

PM_{2.5} SIP (Supplemental)

Appendix A

Detailed EGU Data by State/Unit

Summary of Detailed EGU Data by State/Unit

This section provides detailed EGU SO₂ and NO_x emissions by CSAPR state totals and by individual unit for PJM states with actual/expected reductions.

Data for the EGUs have been taken from the following sources:

- CAIR 2015 Final Modeling (Parsed), developed in 2005
 - o http://www.epa.gov/airmarkets/progsregs/epa-ipm/cair/index.html
- CSAPR 2014 TR1 Remedy Case, developed in 2011
 - o ftp://ftp.epa.gov/EmisInventory/2005v4 2/2014emis
- CAMD Reported 2012 Emissions, downloaded 8/21/2013
 - o http://ampd.epa.gov/ampd/
- PJM Expected Deactivations, downloaded 9/12/2013
 - http://www.pjm.com/planning/generation-deactivation/gd-summaries.aspx
- PA DEP Plan Approval for Homer City
 - http://files.dep.state.pa.us/RegionalResources/SWRO/SWROPortalFiles/AQ_HomerCity/Issued%20Plan%20Approval%20PA-32-00055H%204-2-12.pdf
- Federal Consent Decrees
 - o http://cfpub.epa.gov/enforcement/cases/index.cfm

CAMD EGU data was queried for cogeneration, electric utility, and small power producer source categories.

PJM states with expected deactivations included PA, OH, WV, MD, IN, IL, NJ, and VA. Emissions reductions were calculated by multiplying the annualized 2012 emissions by the percent reduction in operation based on deactivation date.

Homer City percent reductions were calculated by using 2012 emissions for each unit until installation of the desulfurization system, then applying percentages of 2012 values plus the annual permitted SO_2 limit based on the estimated installation dates.

Projected and Reported EGU Emissions by CSAPR-Controlled State, in tons/year

	CAIR 2	2015	CSAPR	2014								
	Final Pa	arsed	TR1 Re	medy	2012 (CAMD	2013 Ex	pected	2014 Ex	pected	2015 Ex	pected
State	SO2	NOx	SO2	NOx	SO2	NOx	SO2	NOx	SO2	NOx	SO2	NOx
Alabama	255322	49081	173566	69192	128828	45832	128828	45832	128828	45832	128828	45832
Arkansas	82416	31896	106685	37640	76326	34847	76326	34847	76326	34847	76326	34847
Florida	167154	61453	148069	78508	84384	60931	84384	60931	84384	60931	84384	60931
Georgia	248669	66325	93208	41484	101072	34892	101072	34892	101072	34892	101072	34892
Illinois	244283	65259	132647	49162	152172	52956	146224	51573	146224	51573	146224	51573
Indiana	377292	86216	195046	110740	268457	93224	266418	91713	266418	91713	263880	90936
lowa	161590	43276	83827	42231	81368	34827	81368	34827	81368	34827	81368	34827
Kansas	80071	90262	45740	24328	32472	33095	32472	33095	32472	33095	32472	33095
Kentucky	277845	79715	116927	76088	186180	80268	186180	80268	186180	80268	186180	80268
Louisiana	62034	29722	139204	31582	85858	43947	85858	43947	85858	43947	85858	43947
Maryland	23813	12718	30368	17190	22884	15559	22325	15392	22325	15371	22325	15356
Michigan	390998	87122	162632	60907	194702	66451	194702	66451	194702	66451	194702	66451
Minnesota	84505	39313	49622	34429	25286	24353	25286	24353	25286	24353	25286	24353
Mississippi	80957	12095	32109	26080	37213	19799	37213	19799	37213	19799	37213	19799
Missouri	268604	62024	186899	52103	138833	69814	138833	69814	138833	69814	138833	69814
Nebraska	72333	49378	71339	28211	62389	26902	62389	26902	62389	26902	62389	26902
New Jersey	35626	19137	6243	7720	2979	5368	2979	5344	2362	5236	2041	4894
New York	51964	36481	15160	20528	17636	17988	17636	17988	17636	17988	17636	17988
North Carolina	145199	50686	69377	45008	58295	48708	58295	48708	58295	48708	58295	48708
Ohio	239210	86055	178975	89753	323962	81281	275757	74112	274215	73376	192960	65276
Oklahoma	115526	78531	138072	44143	76273	63947	76273	63947	76273	63947	76273	63947
Pennsylvania	150093	79813	125545	118981	249627	129463	241821	122452	225612	102387	146961	100202
South Carolina	104446	35888	100788	36747	44973	18132	44973	18132	44973	18132	44973	18132

	CAIR	2015	CSAPI	R 2014								
	Final I	Parsed	TR1 R	emedy	2012	CAMD	2013 E	xpected	2014 E	xpected	2015 Ex	kpected
State	SO2	NOx	SO2	NOx								
Tennessee	159744	27159	64721	20512	66258	22614	66258	22614	66258	22614	66258	22614
Texas	352064	159714	266648	137964	338840	127790	338840	127790	338840	127790	338840	127790
Virginia	117933	39381	51144	39734	31488	22642	30968	22183	30968	22183	13284	17359
West Virginia	118209	44179	84344	53975	83265	50491	80568	50056	80568	50056	60237	46241
Wisconsin	151010	38614	50137	33537	61565	24841	61565	24841	61565	24841	61565	24841
TOTALS	4618909	1561493	2919042	1428480	3033582	1350962	2965809	1332804	2947442	1311874	2746660	1291816

Many CSAPR states were already near or below CAIR and CSAPR levels based on reported 2012 CAMD emissions. For states without known/expected reductions, 2012 emissions were held constant through 2015.

Reported CAMD EGU Emissions by CSAPR-Controlled State, in tons/year, 2007-2011

	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
State	SO2 (tons)	NOx (tons)								
AL	447189	357547	277976	204197	179256	122420	112665	49663	63364	61478
AR	72247	73289	68535	67084	73623	37877	37800	34100	37785	38338
FL	317582	263952	209966	145013	94710	184171	161297	97982	80083	58854
GA	635484	514539	262375	218911	186891	107471	105968	57630	60588	54860
IA	130610	109293	87135	104666	95946	53438	49023	40469	45045	38574
IL	272571	257431	229370	220095	205630	118305	120037	72336	76356	69005
IN	635683	533421	410244	410295	367309	187134	187036	101060	111638	107659
KS	115772	95902	51561	45251	39385	69812	52900	47863	48947	43201
KY	380314	344874	252013	271513	246399	174893	157959	78850	91974	92174
LA	78051	76302	75809	102264	93275	51898	49875	43506	47313	48024
MD	272879	227198	199327	29947	32275	51117	36701	17452	19444	18615
MI	338014	326501	274277	243426	222702	107761	107673	82478	80395	71949
MN	81971	71926	49807	41574	36610	73743	60230	37091	31173	27968
MO	255202	258269	240213	236231	196265	105921	88742	53604	58518	63419
MS	69796	65236	40161	54696	43210	48547	41933	26602	29774	25079
NC	370826	227030	117325	120387	77985	63023	59920	42980	54955	46677
NE	69008	75706	75494	64184	70999	40862	43198	46314	37417	35739
NJ	34184	21199	12802	15261	4687	16131	13812	7852	9563	6089
NY	107210	65427	46344	49568	40756	46814	36711	26447	27443	22585
ОН	954646	709444	600691	572143	575473	238277	235363	95821	104930	100729
OK	100111	101320	95307	85135	92351	76529	79989	73357	71439	77983
PA	951186	831915	627032	409867	328738	185457	182811	116547	132540	145955
SC	172726	157618	97981	94656	66191	46865	43571	21834	27538	23969
TN	237231	208069	108081	119087	120353	103044	85641	28029	31343	27012

	2007	2008	2009	2010	2011	2007	2008	2009	2010	2011
State	SO2 (tons)	NOx (tons)								
TX	498475	484262	453938	461880	426476	160808	159281	145435	145677	146658
VA	172685	125985	95415	93389	68071	57917	48398	30322	38303	33855
WI	133629	129695	104323	109476	91296	51710	47805	33426	33466	31140
WV	371996	301574	177605	109066	95693	151418	99492	37607	53316	55674
TOTALS	8277277	7014923	5341105	4699264	4172556	2733364	2505831	1546660	1650327	1573260

This data was used for the reported CAMD data trends for 2007-2011 in Figures 3-3 and 3-4.

Detailed Reported and Expected Emissions by Unit, PJM States, 2012-2015

The following table provides detailed emissions by unit for states in PJM with future modifications (controls) and current/expected deactivations.

Methodology

2012 CAMD data was used as a "baseline current" year for expected EGU emissions. Emissions were annualized, ignoring differences in quarterly emissions since quarterly production levels can vary by unit and year.

For units with known/expected controls or scheduled for deactivation, percent reductions for 2013-2015 were calculated based on the date of the installation or deactivation. E.g., for a unit with a deactivation date of 5/1/2013, the 2013 SO_2 and NO_x emissions were reduced from 2012 levels by 66% (or 8 months divided by 12). This unit would then have 100% reductions for SO_2 and SO_3 and SO_4 and in 2015.

Reference sources for the controls/deactivations were included for each unit with an expected reduction. This included PA DEP (plan approval), PJM (announced deactivations), and EPA (consent decrees). Many units scheduled for deactivation are also subject to EPA consent decrees (see the footnotes and Appendix B-3 for further explanations).

For units without known/announced future changes, emissions were held constant through 2015.

CAME	Facility Information			Reported Er	nissions	Emissions Reduction		R	eductio	n from	2012 Er	nissions			Pro	ojected E	missions		
		Facility ID		2012 (to	ons)			2013	(%)	2014	(%)	2015 (%)	2013 (t	ons)	2014 (t	ons)	2015 (t	ons)
State	Facility Name	(ORISPL)	Unit ID	SO2	NOx	Actual/Projected	Reference(s)	SO2	NOx	SO2	NOx	SO2	NOx	SO2	NOx	SO2	NOx	SO2	NOx
MD	AES Warrior Run	10678	1	1235	580									1235	580	1235	580	1235	580
MD	Brandon Shores	602	1	1547	1405									1547	1405	1547	1405	1547	1405
MD	Brandon Shores	602	2	1301	2735									1301	2735	1301	2735	1301	2735
MD	C P Crane	1552	1	1212	946									1212	946	1212	946	1212	946
MD	C P Crane	1552	2	961	871									961	871	961	871	961	871
MD	Chalk Point	1571	1	2510	1095									2510	1095	2510	1095	2510	1095
MD	Chalk Point	1571	2	2136	1245									2136	1245	2136	1245	2136	1245
MD	Chalk Point	1571	3	48	1117									48	1117	48	1117	48	1117
MD	Chalk Point	1571	4	46	1188									46	1188	46	1188	46	1188
MD	Chalk Point	1571	**GT3	0	4									0	4	0	4	0	4
MD	Chalk Point	1571	**GT4	0	5									0	5	0	5	0	5
MD	Chalk Point	1571	**GT5	1	6									1	6	1	6	1	6
MD	Chalk Point	1571	**GT6	1	8									1	8	1	8	1	8
MD	Chalk Point	1571	GT2	0	1									0	1	0	1	0	1
MD	Chalk Point	1571	SMECO	0	22									0	22	0	22	0	22
MD	Dickerson	1572	1	265	487									265	487	265	487	265	487
MD	Dickerson	1572	2	259	435									259	435	259	435	259	435
MD	Dickerson	1572	3	293	517									293	517	293	517	293	517
MD	Dickerson	1572	GT2	0	33									0	33	0	33	0	33
MD	Dickerson	1572	GT3	0	16									0	16	0	16	0	16
MD	Gould Street	1553	3	0	23									0	23	0	23	0	23
MD	Herbert A Wagner	1554	1	0	55									0	55	0	55	0	55
MD	Herbert A Wagner	1554	2	2513	980									2513	980	2513	980	2513	980
MD	Herbert A Wagner	1554	3	4960	503									4960	503	4960	503	4960	503
MD	Herbert A Wagner	1554	4	41	19									41	19	41	19	41	19
MD	Morgantown	1573	1	1232	343									1232	343	1232	343	1232	343
MD	Morgantown	1573	2	1699	458									1699	458	1699	458	1699	458
MD	Morgantown	1573	GT3	5	6									5	6	5	6	5	6
MD	Morgantown	1573	GT4	5	5									5	5	5	5	5	5
MD	Morgantown	1573	GT5	2	2									2	2	2	2	2	2
MD	Morgantown	1573	GT6	2	3									2	3	2	3	2	3
MD	Panda Brandywine	54832	1	1	45									1	45	1	45	1	45
MD	Panda Brandywine	54832	2	1	39									1	39	1	39	1	39
MD	Perryman	1556	**51	1	30									1	30	1	30	1	30
MD	Perryman	1556	CT1	0	7									0	7	0	7	0	7
MD	Perryman	1556	CT2	1	9									1	9	1	9	1	9
MD	Perryman	1556	CT3	0	7									0	7	0	7	0	7
MD	Perryman	1556	CT4	0	8									0	8	0	8	0	8
MD	R. Paul Smith Power Station	1570	9	33	12	Deactivation 9/1/2012	РЈМ	100%	100%	100%	100%	100%	100%	0	0	0	0	0	0
MD	R. Paul Smith Power Station	1570	11	526	155	Deactivation 9/1/2012 Deactivation 9/1/2012	PJM		100%	100%	100%		100%	0	0	0	0	0	0
MD	Riverside	1559	4	0	36	Deactivation 6/1/2014	PJM	10076	10076	58%	58%		100%	0	36	0	15	0	0
MD	Riverside	1559	CT6	1	1	Deactivation 0/1/2014	FJIVI			3070	3676	100%	100%	1	1	1	13	1	1
MD	Rock Springs Generating Facility	7835	1	0										0		0	5	0	5
MD		7835 7835	2	0	5									0	5	0	5	0	5
	Rock Springs Generating Facility	7835 7835	3											1	21	1	_	1	
MD	Rock Springs Generating Facility Rock Springs Generating Facility	7835 7835	э л	1 0	31 28									0	31	0	31	0	31
MD MD	Vienna	7835 1564	4 8		28 10									Ū	28 10	-	28 10	42	28 10
				42										42 0	10 17	42	10		10 17
MD	Westport	1560	CT5	0	17									0	17	0	17	0	17
OH	AMP Objects Turbines Bowling Green	55262	CT1	0	0									U	0	0	0	0	0
OH	AMP-Ohio Gas Turbines Galion	55263	CT1	0	0									0	0	0	0	0	0
OH	AMP-Ohio Gas Turbines Napoleon	55264	CT1	0	0	Department	DIM					F00/	E00/	(200	U 530	0	U 530	0	0
ОН	Ashtabula	2835	7	6289	529	Deactivation 6/1/2015	PJM					58%	58%	6289	529	6289	529	2642	222

CAM	Facility Information Facility ID			Reported Em	nissions	Emissions Reduction		1	Reducti	on from	2012 Eı	missions	i		Pı	rojected E	missions	5	
		Facility ID		2012 (to	ns)			2013	3 (%)	2014	(%)	2015	(%)	2013 (t	ons)	2014 (1	tons)	2015 (t	tons)
State	Facility Name	(ORISPL)	Unit ID	SO2	NOx	Actual/Projected	Reference(s)	SO2	NOx	SO2	NOx	SO2	NOx	SO2	NOx	SO2	NOx	SO2	NOx
ОН	Avon Lake Power Plant	2836	10	1262	162									1262	162	1262	162	1262	162
ОН	Avon Lake Power Plant	2836	12	37045	4419									37045	4419	37045	4419	37045	4419
ОН	Avon Lake Power Plant	2836	CT10	0	0									0	0	0	0	0	0
ОН	Bay Shore	2878	1	2555	411									2555	411	2555	411	2555	411
ОН	Bay Shore	2878	2	109	73	Deactivation 9/1/2012	PJM	100%	100%	100%	100%		100%	0	0	0	0	0	0
ОН	Bay Shore	2878	3	625	324	Deactivation 9/1/2012	PJM	100%	100%	100%	100%	100%	100%	0	0	0	0	0	0
ОН	Bay Shore	2878	4	963	503	Deactivation 9/1/2012	PJM	100%	100%	100%	100%	100%	100%	0	0	0	0	0	0
ОН	Cardinal	2828	1	2711	643									2711	643	2711	643	2711	643
ОН	Cardinal	2828	2	3540	1101									3540	1101	3540	1101	3540	1101
ОН	Cardinal	2828	3	1894	513									1894	513	1894	513	1894	513
ОН	Conesville	2840	3	7898	763	Deactivation 12/31/2012	PJM, EPA ¹	100%	100%	100%	100%	100%	100%	0	0	0	0	0	0
ОН	Conesville	2840	4	2179	992									2179	992	2179	992	2179	992
ОН	Conesville	2840	5	1380	3330									1380	3330	1380	3330	1380	3330
ОН	Conesville	2840	6	1424	3378									1424	3378	1424	3378	1424	3378
ОН	Darby Electric Generating Station	55247	CT1	0	18									0	18	0	18	0	18
ОН	Darby Electric Generating Station	55247	CT2	0	18									0	18	0	18	0	18
ОН	Darby Electric Generating Station	55247	CT3	0	18									0	18	0	18	0	18
ОН	Darby Electric Generating Station	55247	CT4	0	17									0	17	0	17	0	17
ОН	Darby Electric Generating Station	55247	CT5	0	9									0	9	0	9	0	9
ОН	Darby Electric Generating Station	55247	CT6	0	17									0	17	0	17	0	17
ОН	Dicks Creek Station	2831	1	0	0									0	0	0	0	0	0
ОН	Dresden Energy Facility	55350	1A	2	38									2	38	2	38	2	38
ОН	Dresden Energy Facility	55350	1B	2	39									2	39	2	39	2	39
ОН	Duke Energy Hanging Rock, II LLC	55736	CTG1	5	71									5	71	5	71	5	71
ОН	Duke Energy Hanging Rock, II LLC	55736	CTG2	5	68									5	68	5	68	5	68
ОН	Duke Energy Hanging Rock, II LLC	55736	CTG3	5	81									5	81	5	81	5	81
ОН	Duke Energy Hanging Rock, II LLC	55736	CTG4	5	68									5	68	5	68	5	68
ОН	Duke Energy Washington, II LLC	55397	CT1	5	82									5	82	5	82	5	82
ОН	Duke Energy Washington, II LLC	55397	CT2	5	81									5	81	5	81	5	81
ОН	Eastlake	2837	1	6198	724	Deactivation 6/1/2015	PJM					58%	58%	6198	724	6198	724	2603	304
ОН	Eastlake	2837	2	5461	598	Deactivation 6/1/2015	PJM					58%	58%	5461	598	5461	598	2294	251
ОН	Eastlake	2837	3	6133	665	Deactivation 6/1/2015	PJM					58%	58%	6133	665	6133	665	2576	279
ОН	Eastlake	2837	4	7143	919	Deactivation 9/1/2012	PJM	100%			100%		100%	0	0	0	0	0	0
ОН	Eastlake	2837	5	29916	4214	Deactivation 9/1/2012	PJM	100%	100%	100%	100%	100%	100%	0	0	0	0	0	0
ОН	Eastlake	2837	6	5	12									5	12	5	12	5	12
ОН	Frank M Tait Station	2847	1	0	5									0	5	0	5	0	5
ОН	Frank M Tait Station	2847	2	0	5									0	5	0	5	0	5
ОН	Frank M Tait Station	2847	3	0	5									0	5	0	5	0	5
ОН	Fremont Energy Center	55701	CT01	4	76									4	76	4	76	4	76
ОН	Fremont Energy Center	55701	CT02	4	69									4	69	4	69	4	69
ОН	Gen J M Gavin	8102	1	15977	3724									15977	3724	15977	3724	15977	3724
ОН	Gen J M Gavin	8102	2	15292	3522									15292	3522	15292	3522	15292	3522
ОН	Greenville Electric Gen Station	55228	G1CT1	0	4									0	4	0	4	0	4
ОН	Greenville Electric Gen Station	55228	G1CT2	0	4									0	4	0	4	0	4
OH	Greenville Electric Gen Station	55228	G2CT1	0	4									0	4	0	4	0	4
OH	Greenville Electric Gen Station	55228	G2CT2	0	4									0	4	0	4	0	4
ОН	Greenville Electric Gen Station	55228	G3CT1	0	4									0	4	0	4	0	4
OH	Greenville Electric Gen Station	55228	G3CT2	0	4									0	4	0	4	0	4
OH	Greenville Electric Gen Station	55228	G4CT1	0	3									0	3	0	3	0	3
OH	Greenville Electric Gen Station	55228	G4CT2	0	4									0	4	0	4	0	4
OH	Hamilton Municipal Power Plant	2917	9	420	156									420	156	420	156	420	156
ОН	J M Stuart	2850	1	2942	2227									2942	2227	2942	2227	2942	2227

CAMI	D Facility Information			Reported Em	issions	Emissions Reduction		ı	Reducti	on from	2012 Er	nissions	;		Pr	ojected E	missions	;	
	·	Facility ID		2012 (to	ns)			2013	3 (%)	2014	(%)	2015	(%)	2013 (t	ons)	2014 (t	ons)	2015 (t	ons)
State	Facility Name	(ORISPL)	Unit ID	SO2	NOx	Actual/Projected	Reference(s)	SO2	NOx	SO2	NOx	SO2	NOx	SO2	NOx	SO2	NOx	SO2	NOx
ОН	J M Stuart	2850	2	2191	2216									2191	2216	2191	2216	2191	2216
ОН	J M Stuart	2850	3	1458	1333									1458	1333	1458	1333	1458	1333
ОН	J M Stuart	2850	4	2273	2063									2273	2063	2273	2063	2273	2063
ОН	J M Stuart	2850	5											0	0	0	0	0	0
ОН	Killen Station	6031	2	5362	5822									5362	5822	5362	5822	5362	5822
ОН	Kyger Creek	2876	1	947	790									947	790	947	790	947	790
ОН	Kyger Creek	2876	2	1905	1200									1905	1200	1905	1200	1905	1200
ОН	Kyger Creek	2876	3	741	879									741	879	741	879	741	879
ОН	Kyger Creek	2876	4	626	774									626	774	626	774	626	774
ОН	Kyger Creek	2876	5	770	935									770	935	770	935	770	935
ОН	Lake Shore	2838	18	777	332	Deactivation 6/1/2015	PJM					58%	58%	777	332	777	332	326	139
ОН	Mad River	2860	Α											0	0	0	0	0	0
ОН	Mad River	2860	В											0	0	0	0	0	0
ОН	Madison Generating Station	55110	1	0	5									0	5	0	5	0	5
ОН	Madison Generating Station	55110	2	0	6									0	6	0	6	0	6
ОН	Madison Generating Station	55110	3	0	4									0	4	0	4	0	4
ОН	Madison Generating Station	55110	4	0	4									0	4	0	4	0	4
ОН	Madison Generating Station	55110	5	0	4									0	4	0	4	0	4
ОН	Madison Generating Station	55110	6	0	5									0	5	0	5	0	5
ОН	Madison Generating Station	55110	7	0	3									0	3	0	3	0	3
ОН	Madison Generating Station	55110	8	0	6									0	6	0	6	0	6
ОН	Miami Fort Generating Station	2832	6	15791	1219									15791	1219	15791	1219	15791	1219
ОН	Miami Fort Generating Station	2832	7	6098	2791									6098	2791	6098	2791	6098	2791
ОН	Miami Fort Generating Station	2832	8	4518	2844									4518	2844	4518	2844	4518	2844
ОН	Muskingum River	2872	1	2495	239	Deactivation 6/1/2015	PJM, EPA ¹					58%	58%	2495	239	2495	239	1048	100
ОН	Muskingum River	2872	2	2789	247	Deactivation 6/1/2015	PJM, EPA ¹					58%	58%	2789	247	2789	247	1172	104
ОН	Muskingum River	2872	3	15450	1122	Deactivation 6/1/2015	PJM, EPA ¹					58%	58%	15450	1122	15450	1122	6489	471
ОН	Muskingum River	2872	4	9539	824	Deactivation 6/1/2015	PJM, EPA ¹					58%	58%	9539	824	9539	824	4006	346
ОН	Muskingum River	2872	5	5864	219									5864	219	5864	219	5864	219
ОН	Muskingum River	2872	B001		2									0	2	0	2	0	2
ОН	Niles	2861	1	1360	282	Deactivation 10/1/2012	PJM	100%	100%	100%			100%	0	0	0	0	0	0
ОН	Niles	2861	2			Deactivation 6/1/2012	PJM	100%	100%	100%	100%	100%	100%	0	0	0	0	0	0
ОН	Niles	2861	CTA	4	9									4	9	4	9	4	9
ОН	O H Hutchings	2848	H-1	10	4	Deactivation 6/1/2015	PJM					58%	58%	10	4	10	4	4	2
ОН	O H Hutchings	2848	H-2	32	14	Deactivation 6/1/2015	PJM					58%	58%	32	14	32	14	13	6
ОН	O H Hutchings	2848	H-3	133	40	Deactivation 6/1/2015	PJM					58%	58%	133	40	133	40	56	17
ОН	O H Hutchings	2848	H-4			Deactivation 6/1/2013	PJM	58%	58%	100%	100%	100%	100%	0	0	0	0	0	0
ОН	O H Hutchings	2848	H-5	150	45	Deactivation 6/1/2015	PJM					58%	58%	150	45	150	45	63	19
ОН	O H Hutchings	2848	H-6	86	28	Deactivation 6/1/2015	PJM					58%	58%	86	28	86	28	36	12
ОН	O H Hutchings	2848	H-7	0	1									0	1	0	1	0	1
ОН	Omega JV2 Bowling Green	7783	P001	0	3									0	3	0	3	0	3
ОН	Omega JV2 Hamilton	7782	P001	0	2									0	2	0	2	0	2
ОН	Picway	2843	9	67	11	Deactivation 6/1/2015	PJM					58%	58%	67	11	67	11	28	5
ОН	R E Burger	2864	5											0	0	0	0	0	0
OH	R E Burger	2864	6	_	_									0	0	0	0	0	0
ОН	Richland Peaking Station	2880	CTG4	0	33									0	33	0	33	0	33
OH	Richland Peaking Station	2880	CTG5	0	34									0	34	0	34	0	34
OH	Richland Peaking Station	2880	CTG6	0	21									0	21	0	21	0	21
OH	Robert P Mone	7872	1	0	5									0	5	0	5	0	5
OH	Robert P Mone	7872	2	0	6									0	6	0	6	0	6
ОН	Robert P Mone	7872	3	0	4									0	4	0	4	0	4

CAMI	cility Information Facility ID			Reported En	nissions	Emissions Reduction		ı	Reducti	on from	2012 Er	nissions	3		Pr	ojected E	missions		
		Facility ID		2012 (to	ns)			2013	3 (%)	2014	(%)	2015	(%)	2013 (t	ons)	2014 (t	ons)	2015 (t	ons)
State	Facility Name	(ORISPL)	Unit ID	SO2	NOx	Actual/Projected	Reference(s)	SO2	NOx	SO2	NOx	SO2	NOx	SO2	NOx	SO2	NOx	SO2	NOx
ОН	Rolling Hills Generating LLC	55401	CT-1	0	5									0	5	0	5	0	5
ОН	Rolling Hills Generating LLC	55401	CT-2	0	5									0	5	0	5	0	5
ОН	Rolling Hills Generating LLC	55401	CT-3	0	9									0	9	0	9	0	9
ОН	Rolling Hills Generating LLC	55401	CT-4	0	7									0	7	0	7	0	7
ОН	Rolling Hills Generating LLC	55401	CT-5	0	7									0	7	0	7	0	7
ОН	Tait Electric Generating Station	55248	CT4	0	8									0	8	0	8	0	8
ОН	Tait Electric Generating Station	55248	CT5	0	8									0	8	0	8	0	8
ОН	Tait Electric Generating Station	55248	CT6	0	6									0	6	0	6	0	6
ОН	Tait Electric Generating Station	55248	CT7	0	7									0	7	0	7	0	7
ОН	Troy Energy, LLC	55348	1	0	4									0	4	0	4	0	4
ОН	Troy Energy, LLC	55348	2	0	4									0	4	0	4	0	4
ОН	Troy Energy, LLC	55348	3	0	5									0	5	0	5	0	5
ОН	Troy Energy, LLC	55348	4	0	5									0	5	0	5	0	5
ОН	W H Sammis	2866	1	244	580									244	580	244	580	244	580
ОН	W H Sammis	2866	2	247	584									247	584	247	584	247	584
ОН	W H Sammis	2866	3	310	759									310	759	310	759	310	759
ОН	W H Sammis	2866	4	301	724									301	724	301	724	301	724
ОН	W H Sammis	2866	5	261	313									261	313	261	313	261	313
ОН	W H Sammis	2866	6	1416	1448									1416	1448	1416	1448	1416	1448
ОН	W H Sammis	2866	7	1287	1347									1287	1347	1287	1347	1287	1347
ОН	W H Zimmer Generating Station	6019	1	11975	6575									11975	6575	11975	6575	11975	6575
ОН	W H Zimmer Generating Station	6019	Α		3									0	3	0	3	0	3
ОН	W H Zimmer Generating Station	6019	В		3									0	3	0	3	0	3
ОН	Walter C Beckjord Generating Station	2830	1			Deactivation 5/1/2012	PJM	100%	100%	100%	100%	100%	100%	0	0	0	0	0	0
ОН	Walter C Beckjord Generating Station	2830	2			Deactivation 11/21/2013	PJM	11%	11%	100%	100%	100%	100%	0	0	0	0	0	0
ОН	Walter C Beckjord Generating Station	2830	3	1732	827	Deactivation 11/21/2013	PJM	11%	11%	100%	100%	100%	100%	1542	736	0	0	0	0
ОН	Walter C Beckjord Generating Station	2830	4	2698	751	Deactivation 4/1/2015	PJM					75%	75%	2698	751	2698	751	674	188
ОН	Walter C Beckjord Generating Station	2830	5	19639	1618	Deactivation 4/1/2015	PJM					75%	75%	19639	1618	19639	1618	4910	404
ОН	Walter C Beckjord Generating Station	2830	6	42999	4239	Deactivation 4/1/2015	PJM					75%	75%	42999	4239	42999	4239	10750	1060
ОН	Walter C Beckjord Generating Station	2830	CT1	0	2									0	2	0	2	0	2
ОН	Walter C Beckjord Generating Station	2830	CT2	0	1									0	1	0	1	0	1
ОН	Walter C Beckjord Generating Station	2830	CT3	0	1									0	1	0	1	0	1
ОН	Walter C Beckjord Generating Station	2830	CT4	0	1									0	1	0	1	0	1
ОН	Waterford Plant	55503	1	4	60									4	60	4	60	4	60
ОН	Waterford Plant	55503	2	4	65									4	65	4	65	4	65
ОН	Waterford Plant	55503	3	4	63									4	63	4	63	4	63
ОН	West Lorain	2869	2	0	6									0	6	0	6	0	6
ОН	West Lorain	2869	3	0	5									0	5	0	5	0	5
ОН	West Lorain	2869	4	0	6									0	6	0	6	0	6
ОН	West Lorain	2869	5	0	7									0	7	0	7	0	7
ОН	West Lorain	2869	6	0	5									0	5	0	5	0	5
ОН	West Lorain	2869	1A	1	19									1	19	1	19	1	19
ОН	West Lorain	2869	1B	1	21									1	21	1	21	1	21
ОН	Woodsdale	7158	**GT1	0	4									0	4	0	4	0	4
ОН	Woodsdale	7158	**GT2	0	3									0	3	0	3	0	3
ОН	Woodsdale	7158	**GT3	0	5									0	5	0	5	0	5
ОН	Woodsdale	7158	**GT4	0	2									0	2	0	2	0	2
ОН	Woodsdale	7158	**GT5	0	2									0	2	0	2	0	2
ОН	Woodsdale	7158	**GT6	0	1									0	1	0	1	0	1
PA	AES Beaver Valley LLC	10676	32	851	776									851	776	851	776	851	776
PA	AES Beaver Valley LLC	10676	33	930	941									930	941	930	941	930	941
PA	AES Beaver Valley LLC	10676	34	929	775									929	775	929	775	929	775

CAM	O Facility Information			Reported En	nissions	Emissions Reduction		1	Reducti	on from	2012 Eı	missions	5		Pre	ojected E	missions		
		Facility ID		2012 (to	ns)			2013	3 (%)	2014	(%)	2015	(%)	2013 (t	ons)	2014 (t	ons)	2015 (t	tons)
State	Facility Name	(ORISPL)	Unit ID	SO2	NOx	Actual/Projected	Reference(s)	SO2	NOx	SO2	NOx	SO2	NOx	SO2	NOx	SO2	NOx	SO2	NOx
PA	AES Beaver Valley LLC	10676	35	495	469									495	469	495	469	495	469
PA	Allegheny Energy Units 1 & 2	55196	1	0	7									0	7	0	7	0	7
PA	Allegheny Energy Units 1 & 2	55196	2	0	6									0	6	0	6	0	6
PA	Allegheny Energy Units 3, 4 & 5	55710	3	3	52									3	52	3	52	3	52
PA	Allegheny Energy Units 3, 4 & 5	55710	4	3	44									3	44	3	44	3	44
PA	Allegheny Energy Units 8 & 9	55377	8	0	7									0	7	0	7	0	7
PA	Allegheny Energy Units 8 & 9	55377	9	0	6									0	6	0	6	0	6
PA	Armstrong Energy Ltd Partnership, LLP	55347	1	0	8									0	8	0	8	0	8
PA	Armstrong Energy Ltd Partnership, LLP	55347	2	0	7									0	7	0	7	0	7
PA	Armstrong Energy Ltd Partnership, LLP	55347	3	0	9									0	9	0	9	0	9
PA	Armstrong Energy Ltd Partnership, LLP	55347	4	0	9									0	9	0	9	0	9
PA	Armstrong Power Station	3178	1	3952	463	Deactivation 9/1/2012	PJM	100%	100%	100%	100%	100%	100%	0	0	0	0	0	0
PA	Armstrong Power Station	3178	2	1233	142	Deactivation 9/1/2012	PJM	100%	100%	100%	100%	100%	100%	0	0	0	0	0	0
PA	Bethlehem Power Plant	55690	1	2	26									2	26	2	26	2	26
PA	Bethlehem Power Plant	55690	2	2	33									2	33	2	33	2	33
PA	Bethlehem Power Plant	55690	3	2	29									2	29	2	29	2	29
PA	Bethlehem Power Plant	55690	5	2	28									2	28	2	28	2	28
PA	Bethlehem Power Plant	55690	6	3	19									3	19	3	19	3	19
PA	Bethlehem Power Plant	55690	7	2	23									2	23	2	23	2	23
PA	Bruce Mansfield	6094	1	4471	2753									4471	2753	4471	2753	4471	2753
PA	Bruce Mansfield	6094	2	5270	3325									5270	3325	5270	3325	5270	3325
PA	Bruce Mansfield	6094	3	9341	3439									9341	3439	9341	3439	9341	3439
PA	Brunner Island	3140	1	2056	1969									2056	1969	2056	1969	2056	1969
PA	Brunner Island	3140	2	3887	3624									3887	3624	3887	3624	3887	3624
PA	Brunner Island	3140	3	6312	5728									6312	5728	6312	5728	6312	5728
PA	Brunot Island Power Station	3096	3	0	3728									0312	3728	0312	3720	0312	3728
PA	Brunot Island Power Station	3096	2A	0	3									0	3	0	3	0	3
PA	Brunot Island Power Station	3096	2B	0	5									0	5	0	5	0	5
PA	Cambria Cogen	10641	1	826	470									826	470	826	470	826	470
PA	Cambria Cogen	10641	2	929	516									929	516	929	516	929	516
PA	Chambersburg Units 12 & 13	55654	12	0	10									0	10	0	10	0	10
PA	Chambersburg Units 12 & 13	55654	13	0	10									0	10	0	10	0	10
	_	8226	15	1911	4484									1911	4484	1911	4484	Ŭ	4484
PA	Cheswick	10143	AAB01	2547	878									2547	878	2547	4464 878	1911 2547	878
PA	Colver Power Project																		
PA	Conemaugh	3118	1	2963	8118									2963	8118	2963	8118	2963	8118
PA	Conemaugh	3118	2	3349	8338									3349	8338	3349	8338	3349	8338
PA	Croydon Generating Station	8012	11	1	3									1	3	1	3	1	3
PA	Croydon Generating Station	8012	12	1	3									1	3	1	3	1	3
PA	Croydon Generating Station	8012	21	1	3									1	3	1	3	1	3
PA	Croydon Generating Station	8012	22	1	2									1	2	1	2	1	2
PA	Croydon Generating Station	8012	31	1	2									1	2	1	2	1	2
PA	Croydon Generating Station	8012	32	1	3									1	3	1	3	1	3
PA	Croydon Generating Station	8012	41	0	1									0	1	0	1	0	1
PA	Croydon Generating Station	8012	42	0	1									0	1	0	1	0	1
PA	Duke Energy Fayette, II LLC	55516	CTG1	5	54									5	54	5	54	5	54
PA	Duke Energy Fayette, II LLC	55516	CTG2	5	56									5	56	5	56	5	56
PA	Ebensburg Power Company	10603	31	2003	316									2003	316	2003	316	2003	316
PA	Eddystone Generating Station	3161	2											0	0	0	0	0	0
PA	Eddystone Generating Station	3161	3	53	39									53	39	53	39	53	39
PA	Eddystone Generating Station	3161	4	71	58									71	58	71	58	71	58
PA	Elrama	3098	1			Deactivation 6/1/2012	PJM	100%	100%	100%	100%	100%	100%	0	0	0	0	0	0
PA	Elrama	3098	2	28	30	Deactivation 6/1/2012	PJM	100%	100%	100%	100%	100%	100%	0	0	0	0	0	0

CAMI	Facility Information			Reported Em	nissions	Emissions Reduction		ı	Reducti	on from	2012 E	mission	s		Pr	ojected E	missions	;	
		Facility ID		2012 (to	-				3 (%)	2014		2015		2013 (t	-	2014 (t	=	2015 (t	
State	Facility Name	(ORISPL)	Unit ID	SO2	NOx	Actual/Projected	Reference(s)	SO2				SO2		SO2	NOx	SO2	NOx	SO2	NOx
PA	Elrama	3098	3	22	26	Deactivation 6/1/2012	PJM	100%	100%	100%	100%	100%	100%	0	0	0	0	0	0
PA	Elrama	3098	4	200	217	Deactivation 10/1/2012	PJM	100%	100%	100%	100%	100%	100%	0	0	0	0	0	0
PA	Fairless Energy, LLC	55298	1A	4	58									4	58	4	58	4	58
PA	Fairless Energy, LLC	55298	1B	5	62									5	62	5	62	5	62
PA	Fairless Energy, LLC	55298	2A	4	55									4	55	4	55	4	55
PA	Fairless Energy, LLC	55298	2B	4	53									4	53	4	53	4	53
PA	Fairless Hills Generating Station	7701	PHBLR4	54	60									54	60	54	60	54	60
PA	Fairless Hills Generating Station	7701	PHBLR5	22	29									22	29	22	29	22	29
PA	FPL Energy Marcus Hook, LP	55801	1	4	83									4	83	4	83	4	83
PA	FPL Energy Marcus Hook, LP	55801	2	3	80									3	80	3	80	3	80
PA	FPL Energy Marcus Hook, LP	55801	3	3	71									3	71	3	71	3	71
PA	FPL Energy MH50	50074	1		0									0	0	0	0	0	0
PA	Gilberton Power Company	10113	31	463	59									463	59	463	59	463	59
PA	Gilberton Power Company	10113	32	467	60									467	60	467	60	467	60
PA	Grays Ferry Cogen Partnership	54785	2	2	119									2	119	2	119	2	119
PA	Grays Ferry Cogen Partnership	54785	25	10	83									10	83	10	83	10	83
PA	Handsome Lake Energy	55233	EU-1A	0	5									0	5	0	5	0	5
PA	Handsome Lake Energy	55233	EU-1B	0	6									0	6	0	6	0	6
PA	Handsome Lake Energy	55233	EU-2A	0	4									0	4	0	4	0	4
PA	Handsome Lake Energy	55233	EU-2B	0	6									0	6	0	6	0	6
PA	Handsome Lake Energy	55233	EU-3A	0	4									0	4	0	4	0	4
PA	Handsome Lake Energy	55233	EU-3B	0	6									0	6	0	6	0	6
PA	Handsome Lake Energy	55233	EU-4A	0	7									0	7	0	7	0	7
PA	Handsome Lake Energy	55233	EU-4B	0	7									0	7	0	7	0	7
PA	Handsome Lake Energy	55233	EU-5A	0	4									0	4	0	4	0	4
PA	Handsome Lake Energy	55233	EU-5B	0	6									0	6	0	6	0	6
PA	Hatfield's Ferry Power Station	3179	1	1080	7240	Deactivation 10/9/2013	PJM	23%	23%	100%	100%	100%	100%	832	5575	0	0	0	0
PA	Hatfield's Ferry Power Station	3179	2	1150	8040	Deactivation 10/9/2013	PJM	23%	23%	100%	100%	100%	100%	886	6191	0	0	0	0
PA	Hatfield's Ferry Power Station	3179	3	1560	8309	Deactivation 10/9/2013	PJM	23%	23%	100%	100%	100%	100%	1201	6398	0	0	0	0
PA	Hazleton Generation	10870	TURB2	0	0									0	0	0	0	0	0
PA	Hazleton Generation	10870	TURB3	0	0									0	0	0	0	0	0
PA	Hazleton Generation	10870	TURB4	0	0									0	0	0	0	0	0
PA	Hazleton Generation	10870	TURBIN	0	2									0	2	0	2	0	2
PA	Homer City	3122	1	43971	2585	NID installation 10/2014	PA DEP			22%		86%		43971	2585	34297	2585	5950	2585
PA	Homer City	3122	2	52667	4291	NID installation 4/2015	PA DEP					66%		52667	4291	52667	4291	17907	4291
PA	Homer City	3122	3	3136	3415									3136	3415	3136	3415	3136	3415
PA	Hunlock Creek Energy Center	3176	CT5	1	8									1	8	1	8	1	8
PA	Hunlock Creek Energy Center	3176	CT6	0	22									0	22	0	22	0	22
PA	Hunlock Unit 4	56397	4	0	2									0	2	0	2	0	2
PA	Hunterstown Combined Cycle	55976	CT101	3	38									3	38	3	38	3	38
PA	Hunterstown Combined Cycle	55976	CT201	3	36									3	36	3	36	3	36
PA	Hunterstown Combined Cycle	55976	CT301	3	37									3	37	3	37	3	37
PA	Keystone	3136	1	17383	9531									17383	9531	17383	9531	17383	9531
PA	Keystone	3136	2	12037	7923									12037	7923	12037	7923	12037	7923
PA	Kimberly-Clark Tissue Company	50410	35		127									0	127	0	127	0	127
PA	Liberty Electric Power Plant	55231	1	4	79									4	79	4	79	4	79
PA	Liberty Electric Power Plant	55231	2	4	80									4	80	4	80	4	80
PA	Lower Mount Bethel Energy	55667	CT01	3	55									3	55	3	55	3	55
PA	Lower Mount Bethel Energy	55667	CT02	4	68									4	68	4	68	4	68
PA	Martins Creek	3148	3	59	739									59	739	59	739	59	739
PA	Martins Creek	3148	4	103	1166									103	1166	103	1166	103	1166
PA	Mitchell Power Station	3181	1	0	0									0	0	0	0	0	0
			_	•	•									•	•	•	•	•	•

CAMI	D Facility Information			Reported Em	nissions	Emissions Reduction		F	Reducti	on from	2012 Er	mission	s		Pr	ojected E	missions		
		Facility ID		2012 (to	ns)			2013	3 (%)	2014	(%)	2015		2013 (to	ons)	2014 (t	ons)	2015 (t	ons)
State	Facility Name	(ORISPL)	Unit ID	SO2	NOx	Actual/Projected	Reference(s)	SO2	NOx	SO2	NOx	SO2	NOx	SO2	NOx	SO2	NOx	SO2	NOx
PA	Mitchell Power Station	3181	2											0	0	0	0	0	0
PA	Mitchell Power Station	3181	3	1	1	Deactivation 10/9/2013	PJM	23%	23%	100%	100%		100%	0	0	0	0	0	0
PA	Mitchell Power Station	3181	33	1569	1970	Deactivation 10/9/2013	PJM	23%	23%	100%	100%	100%	100%	1208	1517	0	0	0	0
PA	Montour	3149	1	7180	7533									7180	7533	7180	7533	7180	7533
PA	Montour	3149	2	7957	7582									7957	7582	7957	7582	7957	7582
PA	Mountain	3111	31	2	12									2	12	2	12	2	12
PA	Mountain	3111	32	3	20									3	20	3	20	3	20
PA	Mt. Carmel Cogeneration	10343	SG-101	465	304									465	304	465	304	465	304
PA	New Castle	3138	3	1540	241									1540	241	1540	241	1540	241
PA	New Castle	3138	4	1392	207									1392	207	1392	207	1392	207
PA	New Castle	3138	5	2062	408									2062	408	2062	408	2062	408
PA	North East Cogeneration Plant	54571	1											0	0	0	0	0	0
PA	North East Cogeneration Plant	54571	2											0	0	0	0	0	0
PA	Northampton Generating Plant	50888	NGC01	474	383									474	383	474	383	474	383
PA	Northeastern Power Company	50039	31	700	101									700	101	700	101	700	101
PA	Ontelaunee Energy Center	55193	CT1	4	44									4	44	4	44	4	44
PA	Ontelaunee Energy Center	55193	CT2	4	45									4	45	4	45	4	45
PA	Panther Creek Energy Facility	50776	1	276	272									276	272	276	272	276	272
PA	Panther Creek Energy Facility	50776	2	281	270									281	270	281	270	281	270
PA	PEI Power Corporation	50279	2	0	7									0	7	0	7	0	7
PA	Piney Creek Power Plant	54144	31	1086	264	Deactivation 4/12/2013	PJM	72%	72%	100%	100%	100%	100%	304	74	0	0	0	0
PA	Portland	3113	1	784	75	Deactivation 6/1/2014	PJM			58%	58%	100%	100%	784	75	329	31	0	0
PA	Portland	3113	2	1598	243	Deactivation 6/1/2014	PJM			58%	58%	100%	100%	1598	243	671	102	0	0
PA	Portland	3113	5	0	1									0	1	0	1	0	1
PA	PPL Ironwood, LLC	55337	1	4	102									4	102	4	102	4	102
PA	PPL Ironwood, LLC	55337	2	6	126									6	126	6	126	6	126
PA	Richmond	3168	91	1	3									1	3	1	3	1	3
PA	Richmond	3168	92	1	4									1	4	1	4	1	4
PA	Schuylkill	3169	1	2	1	Deactivation 1/1/2013	PJM	100%	100%	100%	100%	100%	100%	0	0	0	0	0	0
PA	Scrubgrass Generating Plant	50974	1	890	357									890	357	890	357	890	357
PA	Scrubgrass Generating Plant	50974	2	917	400									917	400	917	400	917	400
PA	Seward	3130	1	1829	395									1829	395	1829	395	1829	395
PA	Seward	3130	2	2505	558									2505	558	2505	558	2505	558
PA	Shawville	3131	1	3592	544	Deactivation 4/16/2015	PJM					71%	71%	3592	544	3592	544	1042	158
PA	Shawville	3131	2	4297	665	Deactivation 4/16/2015	PJM					71%	71%	4297	665	4297	665	1246	193
PA	Shawville	3131	3	6509	851	Deactivation 4/16/2015	PJM					71%	71%	6509	851	6509	851	1888	247
PA	Shawville	3131	4	6085	830	Deactivation 4/16/2015	PJM					71%	71%	6085	830	6085	830	1765	241
PA	St. Nicholas Cogeneration Project	54634	1	1939	240									1939	240	1939	240	1939	240
PA	Sunbury	3152	3	1344	140									1344	140	1344	140	1344	140
PA	Sunbury	3152	4	407	34									407	34	407	34	407	34
PA	Sunbury	3152	1A	446	57									446	57	446	57	446	57
PA	Sunbury	3152	1B	508	64									508	64	508	64	508	64
PA	Sunbury	3152	2A	251	33									251	33	251	33	251	33
PA	Sunbury	3152	2B	0	0									0	0	0	0	0	0
PA	Titus	3115	1	386	68	Deactivation 9/1/2013	PJM	33%	33%	100%	100%	100%	100%	259	45	0	0	0	0
PA	Titus	3115	2	313	57	Deactivation 9/1/2013	PJM	33%	33%	100%	100%	100%	100%	210	38	0	0	0	0
PA	Titus	3115	3	378	64	Deactivation 9/1/2013	PJM	33%	33%	100%	100%			253	43	0	0	0	0
PA	Tolna	3116	31	0	3									0	3	0	3	0	3
PA	Tolna	3116	32	0	3									0	3	0	3	0	3
PA	Warren	3132	5	3	43									3	43	3	43	3	43
PA	Wheelabrator - Frackville	50879	GEN1	476	446									476	446	476	446	476	446
PA	WPS Westwood Generation, LLC	50611	31	272	230									272	230	272	230	272	230
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CAMI	D Facility Information			Reported Em	nissions	Emissions Reduction									Pre	ojected E	missions		
		Facility ID		2012 (to	ns)			2013	3 (%)	2014	(%)	2015	(%)	2013 (t	ons)	2014 (t	ons)	2015 (t	ons)
State	Facility Name	(ORISPL)	Unit ID	SO2	NOx	Actual/Projected	Reference(s)	SO2	NOx	SO2	NOx	SO2	NOx	SO2	NOx	SO2	NOx	SO2	NOx
PA	York Energy Center	55524	1	3	26									3	26	3	26	3	26
PA	York Energy Center	55524	2	3	28									3	28	3	28	3	28
PA	York Energy Center	55524	3	3	27									3	27	3	27	3	27
WV	Albright Power Station	3942	1	169	51	Deactivation 9/1/2012	PJM	100%	100%	100%	100%	100%	100%	0	0	0	0	0	0
WV	Albright Power Station	3942	2	440	75	Deactivation 9/1/2012	PJM	100%	100%	100%	100%	100%	100%	0	0	0	0	0	0
WV	Albright Power Station	3942	3	1880	218	Deactivation 9/1/2012	PJM	100%	100%	100%	100%	100%	100%	0	0	0	0	0	0
WV	Big Sandy Peaker Plant	55284	GS01	0	2									0	2	0	2	0	2
WV	Big Sandy Peaker Plant	55284	GS02	0	2									0	2	0	2	0	2
WV	Big Sandy Peaker Plant	55284	GS03	0	2									0	2	0	2	0	2
WV	Big Sandy Peaker Plant	55284	GS04	0	1									0	1	0	1	0	1
WV	Big Sandy Peaker Plant	55284	GS05	0	1									0	1	0	1	0	1
WV	Big Sandy Peaker Plant	55284	GS06	0	1									0	1	0	1	0	1
WV	Big Sandy Peaker Plant	55284	GS07	0	1									0	1	0	1	0	1
WV	Big Sandy Peaker Plant	55284	GS08	0	1									0	1	0	1	0	1
WV	Big Sandy Peaker Plant	55284	GS09	0	1									0	1	0	1	0	1
WV	Big Sandy Peaker Plant	55284	GS10	0	1									0	1	0	1	0	1
WV	Big Sandy Peaker Plant	55284	GS11	0	1									0	1	0	1	0	1
WV	Big Sandy Peaker Plant	55284	GS12	0	1									0	1	0	1	0	1
WV	Ceredo Generating Station	55276	1	0	1									0	1	0	1	0	1
WV	Ceredo Generating Station	55276	2	0	1									0	1	0	1	0	1
WV	Ceredo Generating Station	55276	3	0	1									0	1	0	1	0	1
WV	Ceredo Generating Station	55276	4	0	1									0	1	0	1	0	1
WV	Ceredo Generating Station	55276	5	0	1									0	1	0	1	0	1
WV	Ceredo Generating Station	55276	6	0	1									0	1	0	1	0	1
WV	Fort Martin Power Station	3943	1	2232	5547									2232	5547	2232	5547	2232	5547
WV	Fort Martin Power Station	3943	2	1190	2415									1190	2415	1190	2415	1190	2415
WV	Grant Town Power Plant	10151	1A	1041	752									1041	752	1041	752	1041	752
WV	Grant Town Power Plant	10151	1B	1054	761									1054	761	1054	761	1054	761
WV	Harrison Power Station	3944	1	3986	4633									3986	4633	3986	4633	3986	4633
WV	Harrison Power Station	3944	2	3195	4987									3195	4987	3195	4987	3195	4987
WV	Harrison Power Station	3944	3	4867	5990									4867	5990	4867	5990	4867	5990
WV	John E Amos	3935	1	916	864									916	864	916	864	916	864
WV	John E Amos	3935	2	678	830									678	830	678	830	678	830
WV	John E Amos	3935	3	1539	1546									1539	1546	1539	1546	1539	1546
WV	John E Amos	3935	AUX1											0	0	0	0	0	0
WV	John E Amos	3935	AUX3											0	0	0	0	0	0
WV	Kammer	3947	1	6029	1208	Deactivation 6/1/2015	PJM, EPA ¹					58%	58%	6029	1208	6029	1208	2532	507
WV	Kammer	3947	2	5373	1060	Deactivation 6/1/2015	PJM, EPA ¹					58%	58%	5373	1060	5373	1060	2257	445
WV	Kammer	3947	3	8314	1587	Deactivation 6/1/2015	PJM, EPA ¹					58%	58%	8314	1587	8314	1587	3492	666
WV	Kanawha River	3936	1	3062	668	Deactivation 6/1/2015	PJM					58%	58%	3062	668	3062	668	1286	281
WV	Kanawha River	3936	2	4197	830	Deactivation 6/1/2015	PJM					58%	58%	4197	830	4197	830	1763	348
WV	Longview Power	56671	1	955	1179	2 000011 001011 07 =7 =0 =0						33,1	3075	955	1179	955	1179	955	1179
WV	Mitchell (WV)	3948	1	1801	992									1801	992	1801	992	1801	992
WV	Mitchell (WV)	3948	2	1654	874									1654	874	1654	874	1654	874
WV	Mitchell (WV)	3948	AUX1		3									0	3	0	3	0	3
WV	Morgantown Energy Facility	10743	CFB1	454	452									454	452	454	452	454	452
WV	Morgantown Energy Facility	10743	CFB2	454	455									454	455	454	455	454	455
WV	Mount Storm Power Station	3954	1	2319	1562									2319	1562	2319	1562	2319	1562
WV	Mount Storm Power Station	3954	2	2297	1449									2297	1449	2297	1449	2297	1449
WV	Mount Storm Power Station	3954	3	833	682									833	682	833	682	833	682
WV	Mountaineer (1301)	6264	1	1151	2264									1151	2264	1151	2264	1151	2264
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CAME	Facility Information			Reported Em	nissions	Emissions Reduction		1	Reducti	on from	2012 Eı	missions	;		Pr	ojected E	missions	į	
. .		Facility ID		2012 (to	-				3 (%)	2014		2015		2013 (t		2014 (t	-	2015 (t	-
	Facility Name	(ORISPL)	Unit ID	SO2	NOx	Actual/Projected	Reference(s)	SO2	NOx	SO2	NOx	SO2	NOx	SO2	NOx	SO2	NOx	SO2	NOx
WV	Mountaineer (1301)	6264	AUX1		0									0	0	0	0	0	0
WV	Mountaineer (1301)	6264	AUX2		0									0	0	0	0	0	0
WV	North Branch Power Station	7537	1A											0	0	0	0	0	0
WV	North Branch Power Station	7537	1B	4546	240	Deceli elle (6/4/2015	DINA					E00/	F.00/	0	0	0	0	0	0
WV	Phil Sporn	3938	11	1616	240	Deactivation 6/1/2015	PJM					58%	58%	1616	240	1616	240	679	101
WV	Phil Sporn	3938	21	3994	588	Deactivation 6/1/2015	PJM					58%	58%	3994	588	3994	588	1677	247
WV	Phil Sporn	3938	31	1680	267	Deactivation 6/1/2015	PJM					58%	58%	1680	267	1680	267	706	112
WV	Phil Sporn	3938	41	788	130	Deactivation 6/1/2015	PJM					58%	58%	788	130	788	130	331	55
WV	Phil Sporn	3938	51			Deactivation 2/13/2012	PJM, EPA ¹	100%	100%	100%	100%	100%	100%	0	0	0	0	0	0
WV	Pleasants Energy, LLC	55349	1	0	7									0	7	0	7	0	7
WV	Pleasants Energy, LLC	55349	2	0	8									0	8	0	8	0	8
WV	Pleasants Power Station	6004	1	6482	2777									6482	2777	6482	2777	6482	2777
WV	Pleasants Power Station	6004	2	6415	2426									6415	2426	6415	2426	6415	2426
WV	Rivesville Power Station	3945	7			Deactivation 9/1/2012	PJM	100%	100%	100%	100%	100%	100%	0	0	0	0	0	0
WV	Rivesville Power Station	3945	8	22	25	Deactivation 9/1/2012	PJM	100%	100%	100%	100%	100%	100%	0	0	0	0	0	0
WV	Willow Island Power Station	3946	1	141	45	Deactivation 9/1/2012	PJM	100%	100%	100%	100%	100%	100%	0	0	0	0	0	0
WV	Willow Island Power Station	3946	2	45	22	Deactivation 9/1/2012	PJM	100%	100%	100%	100%	100%	100%	0	0	0	0	0	0
IL	Alsey Station	7818	ACT1	0	4									0	4	0	4	0	4
IL	Alsey Station	7818	ACT2	0	4									0	4	0	4	0	4
IL	Alsey Station	7818	ACT5	0	4									0	4	0	4	0	4
IL	Aurora	55279	AGS01	0	3									0	3	0	3	0	3
IL	Aurora	55279	AGS02	0	3									0	3	0	3	0	3
IL	Aurora	55279	AGS03	0	4									0	4	0	4	0	4
IL	Aurora	55279	AGS04	0	3									0	3	0	3	0	3
IL	Aurora	55279	AGS05	0	2									0	2	0	2	0	2
IL	Aurora	55279	AGS06	0	1									0	1	0	1	0	1
IL	Aurora	55279	AGS07	0	1									0	1	0	1	0	1
IL	Aurora	55279	AGS08	0	1									0	1	0	1	0	1
IL	Aurora	55279	AGS09	0	1									0	1	0	1	0	1
IL	Aurora	55279	AGS10	0	1									0	1	0	1	0	1
IL	Baldwin Energy Complex	889	1	1591	1610									1591	1610	1591	1610	1591	1610
IL	Baldwin Energy Complex	889	2	6765	1375									6765	1375	6765	1375	6765	1375
IL	Baldwin Energy Complex	889	3	1847	2125									1847	2125	1847	2125	1847	2125
IL	Calumet Energy Team, LLC	55296	**1	0	10									0	10	0	10	0	10
IL	Calumet Energy Team, LLC	55296	**2	0	10									0	10	0	10	0	10
IL	Coffeen	861	1	43	703									43	703	43	703	43	703
IL	Coffeen	861	2	60	1270									60	1270	60	1270	60	1270
IL	Cordova Energy Company	55188	1	0	0									0	0	0	0	0	0
IL	Cordova Energy Company	55188	2	0	0									0	0	0	0	0	0
IL	Crawford	867	7	1598	276	Deactivation 8/28/2012	PJM	100%	100%	100%	100%	100%	100%	0	0	0	0	0	0
IL	Crawford	867	8	2149	507	Deactivation 8/24/2012	PJM	100%	100%	100%	100%	100%	100%	0	0	0	0	0	0
IL	Crete Energy Park	55253	GT1	0	1									0	1	0	1	0	1
IL	Crete Energy Park	55253	GT2	0	1									0	1	0	1	0	1
IL	Crete Energy Park	55253	GT3	0	1									0	1	0	1	0	1
IL	Crete Energy Park	55253	GT4	0	1									0	1	0	1	0	1
IL	Dallman	963	31	169	109									169	109	169	109	169	109
IL	Dallman	963	32	173	116									173	116	173	116	173	116
IL	Dallman	963	33	453	323									453	323	453	323	453	323
IL	Dallman	963	4	309	225									309	225	309	225	309	225
IL	Duck Creek	6016	1	296	1247									296	1247	296	1247	296	1247
IL	Duke Energy Lee, II LLC	55236	CT1	0	2									0	2	0	2	0	2
IL	Duke Energy Lee, II LLC	55236	CT2	0	1									0	1	0	1	0	1
	Dane Life by Lee, if LLC	33230	C12	U	1									U	1	U	1	U	1

CAMI	Facility Information			Reported Em	nissions	Emissions Reduction		Re	ductio	n from	2012 En	nissions			Pro	ojected E	missions		
		Facility ID		2012 (to	ns)			2013 (9	%)	2014	(%)	2015	(%)	2013 (t	ons)	2014 (t	ons)	2015 (t	ons)
State	Facility Name	(ORISPL)	Unit ID	SO2	NOx	Actual/Projected	Reference(s)	SO2	NOx	SO2	NOx	SO2	NOx	SO2	NOx	SO2	NOx	SO2	NOx
IL	Duke Energy Lee, II LLC	55236	CT3	0	1									0	1	0	1	0	1
IL	Duke Energy Lee, II LLC	55236	CT4	0	2									0	2	0	2	0	2
IL	Duke Energy Lee, II LLC	55236	CT5	0	2									0	2	0	2	0	2
IL	Duke Energy Lee, II LLC	55236	CT6	0	2									0	2	0	2	0	2
IL	Duke Energy Lee, II LLC	55236	CT7	0	4									0	4	0	4	0	4
IL	Duke Energy Lee, II LLC	55236	CT8	0	4									0	4	0	4	0	4
IL	E D Edwards	856	1	1974	806									1974	806	1974	806	1974	806
IL	E D Edwards	856	2	4871	1891									4871	1891	4871	1891	4871	1891
IL	E D Edwards	856	3	4958	611									4958	611	4958	611	4958	611
IL	Elgin Energy Center	55438	CT01	0	8									0	8	0	8	0	8
IL	Elgin Energy Center	55438	CT02	0	6									0	6	0	6	0	6
IL	Elgin Energy Center	55438	CT03	0	15									0	15	0	15	0	15
IL	Elgin Energy Center	55438	CT04	0	15									0	15	0	15	0	15
IL	Elwood Energy Facility	55199	1	0	15									0	15	0	15	0	15
IL	Elwood Energy Facility	55199	2	0	10									0	10	0	10	0	10
IL	Elwood Energy Facility	55199	3	0	10									0	10	0	10	0	10
IL	Elwood Energy Facility	55199	4	0	10									0	10	0	10	0	10
IL	Elwood Energy Facility	55199	5	0	20									0	20	0	20	0	20
IL	Elwood Energy Facility	55199	6	0	28									0	28	0	28	0	28
IL	Elwood Energy Facility	55199	7	0	19									0	19	0	19	0	19
IL	Elwood Energy Facility	55199	8	0	23									0	23	0	23	0	23
IL	Elwood Energy Facility	55199	9	0	7									0	7	0	7	0	7
IL	Factory Gas Turbine	8016	2	3	7									3	7	3	7	3	7
IL	Fisk	886	19	2201	599	Deactivation 8/30/2012	PJM	100% 1	.00%	100%	100%	100%	100%	0	0	0	0	0	0
IL	Fisk	886	311	1	1									1	1	1	1	1	1
IL	Fisk	886	312	0	1									0	1	0	1	0	1
IL	Fisk	886	321	0	1									0	1	0	1	0	1
IL	Fisk	886	322	0	1									0	1	0	1	0	1
IL	Fisk	886	331	0	0									0	0	0	0	0	0
IL	Fisk	886	332	0	0									0	0	0	0	0	0
IL	Fisk	886	341		_									0	0	0	0	0	0
IL	Fisk	886	342	0	1									0	1	0	1	0	1
IL	Freedom Power Project	7842	CT1	0	3									0	3	0	3	0	3
IL	Gibson City Power Plant	55201	GCTG1	0	22									0	22	0	22	0	22
IL	Gibson City Power Plant	55201	GCTG2	0	2									0	2	0	2	0	2
IL	Goose Creek Power Plant	55496	CT-01	0	2									0	2	0	2	0	2
IL	Goose Creek Power Plant	55496	CT-02	0	2									0	2	0	2	0	2
IL	Goose Creek Power Plant	55496	CT-03	0	1									0	1	0	1	0	1
IL	Goose Creek Power Plant	55496	CT-04	0	2									0	2	0	2	0	2
IL	Goose Creek Power Plant	55496	CT-05	0	1									0	1	0	1	0	1
IL	Goose Creek Power Plant	55496	CT-06	0	1									0	1	0	1	0	1
IL	Grand Tower	862	CT01	1	95									1	95	1	95	1	95
IL	Grand Tower	862	CT02	2	236									2	236	2	236	2	236
IL	Havana	891	1	2	230									0	0	0	0	0	0
IL	Havana	891	2											0	0	0	0	0	0
IL	Havana	891	2											0	0	0	0	0	0
IL	Havana	891	J A											0	0	0	0	0	0
IL	Havana	891	'1 5											0	0	0	0	0	0
		891 891	<i>5</i>											0	0	-	0	0	0
IL II	Havana	891 891	0 7											0	0	0	0	0	0
IL II	Havana		,											0	U	Û	U	•	0
IL II	Havana	891	ð	E04.4	1240									U F04.4	1210	U F01.4	1210	0	Ū
IL	Havana	891	9	5814	1219									5814	1219	5814	1219	5814	1219

CAMI	Facility Information			Reported En	nissions	Emissions Reduction		1	Reductio	n from	2012 En	nissions		Pr	ojected E	missions		
		Facility ID		2012 (to	ns)			2013	3 (%)	2014	(%)	2015 (%)	2013 (to	ons)	2014 (t	ons)	2015 (t	ons)
State	Facility Name	(ORISPL)	Unit ID	SO2	NOx	Actual/Projected	Reference(s)	SO2	NOx	SO2	NOx	SO2 NOx	SO2	NOx	SO2	NOx	SO2	NOx
IL	Hennepin Power Station	892	1	1313	381								1313	381	1313	381	1313	381
IL	Hennepin Power Station	892	2	4593	1313								4593	1313	4593	1313	4593	1313
IL	Holland Energy Facility	55334	CTG1	1	33								1	33	1	33	1	33
IL	Holland Energy Facility	55334	CTG2	1	33								1	33	1	33	1	33
IL	Interstate	7425	1	0	5								0	5	0	5	0	5
IL	Joliet 29	384	71	2657	606								2657	606	2657	606	2657	606
IL	Joliet 29	384	72	2705	621								2705	621	2705	621	2705	621
IL	Joliet 29	384	81	2877	714								2877	714	2877	714	2877	714
IL	Joliet 29	384	82	2910	723								2910	723	2910	723	2910	723
IL	Joliet 9	874	5	2210	684								2210	684	2210	684	2210	684
IL	Joppa Steam	887	1	3005	774								3005	774	3005	774	3005	774
IL	Joppa Steam	887	2	2918	758								2918	758	2918	758	2918	758
IL	Joppa Steam	887	3	2727	599								2727	599	2727	599	2727	599
IL	Joppa Steam	887	4	3007	662								3007	662	3007	662	3007	662
IL	Joppa Steam	887	5	2521	604								2521	604	2521	604	2521	604
IL	Joppa Steam	887	6	2812	669								2812	669	2812	669	2812	669
IL	Kendall Energy Facility	55131	GTG-1	2	63								2	63	2	63	2	63
IL	Kendall Energy Facility	55131	GTG-2	3	69								3	69	3	69	3	69
IL	Kendall Energy Facility	55131	GTG-3	3	76								3	76	3	76	3	76
IL	Kendall Energy Facility	55131	GTG-4	3	67								3	67	3	67	3	67
IL	Kincaid Station	876	1	6711	6333								6711	6333	6711	6333	6711	6333
IL	Kincaid Station	876	2	5444	4227								5444	4227	5444	4227	5444	4227
IL	Kinmundy Power Plant	55204	KCTG1	0	4								0	4	0	4	0	4
IL	Kinmundy Power Plant	55204	KCTG2	0	3								0	3	0	3	0	3
IL	LSP University Park, LLC	55640	CT01	0	1								0	1	0	1	0	1
IL	LSP University Park, LLC	55640	CT02	0	1								0	1	0	1	0	1
II.	LSP University Park, LLC	55640	CT03	0	1								0	1	0	1	0	1
IL	LSP University Park, LLC	55640	CT04	0	1								0	1	0	1	0	1
IL	LSP University Park, LLC	55640	CT05	0	1								0	1	0	1	0	1
IL	LSP University Park, LLC	55640	CT06	0	1								0	1	0	1	0	1
IL	LSP University Park, LLC	55640	CT07	0	1								0	1	0	1	0	1
IL	LSP University Park, LLC	55640	CT08	0	1								0	1	0	1	0	1
IL	LSP University Park, LLC	55640	CT09	0	1								0	1	0	1	0	1
IL	LSP University Park, LLC	55640	CT10	0	1								0	1	0	1	0	1
IL	LSP University Park, LLC	55640	CT11	0	1								0	1	0	1	0	1
IL	LSP University Park, LLC	55640	CT12	0	1								n	1	n	1	0	1
IL	Lincoln Generating Facility	55222	CTG-1	0	2								n	2	n	2	0	2
IL	Lincoln Generating Facility Lincoln Generating Facility	55222	CTG-2	0	1								n	1	n	1	0	1
IL	Lincoln Generating Facility Lincoln Generating Facility	55222	CTG-2	0	2								n	2	n	2	0	2
IL	Lincoln Generating Facility Lincoln Generating Facility	55222	CTG-4	0	1								n	1	n	1	0	1
IL	Lincoln Generating Facility Lincoln Generating Facility	55222	CTG-4	0	1								n	1	0	1	0	1
IL IL	Lincoln Generating Facility	55222	CTG-5	0	1								n	1	0	1	0	1
		55222	CTG-7	_	1								0	1	0	1	0	1
IL II	Lincoln Generating Facility	55222	CTG-7	0 0	1								0	1	0	1	0	1
IL II	Lincoln Generating Facility MEPI GT Facility	7858	€1 G- δ	0	7								0	E T	0	E T	0	E T
IL II	•	7858 7858	J	0	0								0	6	0	0	0	0
IL II	MEPLOT Facility		2	U	b								U	6	0	6 0	0	0
IL ''	MEPLOT Facility	7858	3	^	2								U	0	0	0	Ū	0
IL 	MEPI GT Facility	7858	4	0	3								U O	3	U 2	3	0	3
IL II	MEPI GT Facility	7858 076	5 122	1926	3								1026	3	1026	3	1926	3
IL ''	Marion	976	123	1836	467								1836	467	1836	467	1836	467
IL 	Marion	976	4	4012	1636								4012	1636	4012	1636	4012	1636
IL	Marion	976	5	0	1								0	1	0	1	0	1

CAME	Facility Information			Reported Em	nissions	Emissions Reduction		Reductio	on from 2012 Er	nissions		Pr	ojected E	missions	,	
		Facility ID		2012 (to	ns)			2013 (%)	2014 (%)	2015 (%)	2013 (t	ons)	2014 (t	ons)	2015 (t	tons)
State	Facility Name	(ORISPL)	Unit ID	SO2	NOx	Actual/Projected	Reference(s)	SO2 NOx	SO2 NOx	SO2 NOx	SO2	NOx	SO2	NOx	SO2	NOx
IL	Marion	976	6	2	1						2	1	2	1	2	1
IL	Morris Cogeneration, LLC	55216	B-5		21						0	21	0	21	0	21
IL	Morris Cogeneration, LLC	55216	B-6		4						0	4	0	4	0	4
IL	Morris Cogeneration, LLC	55216	CTG1		21						0	21	0	21	0	21
IL	Morris Cogeneration, LLC	55216	CTG2		20						0	20	0	20	0	20
IL	Morris Cogeneration, LLC	55216	CTG3		16						0	16	0	16	0	16
IL	NRG Rockford Energy Center	55238	1	0	5						0	5	0	5	0	5
IL	NRG Rockford Energy Center	55238	2	0	7						0	7	0	7	0	7
IL	NRG Rockford II Energy Center	55936	U1	0	8						0	8	0	8	0	8
IL	Newton	6017	1	10538	1946						10538	1946	10538	1946	10538	1946
IL	Newton	6017	2	5981	1057						5981	1057	5981	1057	5981	1057
IL	Pinckneyville Power Plant	55202	CT01	0	6						0	6	0	6	0	6
IL	Pinckneyville Power Plant	55202	CT02	0	11						0	11	0	11	0	11
IL	Pinckneyville Power Plant	55202	CT03	0	10						0	10	0	10	0	10
IL	Pinckneyville Power Plant	55202	CT04	0	10						0	10	0	10	0	10
IL	Pinckneyville Power Plant	55202	CT05	0	0						0	0	0	0	0	0
IL	Pinckneyville Power Plant	55202	CT06	0	0						0	0	0	0	0	0
IL	Pinckneyville Power Plant	55202	CT07	0	0						0	0	0	0	0	0
IL	Pinckneyville Power Plant	55202	CT08	0	1						0	1	0	1	0	1
IL	Powerton	879	51	5438	1188						5438	1188	5438	1188	5438	1188
IL	Powerton	879	52	5368	1183						5368	1183	5368	1183	5368	1183
IL	Powerton	879	61	5241	1160						5241	1160	5241	1160	5241	1160
IL	Powerton	879	62	5037	1129						5037	1129	5037	1129	5037	1129
IL	Prairie State Generating Company	55856	1	2073	1108						2073	1108	2073	1108	2073	1108
IL	Prairie State Generating Company	55856	2	629	414						629	414	629	414	629	414
IL	Raccoon Creek Power Plant	55417	CT-01	023	1						023	1	023	1	023	1
IL	Raccoon Creek Power Plant	55417	CT-02	0	1						0	1	0	1	0	1
IL	Raccoon Creek Power Plant	55417	CT-02	0	1						0	1	0	1	0	1
IL	Raccoon Creek Power Plant	55417	CT-04	0	1						0	1	0	1	0	1
IL	Rocky Road Power, LLC	55109	T1	0	19						0	19	0	19	0	19
IL	Rocky Road Power, LLC	55109	T2	0	14						0	14	0	14	0	14
	Rocky Road Power, LLC	55109	T3	0	8						0	8	0	8	0	8
IL ''	•	55109									0		0		0	
IL ''	Rocky Road Power, LLC	55237	T4 SCE1	0	10 3						0	10	0	10	0	10 3
IL ''	Shelby County			0	3						0	ა ე	0	ა ე	0	3
IL ''	Shelby County	55237	SCE2	0	•						0	3	0	3	0	_
IL ''	Shelby County	55237	SCE3	0	3						0	3	0	3	0	3
IL 	Shelby County	55237	SCE4	0	3						0	3	0	3	0	3
IL 	Shelby County	55237	SCE5	0	2						0	2	0	2	0	2
IL 	Shelby County	55237	SCE6	0	2						0	2	0	2	0	2
IL 	Shelby County	55237	SCE7	0	3						0	3	0	3	0	3
IL 	Shelby County	55237	SCE8	0	3						0	3	0	3	0	3
IL	Southeast Chicago Energy Project	55281	CTG10	0	3						0	3	0	3	0	3
IL	Southeast Chicago Energy Project	55281	CTG11	0	3						0	3	0	3	0	3
IL	Southeast Chicago Energy Project	55281	CTG12	0	3						0	3	0	3	0	3
IL	Southeast Chicago Energy Project	55281	CTG5	0	4						0	4	0	4	0	4
IL	Southeast Chicago Energy Project	55281	CTG6	0	3						0	3	0	3	0	3
IL	Southeast Chicago Energy Project	55281	CTG7	0	3						0	3	0	3	0	3
IL	Southeast Chicago Energy Project	55281	CTG8	0	3						0	3	0	3	0	3
IL	Southeast Chicago Energy Project	55281	CTG9	0	3						0	3	0	3	0	3
IL	Tilton Power Station	7760	1	0	15						0	15	0	15	0	15
IL	Tilton Power Station	7760	2	0	16						0	16	0	16	0	16
IL	Tilton Power Station	7760	3	0	16						0	16	0	16	0	16

CAME	Facility Information			Reported En	nissions	Emissions Reduction		Reductio	on from 2012 En	nissions		Pr	ojected E	missions	}	
		Facility ID		2012 (to	ns)			2013 (%)	2014 (%)	2015 (%)	2013 (t		2014 (t	=	2015 (t	=
State	Facility Name	(ORISPL)	Unit ID	SO2	NOx	Actual/Projected	Reference(s)	SO2 NOx	SO2 NOx	SO2 NOx	SO2	NOx	SO2	NOx	SO2	NOx
IL	Tilton Power Station	7760	4	0	15						0	15	0	15	0	15
IL	University Park Energy	55250	UP1	0	7						0	7	0	7	0	7
IL	University Park Energy	55250	UP10	0	5						0	5	0	5	0	5
IL	University Park Energy	55250	UP11	0	6						0	6	0	6	0	6
IL	University Park Energy	55250	UP12	0	6						0	6	0	6	0	6
IL	University Park Energy	55250	UP2	0	7						0	7	0	7	0	7
IL	University Park Energy	55250	UP3	0	6						0	6	0	6	0	6
IL	University Park Energy	55250	UP4	0	6						0	6	0	6	0	6
IL	University Park Energy	55250	UP5	0	5						0	5	0	5	0	5
IL	University Park Energy	55250	UP6	0	3						0	3	0	3	0	3
IL	University Park Energy	55250	UP7	0	6						0	6	0	6	0	6
IL	University Park Energy	55250	UP8	0	6						0	6	0	6	0	6
IL	University Park Energy	55250	UP9	0	6						0	6	0	6	0	6
IL	Venice	913	CT03	0	14						0	14	0	14	0	14
IL	Venice	913	CT04	0	15						0	15	0	15	0	15
IL	Venice	913	CT05	0	5						0	5	0	5	0	5
IL	Venice	913	CT2A	0	3						0	3	0	3	0	3
IL	Venice	913	CT2B	0	3						0	3	0	3	0	3
IL	Waukegan	883	311	1	2						1	2	1	2	1	2
IL	Waukegan	883	312	1	2						1	2	1	2	1	2
IL	Waukegan	883	321	1	2						1	2	1	2	1	2
IL	Waukegan	883	322	1	2						1	2	1	2	1	2
IL	Waukegan	883	7	3169	916						3169	916	3169	916	3169	916
IL	Waukegan	883	8	4093	1103						4093	1103	4093	1103	4093	1103
IL	Will County	884	3	2848	546						2848	546	2848	546	2848	546
IL	Will County	884	4	5437	935						5437	935	5437	935	5437	935
IL	Wood River Power Station	898	4	1560	402						1560	402	1560	402	1560	402
IL	Wood River Power Station	898	5	5195	1596						5195	1596	5195	1596	5195	1596
IL	Zion Energy Center	55392	CT-1	0	12						0	12	0	12	0	12
IL	Zion Energy Center	55392	CT-2	0	3						0	3	0	3	0	3
IL	Zion Energy Center	55392	CT-3	0	10						0	10	0	10	0	10
IN	A B Brown Generating Station	6137	1	4290	1069						4290	1069	4290	1069	4290	1069
IN	A B Brown Generating Station	6137	2	2801	1034						2801	1034	2801	1034	2801	1034
IN	A B Brown Generating Station	6137	3	0	16						0	16	0	16	0	16
IN	A B Brown Generating Station	6137	4	0	3						0	3	0	3	0	3
IN	Anderson	7336	ACT1	0	2						0	2	0	2	0	2
IN	Anderson	7336	ACT2	0	3						0	3	0	3	0	3
IN	Anderson	7336	ACT3	0	2						0	2	0	2	0	2
IN	Bailly Generating Station	995	10	0	5						0	5	0	5	0	5
IN	Bailly Generating Station	995	7	558	582						558	582	558	582	558	582
IN	Bailly Generating Station	995	8	1255	928						1255	928	1255	928	1255	928
IN	Broadway Avenue Generating Station	1011	1	0	7						0	7	0	7	0	7
IN	Broadway Avenue Generating Station	1011	2	0	14						0	14	0	14	0	14
IN	Cayuga	1001	1	1779	3968						1779	3968	1779	3968	1779	3968
	Cayuga	1001	2	1443	3600						1443	3600	1443	3600	1443	3600
IN	Cayuga	1001	4	0	10						0	10	0	10	0	10
IN	Clifty Creek	983	1	9205	2497						9205	2497	9205	2497	9205	2497
IN	Clifty Creek	983	2	7348	2197						7348	2197	7348	2197	7348	2197
IN	Clifty Creek	983	3	9840	2854						9840	2854	9840	2854	9840	2854
IN	Clifty Creek	983	4	8567	2035						8567	2035	8567	2035	8567	2035
IN	, Clifty Creek	983	5	8936	2134						8936	2134	8936	2134	8936	2134
IN	, Clifty Creek	983	6	8943	2098						8943	2098	8943	2098	8943	2098
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IN COUNTY OF THE PROPERTY OF T	Facility Name Connersville Peaking Station Connersville Peaking Station Connersville Peaking Station	Facility ID (ORISPL) 1002	Unit ID	2012 (to	ns) NOx			2013 (%	-	2014		2015	(%)	2013 (to	ns)	2014 (t	ons)	2015 (t	onel
IN COUNTY OF THE PROPERTY OF T	Connersville Peaking Station Connersville Peaking Station		Unit ID	SO2	NOv									-		-	-	=	-
IN COUNTY OF THE PROPERTY OF T	Connersville Peaking Station	1002			NOX	Actual/Projected	Reference(s)	SO2 N	Юx	SO2	NOx	SO2	NOx	SO2	NOx	SO2	NOx	SO2	NOx
IN COUNTY OF THE PROPERTY OF T	<u> </u>		1A	0	0									0	0	0	0	0	0
IN COUNTY OF THE PROPERTY OF T	Connercyille Deaking Station	1002	1B	0	0									0	0	0	0	0	0
IN COUNTY OF THE PROPERTY OF T	_	1002	2A	0	0									0	0	0	0	0	0
IN COUNTY OF THE PROPERTY OF T	Connersville Peaking Station	1002	2B	0	0									0	0	0	0	0	0
IN COUNTY OF THE PROPERTY OF T	Dean H Mitchell Generating Station	996	11											0	0	0	0	0	0
IN EIN EIN FIN FIN GIN GIN GIN GIN GIN GIN GIN GIN GIN G	Dean H Mitchell Generating Station	996	4											0	0	0	0	0	0
IN EIN EIN FIN FIN GIN GIN GIN GIN GIN GIN GIN GIN GIN G	Dean H Mitchell Generating Station	996	5											0	0	0	0	0	0
IN EIN FIN FIN GIN GIN GIN GIN GIN GIN GIN GIN GIN G	Dean H Mitchell Generating Station	996	6											0	0	0	0	0	0
IN FIN FIN GIN GIN GIN GIN GIN GIN GIN GIN GIN G	Edwardsport	1004	CTG1	0	46									0	46	0	46	0	46
IN FIN FIN GIN GIN GIN GIN GIN GIN GIN GIN GIN G	Edwardsport	1004	CTG2	26	44									26	44	26	44	26	44
IN FIN GIN GIN GIN GIN GIN GIN GIN GIN GIN G	F B Culley Generating Station	1012	2	349	291									349	291	349	291	349	291
IN FIN GIN GIN GIN GIN GIN GIN GIN GIN GIN G	F B Culley Generating Station	1012	3	1767	1094									1767	1094	1767	1094	1767	1094
IN GIN GIN GIN GIN GIN GIN GIN GIN GIN G	Frank E Ratts	1043	1SG1	3678	293									3678	293	3678	293	3678	293
IN GIN GIN GIN GIN GIN GIN GIN GIN GIN G	Frank E Ratts	1043	2SG1	3004	255									3004	255	3004	255	3004	255
IN GIN GIN GIN GIN GIN GIN GIN GIN GIN G	Georgetown Substation	7759	GT1	0	3									0	3	0	3	0	3
IN GIN GIN GIN GIN GIN GIN GIN GIN GIN G	Georgetown Substation	7759	GT2	0	7									0	7	0	7	0	7
IN GIN GIN GIN GIN GIN GIN GIN HIN HIN H	Georgetown Substation	7759	GT3	0	6									0	6	0	6	0	6
IN G IN G IN G IN G IN H IN H	Georgetown Substation	7759	GT4	0	5									0	5	0	5	0	5
IN G IN G IN H IN H	Gibson	6113	1	2601	2060									2601	2060	2601	2060	2601	2060
IN G IN G IN H	Gibson	6113	2	2315	3282									2315	3282	2315	3282	2315	3282
IN G IN H IN H	Gibson	6113	3	2608	3040									2608	3040	2608	3040	2608	3040
IN H	Gibson	6113	4	2911	2134									2911	2134	2911	2134	2911	2134
IN H	Gibson	6113	5	12011	2127									12011	2127	12011	2127	12011	2127
	Henry County Generating Station	7763	1	0	12									0	12	0	12	0	12
	Henry County Generating Station	7763	2	0	12									0	12	0	12	0	12
IN H	Henry County Generating Station	7763	3	0	12									0	12	0	12	0	12
IN H	Hoosier Energy Lawrence Co Station	7948	1	0	6									0	6	0	6	0	6
IN H	Hoosier Energy Lawrence Co Station	7948	2	0	6									0	6	0	6	0	6
IN H	Hoosier Energy Lawrence Co Station	7948	3	0	6									0	6	0	6	0	6
IN H	Hoosier Energy Lawrence Co Station	7948	4	0	5									0	5	0	5	0	5
IN H	Hoosier Energy Lawrence Co Station	7948	5	0	6									0	6	0	6	0	6
IN H	Hoosier Energy Lawrence Co Station	7948	6	0	6									0	6	0	6	0	6
IN II	IPL - Eagle Valley Generating Station	991	1											0	0	0	0	0	0
IN II	IPL - Eagle Valley Generating Station	991	2											0	0	0	0	0	0
IN II	IPL - Eagle Valley Generating Station	991	3	118	28									118	28	118	28	118	28
IN II	IPL - Eagle Valley Generating Station	991	4	554	83									554	83	554	83	554	83
IN II	IPL - Eagle Valley Generating Station	991	5	1013	153									1013	153	1013	153	1013	153
IN II	IPL - Eagle Valley Generating Station	991	6	1751	293									1751	293	1751	293	1751	293
IN II	IPL - Harding Street Station (EW Stout)	990	10											0	0	0	0	0	0
	IPL - Harding Street Station (EW Stout)	990	50	10531	811									10531	811	10531	811	10531	811
IN II	IPL - Harding Street Station (EW Stout)	990	60	10270	760									10270	760	10270	760	10270	760
IN II	IPL - Harding Street Station (EW Stout)	990	70	741	1495									741	1495	741	1495	741	1495
	IPL - Harding Street Station (EW Stout)	990	9											0	0	0	0	0	0
	IPL - Harding Street Station (EW Stout)	990	GT4	0	15									0	15	0	15	0	15
	IPL - Harding Street Station (EW Stout)	990	GT5	0	19									0	19	0	19	0	19
	IPL - Harding Street Station (EW Stout)	990	GT6	0	10									0	10	0	10	0	10
	IPL - Petersburg Generating Station	994	1	2739	1744									2739	1744	2739	1744	2739	1744
	IPL - Petersburg Generating Station	994	2	4866	1555									4866	1555	4866	1555	4866	1555
	IPL - Petersburg Generating Station	994	3	4495	1833									4495	1833	4495	1833	4495	1833
	IPL - Petersburg Generating Station	994	4	3363	4161									3363	4161	3363	4161	3363	4161
		55502	1	4	65									1	65	1	65	4	65
IN L	Lawrenceburg Energy Facility	JJJU2	1	-	UJ									4	0.3	-	UJ	-	

CAMI	D Facility Information			Reported Er	nissions	Emissions Reduction		F	Reductio	on from	2012 Er	nissions			Pr	rojected I	Emissions	5	
		Facility ID		2012 (to	ons)			2013	3 (%)	2014	(%)	2015	(%)	2013 (t	tons)	2014 (tons)	2015 (1	tons)
State	Facility Name	(ORISPL)	Unit ID	SO2	NOx	Actual/Projected	Reference(s)	SO2	NOx	SO2	NOx	SO2	NOx	SO2	NOx	SO2	NOx	SO2	NOx
IN	Lawrenceburg Energy Facility	55502	3	4	65									4	65	4	65	4	65
IN	Lawrenceburg Energy Facility	55502	4	3	58									3	58	3	58	3	58
IN	Merom	6213	1SG1	3004	1297									3004	1297	3004	1297	3004	1297
IN	Merom	6213	2SG1	1373	950									1373	950	1373	950	1373	950
IN	Michigan City Generating Station	997	12	11584	1170									11584	1170	11584	1170	11584	1170
IN	Michigan City Generating Station	997	4											0	0	0	0	0	0
IN	Michigan City Generating Station	997	5											0	0	0	0	0	0
IN	Michigan City Generating Station	997	6											0	0	0	0	0	0
IN	Montpelier Electric Gen Station	55229	G1CT1	0	10									0	10	0	10	0	10
IN	Montpelier Electric Gen Station	55229	G1CT2	0	10									0	10	0	10	0	10
IN	Montpelier Electric Gen Station	55229	G2CT1	0	10									0	10	0	10	0	10
IN	Montpelier Electric Gen Station	55229	G2CT2	0	10									0	10	0	10	0	10
IN	Montpelier Electric Gen Station	55229	G3CT1	0	10									0	10	0	10	0	10
IN	Montpelier Electric Gen Station	55229	G3CT2	0	10									0	10	0	10	0	10
IN	Montpelier Electric Gen Station	55229	G4CT1	0	11									0	11	0	11	0	11
IN	Montpelier Electric Gen Station	55229	G4CT2	0	11									0	11	0	11	0	11
IN	Noblesville	1007	CT3	1	18									1	18	1	18	1	18
IN	Noblesville	1007	CT4	1	18									1	18	1	18	1	18
IN	Noblesville	1007	CT5	1	20									1	20	1	20	1	20
IN	Portside Energy	55096	BLR1		4									0	4	0	4	0	4
IN	Portside Energy	55096	BLR2		0									0	0	0	0	0	0
IN	Portside Energy	55096	СТ		26									0	26	0	26	0	26
IN	R Gallagher	1008	1	2	1									2	1	2	1	2	1
IN	R Gallagher	1008	2	598	337									598	337	598	337	598	337
IN	R Gallagher	1008	3	1	0									1	0	1	0	1	0
IN	R Gallagher	1008	4	324	166									324	166	324	166	324	166
IN	R M Schahfer Generating Station	6085	14	5423	782									5423	782	5423	782	5423	782
IN	R M Schahfer Generating Station	6085	15	8127	2086									8127	2086	8127	2086	8127	2086
IN	R M Schahfer Generating Station	6085	16A	0	49									0	49	0	49	0	49
IN	R M Schahfer Generating Station	6085	16B	0	29									0	29	0	29	0	29
IN	R M Schahfer Generating Station	6085	17	546	1148									546	1148	546	1148	546	1148
IN	R M Schahfer Generating Station	6085	18	803	1846									803	1846	803	1846	803	1846
IN 	Richmond (IN)	7335	RCT1	0	1									0	1	0	1	0	1
IN	Richmond (IN)	7335	RCT2	0	2									0	2	0	2	0	2
IN	Rockport	6166	MB1	27849	11016									27849	11016	27849	11016	27849	11016
IN	Rockport	6166	MB2	26541	10627		2							26541	10627	26541	10627	26541	10627
IN	State Line Generating Station (IN)	981	3	911	325	Deactivation 3/25/2012	PJM, EPA ²	100%	100%	100%	100%	100%	100%	0	0	0	0	0	0
IN	State Line Generating Station (IN)	981	4	1128	1186	Deactivation 3/25/2012	PJM, EPA ²	100%	100%	100%	100%	100%	100%	0	0	0	0	0	0
IN	Sugar Creek Generating Station	55364	CT11	3	49									3	49	3	49	3	49
IN	Sugar Creek Generating Station	55364	CT12	3	52									3	52	3	52	3	52
IN	Tanners Creek	988	U1	506	158	Deactivation 6/1/2015	PJM					58%	58%	506	158	506	158	213	66
IN	Tanners Creek	988	U2	765	246	Deactivation 6/1/2015	PJM					58%	58%	765	246	765	246	321	103
IN	Tanners Creek	988	U3	3105	937	Deactivation 6/1/2015	PJM					58%	58%	3105	937	3105	937	1304	393
IN	Tanners Creek	988	U4	14200	2179									14200	2179	14200	2179	14200	2179
IN	Vermillion Generating Station	55111	1	0	2									0	2	0	2	0	2
IN	Vermillion Generating Station	55111	2	0	2									0	2	0	2	0	2
IN	Vermillion Generating Station	55111	3	0	2									0	2	0	2	0	2
IN	Vermillion Generating Station	55111	4	0	2									0	2	0	2	0	2
IN	Vermillion Generating Station	55111	5	0	2									0	2	0	2	0	2
IN	Vermillion Generating Station	55111	6	0	2									0	2	0	2	0	2
IN	Vermillion Generating Station	55111	7	0	2									0	2	0	2	0	2

CAMI	Facility Information			Reported En	nissions	Emissions Reduction		Reductio	n from 2012 En	nissions	;		Pr	ojected E	missions		
		Facility ID		2012 (to	ons)			2013 (%)	2014 (%)	2015	(%)	2013 (t	ons)	2014 (t	ons)	2015 (t	tons)
State	Facility Name	(ORISPL)	Unit ID	SO2	NOx	Actual/Projected	Reference(s)	SO2 NOx	SO2 NOx	SO2	NOx	SO2	NOx	SO2	NOx	SO2	NOx
IN	Vermillion Generating Station	55111	8	0	2							0	2	0	2	0	2
IN	Wabash River Gen Station	1010	1	357	254							357	254	357	254	357	254
IN	Wabash River Gen Station	1010	2	3110	372							3110	372	3110	372	3110	372
IN	Wabash River Gen Station	1010	3	2490	310							2490	310	2490	310	2490	310
IN	Wabash River Gen Station	1010	4	3293	365							3293	365	3293	365	3293	365
IN	Wabash River Gen Station	1010	5	680	79							680	79	680	79	680	79
IN	Wabash River Gen Station	1010	6	14451	1748							14451	1748	14451	1748	14451	1748
IN	Wheatland Generating Facility LLC	55224	EU-01	0	26							0	26	0	26	0	26
IN	Wheatland Generating Facility LLC	55224	EU-02	0	10							0	10	0	10	0	10
IN	Wheatland Generating Facility LLC	55224	EU-03	0	20							0	20	0	20	0	20
IN	Wheatland Generating Facility LLC	55224	EU-04	0	25							0	25	0	25	0	25
IN	Whitewater Valley	1040	1	195	18							195	18	195	18	195	18
IN	Whitewater Valley	1040	2	378	35							378	35	378	35	378	35
IN	Whiting Clean Energy, Inc.	55259	CT1	3	50							3	50	3	50	3	50
IN	Whiting Clean Energy, Inc.	55259	CT2	4	54							4	54	4	54	4	54
IN	Worthington Generation	55148	1	0	2							0	2	0	2	0	2
IN	Worthington Generation	55148	2	0	2							0	2	0	2	0	2
IN	Worthington Generation	55148	3	0	2							0	2	0	2	0	2
IN	Worthington Generation	55148	4	0	2							0	2	0	2	0	2
VA	Altavista Power Station	10773	1									0	0	0	0	0	0
VA	Altavista Power Station	10773	2									0	0	0	0	0	0
VA	Bear Garden Generating Station	56807	1A	4	56							4	56	4	56	4	56
VA	Bear Garden Generating Station	56807	1B	4	51							4	51	4	51	4	51
VA	Bellemeade Power Station	50966	1	2	74							2	74	2	74	2	74
VA	Bellemeade Power Station	50966	2	2	73							2	73	2	73	2	73
VA	Birchwood Power Facility	54304	1	195	215							195	215	195	215	195	215
VA	Bremo Power Station	3796	3	604	226							604	226	604	226	604	226
VA	Bremo Power Station	3796	4	2345	630							2345	630	2345	630	2345	630
VA	Buchanan Units 1 & 2	55738	1	0	4							0	4	0	4	0	4
VA	Buchanan Units 1 & 2	55738	2	0	4							0	4	0	4	0	4
VA	Chesapeake Energy Center	3803	1	932	475	Deactivation 12/31/2014	PJM			100%	100%	932	475	932	475	0	0
VA	Chesapeake Energy Center	3803	2	1403	679	Deactivation 12/31/2014	PJM			100%	100%	1403	679	1403	679	0	0
VA	Chesapeake Energy Center	3803	3	5133	1236	Deactivation 12/31/2014	PJM				100%	5133	1236	5133	1236	0	0
VA	Chesapeake Energy Center	3803	4	2004	455	Deactivation 12/31/2014	PJM			100%	100%	2004	455	2004	455	0	0
VA	Chesterfield Power Station	3797	**8A	3	500							3	500	3	500	3	500
VA	Chesterfield Power Station	3797	3	27	167							27	167	27	167	27	167
VA	Chesterfield Power Station	3797	4	101	363							101	363	101	363	101	363
VA	Chesterfield Power Station	3797	5	454	435							454	435	454	435	454	435
VA	Chesterfield Power Station	3797	6	641	565							641	565	641	565	641	565
VA	Chesterfield Power Station	3797	7	4	688							4	688	4	688	4	688
VA	Clinch River	3775	1	2035	454							2035	454	2035	454	2035	454
VA	Clinch River	3775	2	1131	259							1131	259	1131	259	1131	259
VA	Clinch River	3775	3	715	160	Deactivation 6/1/2015	PJM			58%	58%	715	160	715	160	300	67
VA	Clover Power Station	7213	1	871	2901							871	2901	871	2901	871	2901
VA	Clover Power Station	7213	2	1004	3793							1004	3793	1004	3793	1004	3793
VA	Cogentrix-Hopewell	10377	BLR01A	398	206							398	206	398	206	398	206
VA	Cogentrix-Hopewell	10377	BLR01B	308	161							308	161	308	161	308	161
VA	Cogentrix-Hopewell	10377	BLR01C	391	194							391	194	391	194	391	194
VA	Cogentrix-Hopewell	10377	BLR02A	128	66							128	66	128	66	128	66
VA	Cogentrix-Hopewell	10377	BLR02B	153	80							153	80	153	80	153	80
VA	Cogentrix-Hopewell	10377	BLR02C	133	74							133	74	133	74	133	74
VA	Cogentrix-Portsmouth	10071	BLR01A	29	14							29	14	29	14	29	14

CAMI	O Facility Information			Reported En	nissions	Emissions Reduction		Reductio	on from 2012 En	nissions			Pro	ojected E	missions		
		Facility ID		2012 (to	ns)			2013 (%)	2014 (%)	2015 (%)	2013 (t	ons)	2014 (t	ons)	2015 (to	ons)
State	Facility Name	(ORISPL)	Unit ID	SO2	NOx	Actual/Projected	Reference(s)	SO2 NOx	SO2 NOx	SO2	NOx	SO2	NOx	SO2	NOx	SO2	NOx
VA	Cogentrix-Portsmouth	10071	BLR01B	28	13							28	13	28	13	28	13
VA	Cogentrix-Portsmouth	10071	BLR01C	26	13							26	13	26	13	26	13
VA	Cogentrix-Portsmouth	10071	BLR02A	25	16							25	16	25	16	25	16
VA	Cogentrix-Portsmouth	10071	BLR02B	22	13							22	13	22	13	22	13
VA	Cogentrix-Portsmouth	10071	BLR02C	25	16							25	16	25	16	25	16
VA	Commonwealth Chesapeake	55381	CT-001	0	13							0	13	0	13	0	13
VA	Commonwealth Chesapeake	55381	CT-002	0	14							0	14	0	14	0	14
VA	Commonwealth Chesapeake	55381	CT-003	0	12							0	12	0	12	0	12
VA	Commonwealth Chesapeake	55381	CT-004	0	4							0	4	0	4	0	4
VA	Commonwealth Chesapeake	55381	CT-005	0	4							0	4	0	4	0	4
VA	Commonwealth Chesapeake	55381	CT-006	0	1							0	1	0	1	0	1
VA	Commonwealth Chesapeake	55381	CT-007	0	2							0	2	0	2	0	2
VA	Darbytown Combustion Turbine	7212	1	0	24							0	24	0	24	0	24
VA	Darbytown Combustion Turbine	7212	2	0	20							0	20	0	20	0	20
VA	Darbytown Combustion Turbine	7212	3	0	21							0	21	0	21	0	21
VA	Darbytown Combustion Turbine	7212	4	0	28							0	28	0	28	0	28
VA	Doswell Limited Partnership	52019	501	2	127							2	127	2	127	2	127
VA	Doswell Limited Partnership	52019	502	2	117							2	117	2	117	2	117
VA	Doswell Limited Partnership	52019	601	2	112							2	112	2	112	2	112
VA	Doswell Limited Partnership	52019	602	2	126							2	126	2	126	2	126
VA	Doswell Limited Partnership	52019	CT1	0	17							0	17	0	17	0	17
VA	Elizabeth River Combustion Turbine Sta	52087	CT-1	2	44							2	44	2	44	2	44
VA	Elizabeth River Combustion Turbine Sta	52087	CT-2	0	25							0	25	0	25	0	25
VA	Elizabeth River Combustion Turbine Sta	52087	CT-3	1	52							1	52	1	52	1	52
VA	Glen Lyn	3776	51	36	15							36	15	36	15	36	15
VA	Glen Lyn	3776	52	43	15							43	15	43	15	43	15
VA	Glen Lyn	3776	6	534	170	Deactivation 6/1/2015	PJM			58%	58%	534	170	534	170	224	71
VA	Gordonsville Power Station	54844	1	2	90							2	90	2	90	2	90
VA	Gordonsville Power Station	54844	2	2	81							2	81	2	81	2	81
VA	Gravel Neck Combustion Turbine	7032	3	1	6							1	6	1	6	1	6
VA	Gravel Neck Combustion Turbine	7032	4	1	26							1	26	1	26	1	26
VA	Gravel Neck Combustion Turbine	7032	5	0	24							0	24	0	24	0	24
VA	Gravel Neck Combustion Turbine	7032	6	1	3							1	3	1	3	1	3
VA	Hopewell Cogeneration Facility	10633	1	1	185							1	185	1	185	1	185
VA	Hopewell Cogeneration Facility	10633	2	1	195							1	195	1	195	1	195
VA	Hopewell Cogeneration Facility	10633	3	1	195							1	195	1	195	1	195
VA	Hopewell Power Station	10771	1	,	25							/	25	/	25	,	25
VA	Hopewell Power Station	10771	2	5	24							5	24	5	24	5	24
VA	Ladysmith Combustion Turbine Sta	7839	1	0	21							0	21	0	21	0	21
VA	Ladysmith Combustion Turbine Sta	7839	2	0	17							0	17	0	17	0	17
VA	Ladysmith Combustion Turbine Sta	7839	3	0	20							0	20	0	20	0	20
VA	Ladysmith Combustion Turbine Sta	7839	4	0	19							0	19	0	19	0	19
VA	Ladysmith Combustion Turbine Sta	7839	5	0	20							0	20	0	20	0	20
VA	Louisa Generation Facility	7837	EU1	0	1							0	1	0	1	0	1
VA	Louisa Generation Facility	7837 7927	EU2	0	1							0	1	0	1	0	1
VA	Louisa Generation Facility	7837 7837	EU3 EU4	0 0	1							0	2	0	2	0	2
VA	Louisa Generation Facility			-	2							0	2	0	_	0	_
VA	Louisa Generation Facility	7837 7826	EU5 EU1	0	0							0	о 7	0	6 7	0	6
VA	Marsh Run Generation Facility	7836 7836	EU1	0	/ c							0	/ c	0	/ c	U	6
VA	Marsh Run Generation Facility	7836 7836	EU2 EU3	0	6							0	6	0	6	0	6
VA	Marsh Run Generation Facility			0	•							0.4	100	Ū	100	O	_
VA	Mecklenburg Power Station	52007	1	84	190							84	190	84	190	84	190

CAMI	P Facility Information			Reported En	nissions	Emissions Reduction		R	Reduction	on from	2012 Eı	mission	S		Pr	ojected E	missions		
		Facility ID		2012 (to	-			2013		2014		2015		2013 (t	-	2014 (t	_	2015 (t	-
State	Facility Name	(ORISPL)	Unit ID	SO2	NOx	Actual/Projected	Reference(s)	SO2	NOx	SO2	NOx	SO2	NOx	SO2	NOx	SO2	NOx	SO2	NOx
VA	Mecklenburg Power Station	52007	2	60	156									60	156	60	156	60	156
VA	Possum Point Power Station	3804	3	0	41									0	41	0	41	0	41
VA	Possum Point Power Station	3804	4	0	83									0	83	0	83	0	83
VA	Possum Point Power Station	3804	5	282	83									282	83	282	83	282	83
VA	Possum Point Power Station	3804	6A	5	76									5	76	5	76	5	76
VA	Possum Point Power Station	3804	6B	5	76									5	76	5	76	5	76
VA	Potomac River	3788	1	39	56	Deactivation 10/1/2012	PJM	100%	100%	100%	100%	100%		0	0	0	0	0	0
VA	Potomac River	3788	2	35	52	Deactivation 10/1/2012	PJM	100%	100%	100%	100%	100%		0	0	0	0	0	0
VA	Potomac River	3788	3	179	144	Deactivation 10/1/2012	PJM	100%	100%	100%	100%	100%		0	0	0	0	0	0
VA	Potomac River	3788	4	66	51	Deactivation 10/1/2012	PJM	100%	100%	100%	100%	100%		0	0	0	0	0	0
VA	Potomac River	3788	5	201	156	Deactivation 10/1/2012	PJM	100%	100%	100%	100%	100%	100%	0	0	0	0	0	0
VA	Remington Combustion Turbine Station	7838	1	0	14									0	14	0	14	0	14
VA	Remington Combustion Turbine Station	7838	2	0	15									0	15	0	15	0	15
VA	Remington Combustion Turbine Station	7838	3	0	13									0	13	0	13	0	13
VA	Remington Combustion Turbine Station	7838	4	0	11									0	11	0	11	0	11
VA	Southampton Power Station	10774	1	13	77									13	77	13	77	13	77
VA	Southampton Power Station	10774	2	13	70									13	70	13	70	13	70
VA	Spruance Genco, LLC	54081	BLR01A	49	158									49	158	49	158	49	158
VA	Spruance Genco, LLC	54081	BLR01B	53	173									53	173	53	173	53	173
VA	Spruance Genco, LLC	54081	BLR02A	61	183									61	183	61	183	61	183
VA	Spruance Genco, LLC	54081	BLR02B	66	202									66	202	66	202	66	202
VA	Spruance Genco, LLC	54081	BLR03A	68	196									68	196	68	196	68	196
VA	Spruance Genco, LLC	54081	BLR03B	77	224									77	224	77	224	77	224
VA	Spruance Genco, LLC	54081	BLR04A	59	187									59	187	59	187	59	187
VA	Spruance Genco, LLC	54081	BLR04B	68	212									68	212	68	212	68	212
VA	Tasley Energy Center	3785	TA10	0	9									0	9	0	9	0	9
VA	Tenaska Virginia Generating Station	55439	CTGDB1	4	42									4	42	4	42	4	42
VA	Tenaska Virginia Generating Station	55439	CTGDB2	4	42									4	42	4	42	4	42
VA	Tenaska Virginia Generating Station	55439	CTGDB3	4	41									4	41	4	41	4	41
VA	Virginia City Hybrid Energy Center	56808	1	58	223									58	223	58	223	58	223
VA	Virginia City Hybrid Energy Center	56808	2	109	182									109	182	109	182	109	182
VA	Wolf Hills Energy	55285	WH01	0	2									0	2	0	2	0	2
VA	Wolf Hills Energy	55285	WH02	0	2									0	2	0	2	0	2
VA	Wolf Hills Energy	55285	WH03	0	2									0	2	0	2	0	2
VA	Wolf Hills Energy	55285	WH04	0	2									0	2	0	2	0	2
VA	Wolf Hills Energy	55285	WH05	0	2									0	2	0	2	0	2
VA	Wolf Hills Energy	55285	WH06	0	2									0	2	0	2	0	2
VA	Wolf Hills Energy	55285	WH07	0	2									0	2	0	2	0	2
VA	Wolf Hills Energy	55285	WH08	0	2									0	2	0	2	0	2
VA	Wolf Hills Energy	55285	WH09	0	2									0	2	0	2	0	2
VA	Wolf Hills Energy	55285	WH10	0	2									0	2	0	2	0	2
VA	Yorktown Power Station	3809	1	2852		Deactivation 12/31/2014	PJM					100%		2852	676	2852	676	0	0
VA	Yorktown Power Station	3809	2	4636		Deactivation 12/31/2014	PJM					100%	100%	4636	1112	4636	1112	0	0
VA	Yorktown Power Station	3809	3	408	128									408	128	408	128	408	128
NJ	B L England	2378	1	934	163	Deactivation 5/1/2014	PJM			66%	66%	100%	100%	934	163	318	55	0	0
NJ	B L England	2378	2	71	227									71	227	71	227	71	227
NJ	B L England	2378	3	38	8									38	8	38	8	38	8
NJ	Bayonne Energy Center	56964	GT1	0	3									0	3	0	3	0	3
NJ	Bayonne Energy Center	56964	GT2	0	3									0	3	0	3	0	3
NJ	Bayonne Energy Center	56964	GT3	0	3									0	3	0	3	0	3
NJ	Bayonne Energy Center	56964	GT4	0	3									0	3	0	3	0	3
NJ	Bayonne Energy Center	56964	GT5	0	2									0	2	0	2	0	2

CAMI	O Facility Information			Reported Em	nissions	Emissions Reduction		Reductio	on from 2012 En	nissions			Pro	ojected E	missions		
		Facility ID		2012 (to				2013 (%)	2014 (%)	2015		2013 (t	-	2014 (t	-	2015 (t	-
	Facility Name	(ORISPL)	Unit ID	SO2	NOx	Actual/Projected	Reference(s)	SO2 NOx	SO2 NOx	SO2	NOx	SO2	NOx	SO2	NOx	SO2	NOx
NJ	Bayonne Energy Center	56964	GT6	0	3							0	3	0	3	0	3
NJ	Bayonne Energy Center	56964	GT7	0	3							0	3	0	3	0	3
NJ	Bayonne Energy Center	56964	GT8	0	3							0	3	0	3	0	3
NJ	Bayonne Plant Holding, LLC	50497	1001	1	32							1	32	1	32	1	32
NJ	Bayonne Plant Holding, LLC	50497	2001	0	31							0	31	0	31	0	31
NJ	Bayonne Plant Holding, LLC	50497	4001	1	34							1	34	1	34	1	34
NJ	Bergen	2398	1101	2	75							2	75	2	75	2	75
NJ	Bergen	2398	1201	2	110							2	110	2	110	2	110
NJ	Bergen	2398	1301	2	106							2	106	2	106	2	106
NJ	Bergen	2398	1401	2	113							2	113	2	113	2	113
NJ	Bergen	2398	2101	3	29							3	29	3	29	3	29
NJ	Bergen	2398	2201	3	32							3	32	3	32	3	32
NJ	Bergen	2398	3001		2	Deactivation 6/1/2015	PJM			58%	58%	0	2	0	2	0	1
NJ	Burlington Generating Station	2399	12001	0	1							0	1	0	1	0	1
NJ	Burlington Generating Station	2399	121	0	11	Deactivation 6/1/2015	PJM			58%	58%	0	11	0	11	0	5
NJ	Burlington Generating Station	2399	122	0	12	Deactivation 6/1/2015	PJM			58%	58%	0	12	0	12	0	5
NJ	Burlington Generating Station	2399	123	0	11	Deactivation 6/1/2015	PJM			58%	58%	0	11	0	11	0	5
NJ	Burlington Generating Station	2399	124	0	13	Deactivation 6/1/2015	PJM			58%	58%	0	13	0	13	0	5
NJ	Burlington Generating Station	2399	14001	0	0							0	0	0	0	0	0
NJ	Burlington Generating Station	2399	16001	0	1							0	1	0	1	0	1
NJ	Burlington Generating Station	2399	18001	1	2	Deactivation 6/1/2015	PJM			58%	58%	1	2	1	2	0	1
NJ	Burlington Generating Station	2399	28001	0	1							0	1	0	1	0	1
NJ	Burlington Generating Station	2399	30001	0	1							0	1	0	1	0	1
NJ	Burlington Generating Station	2399	32001	0	0							0	0	0	0	0	0
NJ	Burlington Generating Station	2399	34001	0	1							0	1	0	1	0	1
NJ	Burlington Generating Station	2399	4001		0							0	0	0	0	0	0
NJ	Camden Plant Holding, LLC	10751	2001	1	77							1	77	1	77	1	77
NJ	Carlls Corner Energy Center	2379	2001	0	108							0	108	0	108	0	108
NJ	Carlls Corner Energy Center	2379	3001	0	83							0	83	0	83	0	83
NJ	Carneys Point	10566	1001	569	394							569	394	569	394	569	394
NJ	Carneys Point	10566	1002	489	349							489	349	489	349	489	349
NJ	Cedar Energy Station	2380	2001	0	11							0	11	0	11	0	11
NJ	Cedar Energy Station	2380	3001	0	11							0	11	0	11	0	11
NJ	Cedar Energy Station	2380	4001	0	10							0	10	0	10	0	10
NJ	Cumberland Energy Center	5083	4001	0	30							0	30	0	30	0	30
NJ	Cumberland Energy Center	5083	5001	0	1							0	1	0	1	0	1
NJ	Deepwater	2384	1	0	46							0	46	0	46	0	46
NJ	Deepwater	2384	8	0	85							0	85	0	85	0	85
NJ	E F Kenilworth, Inc.	10805	2001		96							0	96	0	96	0	96
NJ	EFS Parlin Holdings, LLC	50799	1001	0	21							0	21	0	21	0	21
NJ	EFS Parlin Holdings, LLC	50799	3001	0	20							0	20	0	20	0	20
NJ	Eagle Point Power Generation	50561	1	0	12							0	12	0	12	0	12
NJ	Eagle Point Power Generation	50561	2	0	4							0	4	0	4	0	4
NJ	Edison	2400	1001	0	10	Deactivation 6/1/2015	PJM			58%	58%	0	10	0	10	0	4
NJ	Edison	2400	11001	0	9	Deactivation 6/1/2015	PJM			58%	58%	0	9	0	9	0	4
NJ	Edison	2400	13001	0	11	Deactivation 6/1/2015	PJM			58%	58%	0	11	0	11	0	5
NJ	Edison	2400	15001	0	10	Deactivation 6/1/2015	PJM			58%	58%	0	10	0	10	0	4
NJ	Edison	2400	17001	0	11	Deactivation 6/1/2015	PJM			58%	58%	0	11	0	11	0	4
NJ	Edison	2400	19001	0	11	Deactivation 6/1/2015	PJM			58%	58%	0	11	0	11	0	5
NJ	Edison	2400	21001	0	8	Deactivation 6/1/2015	PJM			58%	58%	0	8	0	8	0	3
NJ	Edison	2400	23001	0	7	Deactivation 6/1/2015	PJM			58%	58%	0	7	0	7	0	3
NJ	Edison	2400	3001	0	9	Deactivation 6/1/2015	PJM			58%	58%	0	9	0	9	0	4

CAMI	P Facility Information			Reported Em	issions	Emissions Reduction		Re	eductio	on from	2012 Er	nissions	;		Pro	ojected E	missions		
		Facility ID		2012 (to	-			2013 (2014		2015		2013 (t	-	2014 (t	-	2015 (t	=
State	Facility Name	(ORISPL)	Unit ID	SO2	NOx	Actual/Projected	Reference(s)	SO2	NOx	SO2	NOx	SO2		SO2	NOx	SO2	NOx	SO2	NOx
NJ	Edison	2400	5001	0	9	Deactivation 6/1/2015	PJM					58%	58%	0	9	0	9	0	4
NJ	Edison	2400	7001	0	9	Deactivation 6/1/2015	PJM					58%	58%	0	9	0	9	0	4
NJ	Edison	2400	9001	0	10	Deactivation 6/1/2015	PJM					58%	58%	0	10	0	10	0	4
NJ	Elmwood Park Power - LLC	50852	2001	0	14									0	14	0	14	0	14
NJ	Essential Power Lakewood, LLC	54640	1001	1	34									1	34	1	34	1	34
NJ	Essential Power Lakewood, LLC	54640	2001	1	35									1	35	1	35	1	35
NJ	Essential Power Ocean Peaking Power, LLC		OPP3	0	25									0	25	0	25	0	25
NJ	Essential Power Ocean Peaking Power, LLC	55938	OPP4	0	29									0	29	0	29	0	29
NJ	Essex	2401	10001	0	14	Deactivation 6/1/2015	PJM					58%	58%	0	14	0	14	0	6
NJ	Essex	2401	12001	0	13	Deactivation 6/1/2015	PJM					58%	58%	0	13	0	13	0	5
NJ	Essex	2401	14001	0	26	Deactivation 6/1/2015	PJM					58%	58%	0	26	0	26	0	11
NJ	Essex	2401	16001	0	24	Deactivation 6/1/2015	PJM					58%	58%	0	24	0	24	0	10
NJ	Essex	2401	18001	0	25	Deactivation 6/1/2015	PJM					58%	58%	0	25	0	25	0	11
NJ	Essex	2401	20001	0	21	Deactivation 6/1/2015	PJM					58%	58%	0	21	0	21	0	9
NJ	Essex	2401	2001	0	18	Deactivation 6/1/2015	PJM					58%	58%	0	18	0	18	0	7
NJ	Essex	2401	22001	0	19	Deactivation 6/1/2015	PJM					58%	58%	0	19	0	19	0	8
NJ	Essex	2401	24001	0	18	Deactivation 6/1/2015	PJM					58%	58%	0	18	0	18	0	8
NJ	Essex	2401	26001	0	22	Deactivation 6/1/2015	PJM					58%	58%	0	22	0	22	0	9
NJ	Essex	2401	28001	0	27	Deactivation 6/1/2015	PJM					58%	58%	0	27	0	27	0	11
NJ	Essex	2401	35001	0	5									0	5	0	5	0	5
NJ	Essex	2401	4001	0	16									0	16	0	16	0	16
NJ	Forked River	7138	2001	0	1									0	1	0	1	0	1
NJ	Forked River	7138	3001	0	2									0	2	0	2	0	2
NJ	Gilbert Generating Station	2393	4	0	8	Deactivation 5/1/2015	PJM					66%	66%	0	8	0	8	0	3
NJ	Gilbert Generating Station	2393	5	0	11	Deactivation 5/1/2015	PJM					66%	66%	0	11	0	11	0	4
NJ	Gilbert Generating Station	2393	6	0	11	Deactivation 5/1/2015	PJM					66%	66%	0	11	0	11	0	4
NJ	Gilbert Generating Station	2393	7	0	7	Deactivation 5/1/2015	PJM					66%	66%	0	7	0	7	0	2
NJ	Gilbert Generating Station	2393	9	0	1	Deactivation 5/1/2015	PJM					66%	66%	0	1	0	1	0	0
NJ	Howard M Down	2434	6001		3		-							0	3	0	3	0	3
NJ	Howard M Down	2434	U11	0	1									0	1	0	1	0	1
NJ	Hudson Generating Station	2403	2	139	373									139	373	139	373	139	373
NJ	Kearny Generating Station	2404	121	0	12	Deactivation 6/1/2012	PJM	100%	100%	100%	100%	100%	100%	0	0	0	0	0	0
NJ	Kearny Generating Station	2404	122	0	12	Deactivation 6/1/2012	PJM		100%	100%	100%	100%	100%	0	0	0	0	0	0
NJ	Kearny Generating Station	2404	123	0	10	Deactivation of 1/2012	1 3141	10070	100/0	10070	10070	10070	10070	0	10	0	10	0	10
NJ	Kearny Generating Station	2404	124	0	12									0	12	0	12	0	12
NJ	Kearny Generating Station	2404	131	0	8									0	8	0	8	0	8
NJ	Kearny Generating Station Kearny Generating Station	2404	132	0	1									0	1	0	1	0	1
NJ	Kearny Generating Station	2404	133	0	0									0	0	0	0	0	0
NJ	Kearny Generating Station Kearny Generating Station	2404	134	0	7									0	7	0	7	0	7
NJ	Kearny Generating Station	2404	141	0	1									0	1	0	, 1	0	1
NJ	Kearny Generating Station Kearny Generating Station	2404	142	0	1									0	1	0	1	0	1
NJ	Kearny Generating Station Kearny Generating Station	2404	15001	O	3									0	3	0	3	0	3
NJ	Kearny Generating Station Kearny Generating Station	2404	16001	0	0									0	0	0	0	0	0
	-			0	2	Deactivation F/1/2015	DIM					66%	66%	0	_	0	_	0	1
NJ NJ	Kearny Generation Station	2404	17001 4001	0 4	3 2E	Deactivation 5/1/2015	PJM					00%	00%	0	3 25	U A	3 25	U A	25
NJ	Linden Cogeneration Facility	50006		· ·	25 61									4	25 61	4	25 61	4 2	
NJ	Linden Cogeneration Facility	50006	5001	2	61 65									2	61 65	2	61 65	2	61 65
NJ	Linden Cogeneration Facility	50006	6001	2	65 63									2	65	2	65 63	_	65
NJ	Linden Cogeneration Facility	50006	7001	2	63									2	63	2	63	2	63
NJ	Linden Cogeneration Facility	50006	8001	1	33									1	33	1	33	1	33
NJ	Linden Cogeneration Facility	50006	9001	1	56									1	56 20	1	56	1	56
NJ	Linden Generating Station	2406	1101	3	29									3	29	3	29	3	29
NJ	Linden Generating Station	2406	1201	3	26									3	26	3	26	3	26

No. Indien Generating Subtaine	CAME	CAMD Facility Information			Reported Emissions		Emissions Reduction	Reduction from 2012 Emissions							Projected Emissions						
No. Inder Generating Station 2406 2201 3 27 27 3		Facility ID			2012 (tons)			2013 (%) 2014 (%) 2015 (%)			(%)	2013 (tons) 2014 (tons)			ons)	2015 (tons)					
No. Linden Generating Station 2406 6 0 4 0 4 0 0 0 0 0 0	State	Facility Name	(ORISPL)	Unit ID	SO2	NOx	Actual/Projected	Reference(s)	SO2	NOx	SO2	NOx	SO2	NOx	SO2	NOx	SO2	NOx	SO2	NOx	
No.	NJ	Linden Generating Station	2406	2101	3	26									3	26	3	26	3	26	
No. Linden Generating Station	NJ	Linden Generating Station	2406	2201	3	27									3	27	3	27	3	27	
No. Linden Generating Station	NJ	Linden Generating Station	2406	5	0	5									0	5	0	5	0	5	
No. Light-of-centrating Plant 1043 101 509 406 8 0 3 6 5 5 5 406 509 406 4	NJ	Linden Generating Station	2406	6	0	4									0	4	0	4	0	4	
N. N. N. Mercer Generating Station	NJ	Linden Generating Station	2406	7	0	4									0	4	0	4	0	4	
N. Mercer Generating Station	NJ	Linden Generating Station	2406	8	0	3									0	3	0	3	0	3	
No. Mercer Generating Slation 2408 7001 0 2 Deactivation 6/1/2015 PJM 588 588 0 2 0 0 0 0 0 0 0 0	NJ	Logan Generating Plant	10043	1001	509	496									509	496	509	496	509	496	
NA Mercer Generating Station	NJ	Mercer Generating Station	2408	1	104	119									104	119	104	119	104	119	
N. Mickleton Energy Center	NJ	Mercer Generating Station	2408	2	54	105									54	105	54	105	54	105	
NL Middle Energy Center	NJ	Mercer Generating Station	2408	7001	0	2	Deactivation 6/1/2015	PJM					58%	58%	0	2	0	2	0	1	
NA Middle Energy Center	NJ	Mickleton Energy Center	8008	1001	0	68									0	68	0	68	0	68	
N. Middle Energy Center	NJ	Middle Energy Center	2382	3001		1									0	1	0	1	0	1	
NY MISSOURI Avenue Energy Center 2383 10001 1 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0	NJ	Middle Energy Center	2382	4001		2									0	2	0	2	0	2	
NI Missouri Avenue Energy Center 2383 11001 2 Deactivation 5/31/2015 PIM 58% 58% 0 2 0 2 0 2 0 1 1 Missouri Avenue Energy Center 2383 12001 4 Deactivation 5/31/2015 PIM 58% 58% 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 0 0 0 0	NJ	Middle Energy Center	2382	5001	1	1									1	1	1	1	1	1	
N. Missouri Avenue Energy Center 2383 12001 4 Deactivation 5/31/2015 PJM 58% 58% 0 4 0 4 0 2 2 2 2 2 2 0 0 0 0 0 0 0 0 0	NJ	Missouri Avenue Energy Center	2383	10001		1	Deactivation 5/31/2015	PJM					58%	58%	0	1	0	1	0	0	
N. National Park	NJ	Missouri Avenue Energy Center	2383	11001		2	Deactivation 5/31/2015	PJM					58%	58%	0	2	0	2	0	1	
NU Newark Bay Cogen 50385 1001 1 39	NJ	Missouri Avenue Energy Center	2383	12001		4	Deactivation 5/31/2015	PJM					58%	58%	0	4	0	4	0	2	
N. Newark Bay Cogen 50385 2001 1 34	NJ	National Park	2409	1001		0									0	0	0	0	0	0	
North Jersey Energy Associates 10308 1001 2 274 2774 2 274 2 274 2 274 2 274 1 2 274 1 2 274 1 2 274 1 2 274 1 2 274 1 2 274 1 2 274 1 2 274 1 2 274 1 2 274 1 2 274 1 2 274 1 2 274 1 2 274 1 2 279 1	NJ	Newark Bay Cogen	50385	1001	1	39									1	39	1	39	1	39	
North Jersey Energy Associates 10308 1002 2 279	NJ	Newark Bay Cogen	50385	2001	1	34									1	34	1	34	1	34	
NJ Pedricktown Cogeneration Plant 10099 1001 1 56	NJ	North Jersey Energy Associates	10308	1001	2	274									2	274	2	274	2	274	
NJ Salem	NJ	North Jersey Energy Associates	10308	1002	2	279									2	279	2	279	2	279	
NJ Sayreville 2390 12001 0 2 0 2 0 2 0 2 0 2 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	NJ	Pedricktown Cogeneration Plant	10099	1001	1	56									1	56	1	56	1	56	
NJ Sayreville 2390 14001 0 1 NJ Sayreville 2390 15001 0 2 NJ Sayreville 2390 15001 0 2 NJ Sayreville 2390 16001 1 4 NJ Sewaren Generating Station 2411 1 2 1 3 Deactivation 6/1/2015 PJM 58% 58% 2 13 2 13 1 6 NJ Sewaren Generating Station 2411 1 2001 0 2 Deactivation 6/1/2015 PJM 58% 58% 0 2 0 2 0 2 0 1 NJ Sewaren Generating Station 2411 2 0 0 8 Deactivation 6/1/2015 PJM 58% 58% 0 2 0 2 0 2 0 1 NJ Sewaren Generating Station 2411 3 0 4 Deactivation 6/1/2015 PJM 58% 58% 0 8 0 8 0 8 0 8 0 3 NJ Sewaren Generating Station 2411 3 0 4 Deactivation 6/1/2015 PJM 58% 58% 0 1 0 4 0 4 0 2 NJ Sewaren Generating Station 2411 4 0 15 Deactivation 6/1/2015 PJM 58% 58% 0 15 0 15 0 16 NJ Sewaren Generating Station 2411 4 0 15 Deactivation 6/1/2015 PJM 58% 58% 0 15 0 15 0 16 NJ Sewaren Generating Station 2411 4 0 16 Deactivation 6/1/2015 PJM 58% 58% 0 15 0 15 0 16 NJ Werner 2385 9001 1 Deactivation 5/1/2015 PJM 66% 66% 1 1 1 1 1 0 0 0 NJ Werner 2385 11001 1 Deactivation 5/1/2015 PJM 66% 66% 1 1 1 1 1 1 0 0 0 NJ Werner 2385 11001 1 1 Deactivation 5/1/2015 PJM 66% 66% 1 1 1 1 1 1 1 0 0 0 NJ Werner 2385 12001 1 1 Deactivation 5/1/2015 PJM 66% 66% 1 1 1 1 1 1 1 0 0 0	NJ	Salem	2410	2001	1	2									1	2	1	2	1	2	
NJ Sayreville 2390 15001 0 2 0 2 0 2 0 2 0 2 0 2 0 2 NJ Sayreville 2390 16001 1 4	NJ	Sayreville	2390	12001	0	2									0	2	0	2	0	2	
NJ Sayreville 2390 16001 1 4	NJ	Sayreville	2390	14001	0	1									0	1	0	1	0	1	
NJ Sewaren Generating Station 2411 1 2 13 Deactivation 6/1/2015 PJM 58% 58% 2 13 2 13 1 6 6 NJ Sewaren Generating Station 2411 12001 0 2 Deactivation 6/1/2015 PJM 58% 58% 0 2 0 2 0 2 0 1 NJ Sewaren Generating Station 2411 2 0 8 Deactivation 6/1/2015 PJM 58% 58% 0 8 0 8 0 8 0 3 NJ Sewaren Generating Station 2411 3 0 4 Deactivation 6/1/2015 PJM 58% 58% 0 4 0 4 0 4 0 2 NJ Sewaren Generating Station 2411 4 0 15 Deactivation 6/1/2015 PJM 58% 58% 0 15 0 15 0 15 0 6 NJ Sherman Avenue 7288 1 0 16	NJ	Sayreville	2390	15001	0	2									0	2	0	2	0	2	
NJ Sewaren Generating Station 2411 12001 0 2 Deactivation 6/1/2015 PJM 58% 58% 0 2 0 2 0 2 0 1 NJ Sewaren Generating Station 2411 2 0 8 Deactivation 6/1/2015 PJM 58% 58% 0 8 0 8 0 8 0 8 0 3 NJ Sewaren Generating Station 2411 3 0 4 Deactivation 6/1/2015 PJM 58% 58% 0 4 0 4 0 4 0 2 NJ Sewaren Generating Station 2411 4 0 15 Deactivation 6/1/2015 PJM 58% 58% 0 15 0 15 0 16 0 16 NJ Sherman Avenue 7288 1 0 16	NJ	Sayreville	2390	16001	1	4									1	4	1	4	1	4	
NJ Sewaren Generating Station 2411 2 0 8 Deactivation 6/1/2015 PJM 58% 58% 0 8 0 8 0 8 0 3 NJ Sewaren Generating Station 2411 3 0 4 Deactivation 6/1/2015 PJM 58% 58% 0 4 0 4 0 4 0 2 NJ Sewaren Generating Station 2411 4 0 15 Deactivation 6/1/2015 PJM 58% 58% 0 15 0 15 0 16 0 16 NJ Sherman Avenue 7288 1 0 16 NJ Werner 2385 9001 1 Deactivation 5/1/2015 PJM 66% 66% 1 1 1 1 1 0 0 NJ Werner 2385 10001 0 1 Deactivation 5/1/2015 PJM 66% 66% 1 1 1 1 1 0 0 NJ Werner 2385 11001 1 Deactivation 5/1/2015 PJM 66% 66% 1 1 1 1 1 0 0 NJ Werner 2385 12001 1 Deactivation 5/1/2015 PJM 66% 66% 1 1 1 1 1 0 0 0 NJ Werner 2385 12001 1 Deactivation 5/1/2015 PJM 66% 66% 1 1 1 1 1 0 0 0 NJ Werner 2385 12001 1 Deactivation 5/1/2015 PJM 66% 66% 1 1 1 1 1 1 0 0 0 NJ Werner 2385 12001 1 Deactivation 5/1/2015 PJM 66% 66% 1 1 1 1 1 1 0 0 0 NJ Werner 2385 12001 1 Deactivation 5/1/2015 PJM 66% 66% 1 1 1 1 1 1 0 0 0 NJ Werner 2385 12001 1 Deactivation 5/1/2015 PJM 66% 66% 1 1 1 1 1 1 0 0 0 NJ Werner 2385 12001 1 Deactivation 5/1/2015 PJM 66% 66% 1 1 1 1 1 1 0 0 0 NJ Werner 2385 12001 1 Deactivation 5/1/2015 PJM 66% 66% 1 1 1 1 1 1 0 0 0 NJ Werner 2385 12001 1 Deactivation 5/1/2015 PJM 66% 66% 1 1 1 1 1 1 0 0 0 NJ Werner 2385 12001 1 Deactivation 5/1/2015 PJM	NJ	Sewaren Generating Station	2411	1	2	13	Deactivation 6/1/2015	PJM					58%	58%	2	13	2	13	1	6	
NJ Sewaren Generating Station 2411 3 0 4 Deactivation 6/1/2015 PJM 58% 58% 0 4 0 4 0 4 0 2 NJ Sewaren Generating Station 2411 4 0 15 Deactivation 6/1/2015 PJM 58% 58% 0 15 0 15 0 6 NJ Sherman Avenue 7288 1 0 16 NJ Werner 2385 9001 1 1 Deactivation 5/1/2015 PJM 66% 66% 1 1 1 1 1 0 0 NJ Werner 2385 10001 0 1 Deactivation 5/1/2015 PJM 66% 66% 0 1 1 1 1 1 0 0 NJ Werner 2385 11001 1 1 Deactivation 5/1/2015 PJM 66% 66% 1 1 1 1 1 0 0 NJ Werner 2385 12001 1 1 Deactivation 5/1/2015 PJM 66% 66% 1 1 1 1 1 0 0 NJ Werner 2385 12001 1 1 Deactivation 5/1/2015 PJM 66% 66% 1 1 1 1 1 1 0 0	NJ	Sewaren Generating Station	2411	12001	0	2	Deactivation 6/1/2015	PJM					58%	58%	0	2	0	2	0	1	
NJ Sewaren Generating Station 2411 4 0 15 Deactivation 6/1/2015 PJM 58% 58% 0 15 0 15 0 6 NJ Sherman Avenue 7288 1 0 16	NJ	Sewaren Generating Station	2411	2	0	8	Deactivation 6/1/2015	PJM					58%	58%	0	8	0	8	0	3	
NJ Sherman Avenue 7288 1 0 16 0 16 0 16 0 16 0 16 NJ Werner 2385 9001 1 1 Deactivation 5/1/2015 PJM 66% 66% 1 1 1 1 1 1 0 0 NJ Werner 2385 10001 0 1 Deactivation 5/1/2015 PJM 66% 66% 0 1 0 1 0 1 0 0 NJ Werner 2385 11001 1 1 Deactivation 5/1/2015 PJM 66% 66% 1 1 1 1 1 1 0 0 NJ Werner 2385 12001 1 1 Deactivation 5/1/2015 PJM 66% 66% 1 1 1 1 1 1 0 0 0	NJ	Sewaren Generating Station	2411	3	0	4	Deactivation 6/1/2015	PJM					58%	58%	0	4	0	4	0	2	
NJ Werner 2385 9001 1 1 Deactivation 5/1/2015 PJM 66% 66% 66% 1 1 1 1 1 0 0 NJ Werner 2385 1001 1 1 Deactivation 5/1/2015 PJM 66% 66% 66% 1 1 1 1 0 0 NJ Werner 2385 12001 1 1 Deactivation 5/1/2015 PJM 66% 66% 1 1 1 1 1 0 0	NJ	Sewaren Generating Station	2411	4	0	15	Deactivation 6/1/2015	PJM					58%	58%	0	15	0	15	0	6	
NJ Werner 2385 10001 0 1 Deactivation 5/1/2015 PJM 66% 66% 0 1 0 1 0 0 NJ Werner 2385 11001 1 1 Deactivation 5/1/2015 PJM 66% 66% 1 1 1 1 1 0 0 NJ Werner 2385 12001 1 1 Deactivation 5/1/2015 PJM 66% 66% 1 1 1 1 1 0 0	NJ	Sherman Avenue	7288	1	0	16									0	16	0	16	0	16	
NJ Werner 2385 11001 1 1 Deactivation 5/1/2015 PJM 66% 66% 1 1 1 1 1 0 0 NJ Werner 2385 12001 1 1 Deactivation 5/1/2015 PJM 66% 66% 1 1 1 1 1 0 0	NJ	Werner	2385	9001	1	1	Deactivation 5/1/2015	PJM					66%	66%	1	1	1	1	0	0	
NJ Werner 2385 12001 1 1 Deactivation 5/1/2015 PJM 66% 66% 1 1 1 1 0 0	NJ	Werner	2385	10001	0	1	Deactivation 5/1/2015	PJM					66%	66%	0	1	0	1	0	0	
···	NJ	Werner	2385	11001	1	1	Deactivation 5/1/2015	PJM					66%	66%	1	1	1	1	0	0	
NI West Station 6776 2001 // 2	NJ	Werner	2385	12001	1	1	Deactivation 5/1/2015	PJM					66%	66%	1	1	1	1	0	0	
NU WEST STATION 0//0 2001 4 5 4 5	NJ	West Station	6776	2001	4	3									4	3	4	3	4	3	

<u>Footnotes</u>

¹ EPA consent decree, Oct. 2007, with AEP. Retire/retrofit/repower: Conesville 3 by 12/31/2012, Sporn 5 by 12/31/2013, and Muskingum 1-4 by 12/31/2015. Additionally, retire/retrofit/repower an additional 600 MW from Sporn 1-4, Kammer 1-3, Clinch 1-3, or Tanner 1-3. For this analysis, Kammer 1-3 was selected.

² EPA consent decree, Apr. 2013, with Dominion. Retire: State Line 3-4 by 12/31/2012.



PM_{2.5} SIP (Supplemental)

Appendix B

Supporting EGU Documentation

- B-1. Homer City Plan Approval
- B-2. PJM Deactivations
- B-3. Consent Decrees

Summary of Supporting EGU Documentation

This section provides supporting documentation for the expected EGU emissions, including permitted major modifications, current/proposed deactivations, and federal consent decrees.

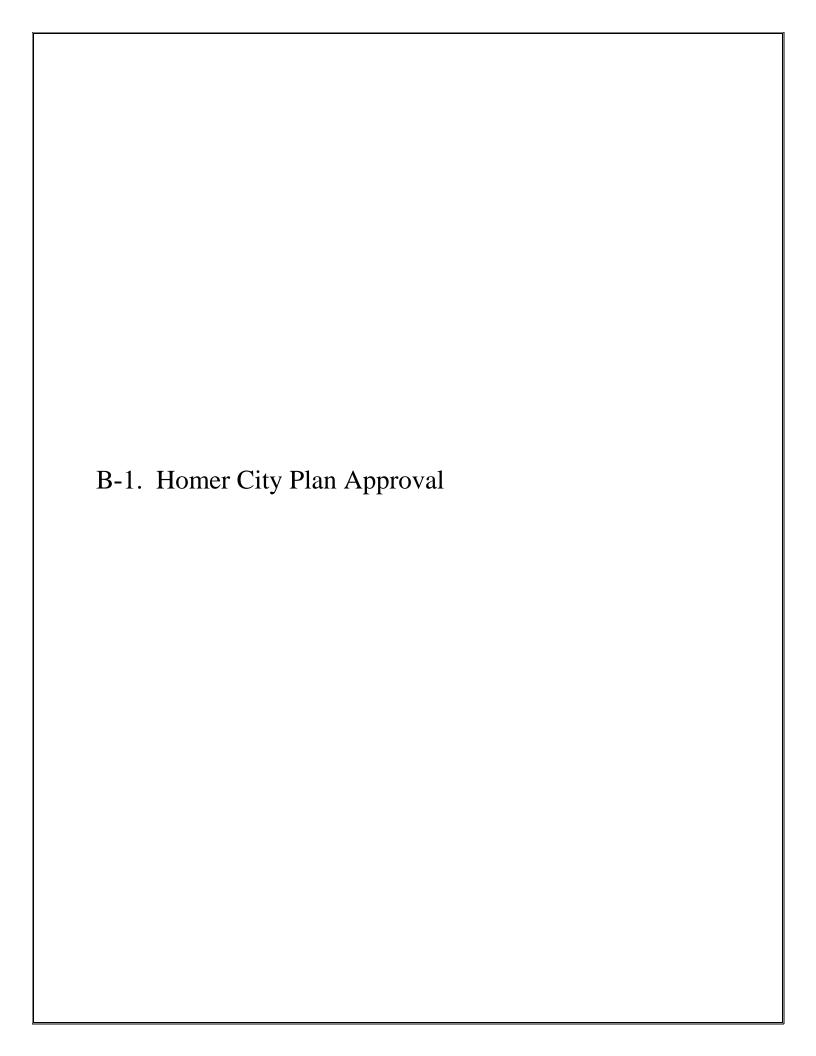
Information has been taken from the following sources:

- B-1: PA DEP Plan Approval for Homer City
 - http://files.dep.state.pa.us/RegionalResources/SWRO/SWROPortalFiles/AQ_Ho merCity/Issued%20Plan%20Approval%20PA-32-00055H%204-2-12.pdf
- B-2: PJM Current and Expected Deactivations, downloaded 9/12/2013
 - o http://www.pjm.com/planning/generation-deactivation/gd-summaries.aspx
- B-3: Federal Consent Decrees
 - o http://cfpub.epa.gov/enforcement/cases/index.cfm

The corresponding electric generating units that these documents apply to are given in Appendix A.

Permitted major modifications (i.e, plan approvals for PA DEP) and federal consent decrees constitute federally enforceable agreements.

The Homer City plan approval was later amended to reflect a later installation date for Unit 2 and corresponding expiration date for the plan approval (April 2015). The installation for Unit 1 was kept at the original date (Oct. 2014) for the emission calculations given in Appendix A.







COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION AIR QUALITY PROGRAM

PLAN APPROVAL

Issue Date: April 2, 2012 Effective Date: April 2, 2012

Expiration Date: October 2, 2014

In accordance with the provisions of the Air Pollution Control Act, the Act of January 8, 1960, P.L. 2119, as amended, and 25 Pa. Code Chapter 127, the Owner, [and Operator if noted] (hereinafter referred to as permittee) identified below is authorized by the Department of Environmental Protection (Department) to construct, install, modify or reactivate the air emission source(s) more fully described in the site inventory list. This Facility is subject to all terms and conditions specified in this plan approval. Nothing in this plan approval relieves the permittee from its obligations to comply with all applicable Federal, State and Local laws and regulations.

The regulatory or statutory authority for each plan approval condition is set forth in brackets. All terms and conditions in this permit are federally enforceable unless otherwise designated as "State-Only" requirements.

Plan Approval No. 32-00055H

Federal Tax Id - Plant Code: 06-1637163-1

Owner Information

Name: HOMER CITY OL1- OL8 LLC
Mailing Address: 1750 POWER PLANT RD

HOMER CITY, PA 15748-8009

Plant Information

Plant: EME HOMER CITY GEN LP/ CENTER TWP

Location: 32 Indiana County 32912 Center Township

SIC Code: 4911 Trans. & Utilities - Electric Services

Operator

Name: EME HOMER CITY GENERATION LP [If different from owner]

Mailing Address: 1750 POWER PLANT RD

HOMER CITY, PA 15748-8009

Responsible Official

Name: BOBBY O DUEY

Title: STATION MANAGING DIRECTOR

Phone: (724) 479 - 6142

Plan Approval Contact Person

Name: GARY CLINE

Title: ENVIRONMENTAL MANAGER

Phone: (724) 479 - 6255

[Signature] _____

MARK A. WAYNER. SOUTHWEST REGION AIR PROGRAMMANAGER



32-00055H



Plan Approval Description

This Plan Approval is to allow the installation and temporary operation of dry flue gas desulfurization ("FGD") systems with fabric filters and associated support equipment for the control of SOx emissions from Unit 1 and 2 by EME Homer City Generation, LP at its Homer City Generating Station located in Black Lick & Center Townships, Indiana County. Steam turbine efficiency upgrades for Unit 1 & 2 are also allowed under this Plan Approval.





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Note: These same sub-sections are repeated for each source!

Section E. Source Group Restrictions

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Section G. Emission Restriction Summary

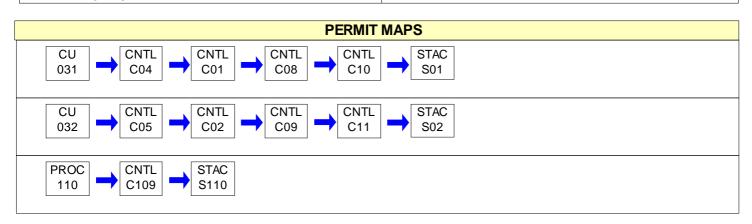
Section H. Miscellaneous





SECTION A. Plan Approval Inventory List

Source ID	Source Name	Capacity/Throughput	Fuel/Material
031	BOILER NO.1 (UNIT 1)	6,792.000 MMBTU/HR	
032	BOILER NO.2 (UNIT 2)	6,792.000 MMBTU/HR	
110	LIME & BYPRODUCT STORAGE & HANDLING SYSTEMS		
C01	ESP UNIT 1 W/ SO3 & NH3 CONDITIONING		
C02	ESP UNIT 2 W/ SO3 & NH3 CONDITIONING		
C04	SCR - UNIT 1 (SELECTIVE CATALYTIC REDUCTION)		
C05	SCR - UNIT 2 (SELECTIVE CATALYTIC REDUCTION)		
C08	ACI - UNIT 1 (ACTIVATED CARBON INJECTION)		
C09	ACI - UNIT 2 (ACTIVATED CARBON INJECTION)		
C10	NID - UNIT 1 (NOVEL INTEGRATED DESULFURIZATION SYSTEM)		
C109	BIN VENT FILTERS		
C11	NID - UNIT 2 (NOVEL INTEGRATED DESULFURIZATION SYSTEM)		
S01	UNIT 1 STACK		
S02	UNIT 2 STACK		
S110	LIME & BYPRODUCT STORAGE SILO EMISSION POINTS		









#001 [25 Pa. Code § 121.1]

Definitions

Words and terms that are not otherwise defined in this plan approval shall have the meanings set forth in Section 3 of the Air Pollution Control Act (35 P.S. § 4003) and 25 Pa. Code § 121.1.

#002 [25 Pa. Code § 127.12b (a) (b)]

Future Adoption of Requirements

The issuance of this plan approval does not prevent the future adoption by the Department of any rules, regulations or standards, or the issuance of orders necessary to comply with the requirements of the Federal Clean Air Act or the Pennsylvania Air Pollution Control Act, or to achieve or maintain ambient air quality standards. The issuance of this plan approval shall not be construed to limit the Department's enforcement authority.

#003 [25 Pa. Code § 127.12b]

Plan Approval Temporary Operation

This plan approval authorizes temporary operation of the source(s) covered by this plan approval provided the following conditions are met.

- (a) When construction, installation, modification, or reactivation is being conducted, the permittee shall provide written notice to the Department of the completion of the activity approved by this plan approval and the permittee's intent to commence operation at least five (5) working days prior to the completion of said activity. The notice shall state when the activity will be completed and when the permittee expects to commence operation. When the activity involves multiple sources on different time schedules, notice is required for the commencement of operation of each source.
- (b) Pursuant to 25 Pa. Code § 127.12b (d), temporary operation of the source(s) is authorized to facilitate the shakedown of sources and air cleaning devices, to permit operations pending the issuance of a permit under 25 Pa. Code Chapter 127, Subchapter F (relating to operating permits) or Subchapter G (relating to Title V operating permits) or to permit the evaluation of the air contaminant aspects of the source.
- (c) This plan approval authorizes a temporary operation period not to exceed 180 days from the date of commencement of operation, provided the Department receives notice from the permittee pursuant to paragraph (a), above.
- (d) The permittee may request an extension of the 180-day shakedown period if further evaluation of the air contamination aspects of the source(s) is necessary. The request for an extension shall be submitted, in writing, to the Department at least 15 days prior to the end of the initial 180-day shakedown period and shall provide a description of the compliance status of the source, a detailed schedule for establishing compliance, and the reasons compliance has not been established. This temporary operation period will be valid for a limited time and may be extended for additional limited periods, each not to exceed 180 days.
- (e) The notice submitted by the permittee pursuant to subpart (a) above, prior to the expiration of the plan approval, shall modify the plan approval expiration date on Page 1 of this plan approval. The new plan approval expiration date shall be 180 days from the date of commencement of operation.

#004 [25 Pa. Code § 127.12(a) (10)]

Content of Applications

The permittee shall maintain and operate the sources and associated air cleaning devices in accordance with good engineering practice as described in the plan approval application submitted to the Department.

#005 [25 Pa. Code §§ 127.12(c) and (d) & 35 P.S. § 4013.2]

Public Records and Confidential Information

- (a) The records, reports or information obtained by the Department or referred to at public hearings shall be available to the public, except as provided in paragraph (b) of this condition.
- (b) Upon cause shown by the permittee that the records, reports or information, or a particular portion thereof, but not emission data, to which the Department has access under the act, if made public, would divulge production or sales figures or methods, processes or production unique to that person or would otherwise tend to affect adversely the



competitive position of that person by revealing trade secrets, including intellectual property rights, the Department will consider the record, report or information, or particular portion thereof confidential in the administration of the act. The Department will implement this section consistent with sections 112(d) and 114(c) of the Clean Air Act (42 U.S.C.A. § § 7412(d) and 7414(c)). Nothing in this section prevents disclosure of the report, record or information to Federal, State or local representatives as necessary for purposes of administration of Federal, State or local air pollution control laws, or when relevant in a proceeding under the act.

#006 [25 Pa. Code § 127.12b]

Plan Approval terms and conditions.

[Additional authority for this condition is derived from 25 Pa. Code Section 127.13]

- (a) This plan approval will be valid for a limited time, as specified by the expiration date contained on Page 1 of this plan approval. Except as provided in § § 127.11a and 127.215 (relating to reactivation of sources; and reactivation), at the end of the time, if the construction, modification, reactivation or installation has not been completed, a new plan approval application or an extension of the previous approval will be required.
- (b) If construction has commenced, but cannot be completed before the expiration of this plan approval, an extension of the plan approval must be obtained to continue construction. To allow adequate time for departmental action, a request for the extension shall be postmarked at least thirty (30) days prior to the expiration date. The request for an extension shall include the following:
 - (i) A justification for the extension,
 - (ii) A schedule for the completion of the construction

If construction has not commenced before the expiration of this plan approval, then a new plan approval application must be submitted and approval obtained before construction can commence.

(c) If the construction, modification or installation is not commenced within 18 months of the issuance of this plan approval or if there is more than an 18-month lapse in construction, modification or installation, a new plan approval application that meets the requirements of 25 Pa. Code Chapter 127, Subchapter B (related to plan approval requirements), Subchapter D (related to prevention of significant deterioration of air quality), and Subchapter E (related to new source review) shall be submitted. The Department may extend the 18-month period upon a satisfactory showing that an extension is justified.

#007 [25 Pa. Code § 127.32]

Transfer of Plan Approvals

- (a) This plan approval may not be transferred from one person to another except when a change of ownership is demonstrated to the satisfaction of the Department and the Department approves the transfer of the plan approval in writing.
- (b) Section 127.12a (relating to compliance review) applies to a request for transfer of a plan approval. A compliance review form shall accompany the request.
- (c) This plan approval is valid only for the specific source and the specific location of the source as described in the application.

#008 [25 Pa. Code § 127.12(4) & 35 P.S. § 4008 & § 114 of the CAA]

Inspection and Entry

- (a) Pursuant to 35 P.S. § 4008, no person shall hinder, obstruct, prevent or interfere with the Department or its personnel in the performance of any duty authorized under the Air Pollution Control Act.
- (b) The permittee shall also allow the Department to have access at reasonable times to said sources and associated air cleaning devices with such measuring and recording equipment, including equipment recording visual observations, as the Department deems necessary and proper for performing its duties and for the effective enforcement of the Air Pollution Control Act and regulations adopted under the act.



(c) Nothing in this plan approval condition shall limit the ability of the Environmental Protection Agency to inspect or enter the premises of the permittee in accordance with Section 114 or other applicable provisions of the Clean Air Act.

#009 [25 Pa. Code 127.13a]

Plan Approval Changes for Cause

This plan approval may be terminated, modified, suspended or revoked and reissued if one or more of the following applies:

- (a) The permittee constructs or operates the source subject to the plan approval in violation of the act, the Clean Air Act, the regulations promulgated under the act or the Clean Air Act, a plan approval or permit or in a manner that causes air pollution.
- (b) The permittee fails to properly or adequately maintain or repair an air pollution control device or equipment attached to or otherwise made a part of the source.
- (c) The permittee fails to submit a report required by this plan approval.
- (d) The Environmental Protection Agency determines that this plan approval is not in compliance with the Clean Air Act or the regulations thereunder.

#010 [25 Pa. Code §§ 121.9 & 127.216]

Circumvention

- (a) The permittee, or any other person, may not circumvent the new source review requirements of 25 Pa. Code Chapter 127, Subchapter E by causing or allowing a pattern of ownership or development, including the phasing, staging, delaying or engaging in incremental construction, over a geographic area of a facility which, except for the pattern of ownership or development, would otherwise require a permit or submission of a plan approval application.
- (b) No person may permit the use of a device, stack height which exceeds good engineering practice stack height, dispersion technique or other technique which, without resulting in reduction of the total amount of air contaminants emitted, conceals or dilutes an emission of air contaminants which would otherwise be in violation of this plan approval, the Air Pollution Control Act or the regulations promulgated thereunder, except that with prior approval of the Department, the device or technique may be used for control of malodors.

#011 [25 Pa. Code § 127.12c]

Submissions

Reports, test data, monitoring data, notifications shall be submitted to the:

Regional Air Program Manager
PA Department of Environmental Protection
(At the address given on the plan approval transmittal letter or otherwise notified)

#012 [25 Pa. Code § 127.12(9) & 40 CFR Part 68]

Risk Management

- (a) If required by Section 112(r) of the Clean Air Act, the permittee shall develop and implement an accidental release program consistent with requirements of the Clean Air Act, 40 CFR Part 68 (relating to chemical accident prevention provisions) and the Federal Chemical Safety Information, Site Security and Fuels Regulatory Relief Act (P.L. 106-40).
- (b) The permittee shall prepare and implement a Risk Management Plan (RMP) which meets the requirements of Section 112(r) of the Clean Air Act, 40 CFR Part 68 and the Federal Chemical Safety Information, Site Security and Fuels Regulatory Relief Act when a regulated substance listed in 40 CFR § 68.130 is present in a process in more than the listed threshold quantity at the facility. The permittee shall submit the RMP to the Environmental Protection Agency according to the following schedule and requirements:
- (1) The permittee shall submit the first RMP to a central point specified by the Environmental Protection Agency no later than the latest of the following:





- (i) Three years after the date on which a regulated substance is first listed under § 68.130; or,
- (ii) The date on which a regulated substance is first present above a threshold quantity in a process.
- (2) The permittee shall submit any additional relevant information requested by the Department or the Environmental Protection Agency concerning the RMP and shall make subsequent submissions of RMPs in accordance with 40 CFR § 68.190.
- (3) The permittee shall certify that the RMP is accurate and complete in accordance with the requirements of 40 CFR Part 68, including a checklist addressing the required elements of a complete RMP.
- (c) As used in this plan approval condition, the term "process" shall be as defined in 40 CFR § 68.3. The term "process" means any activity involving a regulated substance including any use, storage, manufacturing, handling, or on-site movement of such substances or any combination of these activities. For purposes of this definition, any group of vessels that are interconnected, or separate vessels that are located such that a regulated substance could be involved in a potential release, shall be considered a single process.

#013 [25 Pa. Code § 127.25]

Compliance Requirement

A person may not cause or permit the operation of a source subject to § 127.11 (relating to plan approval requirements), unless the source and air cleaning devices identified in the application for the plan approval and the plan approval issued to the source, are operated and maintained in accordance with specifications in the application and conditions in the plan approval issued by the Department. A person may not cause or permit the operation of an air contamination source subject to this chapter in a manner inconsistent with good operating practices.



32-00055H



SECTION C. Site Level Plan Approval Requirements

I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The Owner/Operator shall maintain on site the following comprehensive and accurate records for the air contamination sources and air cleaning devices authorized under this Plan Approval:

- * Amount of lime delivered to the Facility per month by rail, by truck, and in total.
- * Amount of lime used in Unit 1 & 2 each month.
- * Amount of byproduct disposal per month.
- * Results of visible stack, fugitive, and malodor emission inspections.
- * The developed maintenance schedule for, and all maintenance activities performed on, the NID systems.
- * The developed maintenance schedule for, and all maintenance activities performed on, each bin vent collector.

002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

All logs and required records shall be maintained on site for a minimum of five years and shall be made available to the Department upon request.

V. REPORTING REQUIREMENTS.

003 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The Owner/Operator of each stationary source emitting greenhouse gases (GHG) in the form of CO2 equivalent (CO2e), and GHG on a mass-basis shall add actual emissions of GHG in the form of CO2e and GHG on a mass basis to the calendar year source report currently required under TV-32-00055. A description of the method used to calculate the emissions and the time period over which the calculation is based shall be included. The statement shall also contain a certification by a company officer or the plant manager that the information contained in the statement is accurate.

004 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Malfunction reporting shall be conducted as follows:

- a. The Owner/Operator shall report each malfunction that occurs at this facility that poses an imminent and substantial danger to the public health and safety or the environment or which it should reasonably believe may result in citizen complaints to the Department. For purposes of this condition a malfunction is defined as any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment or a process to operate in a normal or usual manner that may result in an increase in the emission of air contaminants.
- b. When the malfunction poses an imminent and substantial danger to the public health and safety or to the environment, the notification shall be submitted to the Department no later than one hour after the incident.
 - i. The report shall describe the:
 - a) Name and location of the facility:



32-00055H EME HOMER CITY GEN LP/ CENTER TWP

SECTION C. **Site Level Plan Approval Requirements**

- b) Nature and cause of the malfunction;
- c) Time when the malfunction or breakdown was first observed;
- d) Expected duration of increased emissions; and
- e) Estimated rate of emissions.
- ii. The Owner/Operator shall notify the Department immediately when corrective measures have been accomplished.
- iii. Subsequent to the malfunction, the owner or operator shall submit a full report on the malfunction to the Department within 15 days, if requested.
- iv. The owner or operator shall submit reports on the operation and maintenance of the source to the Regional Air Program Manager at such intervals and in such form and detail as may be required by the Department. Information required in the reports may include, but is not limited to, process weight rates, firing rates, hours of operation, and maintenance schedules.
- c. Malfunctions shall be reported to the Department at the following address:

PADEP

Office of Air Quality 400 Waterfront Drive Pittsburgh, PA 15222-4745 (412) 442-4000

VI. WORK PRACTICE REQUIREMENTS.

005 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The Owner/Operator shall develop an operation and maintenance (O&M) plan for the NID systems and submit the information to the Department for approval within 180 days of completion of optimization each NID system as verified by the EPC contractor.

006 [25 Pa. Code §127.25]

Compliance requirement.

All air contamination sources and air cleaning devices authorized under this Plan Approval shall be operated according to the developed operating procedures and maintained according to the developed maintenance schedule.

VII. ADDITIONAL REQUIREMENTS.

007 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

This Plan Approval is to allow the installation and temporary operation of dry flue gas desulfurization ("FGD") systems with fabric filters and associated support equipment for the control of SOx emissions from Unit 1 and 2 by EME Homer City Generation, LP at its Homer City Generating Station ("Homer City GS") located in Black Lick & Center Townships, Indiana County. Steam turbine efficiency upgrades for Unit 1 & 2 are also allowed under this Plan Approval.

008 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

New air contamination sources and air cleaning devices authorized to be installed at the Facility under this Plan Approval are as follows:

- * One (1) lime unloading and handling system.
- * One (1) byproduct handling system.
- * Two (2) Alstom, Novel Integrated Desulfurization ("NID") systems, including Alstom pulse jet fabric filters, capable of controlling emissions from Unit 1 and 2.



32-00055H

EME HOMER CITY GEN LP/ CENTER TWP



SECTION C. **Site Level Plan Approval Requirements**

009 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

This approval does not authorize the Owner/Operator to increase the permitted heat input to Unit 1 & 2 as a result of the steam turbine efficiency upgrades (to offset pressure drop and parasitic loss due to the NID systems) associated with this project.

010 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The Owner/Operator shall perform air dispersion modeling for the Facility prior to start-up of the NID systems in order to demonstrate that the Facility will not cause an exceedance of the SO2 NAAQS.

[25 Pa. Code §127.12b]

Plan approval terms and conditions.

The Owner/Operator shall submit an air dispersion modeling protocol to the Department for review and approval prior to performing the modeling required under Section C Condition #010. Results of the air dispersion modeling shall also be submitted to the Department.

The protocol and results shall be submitted to the Department at the following addresses:

PA DEP Air Quality Modeling **PADEP**

RCSOB Office of Air Quality 400 Market Street 400 Waterfront Drive Pittsburgh, PA 15222 Harrisburg, PA 17105

012 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Upon determination by the Owner/Operator that the source(s) covered by this Plan Approval are in compliance with all conditions of the Plan Approval the Owner/Operator shall contact the Department's reviewer for this authorization and schedule the Initial Operating Permit Inspection.

[25 Pa. Code §127.12b] # 013

Plan approval terms and conditions.

Upon completion of the Initial Operating Permit Inspection and determination by the Department that the source(s) covered by this Plan Approval are in compliance with all conditions of the Plan Approval, and at least 60 days prior to the expiration date of the Plan Approval, the Owner/Operator shall either submit a revision to a pending Title V Operating Permit ("TVOP") renewal application, or submit a TVOP administrative amendment application for this Facility.

014 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

If the Department has cause to believe that air contaminant emissions from the sources listed in this Plan Approval may be in excess of the limitations specified in, or established pursuant to this plan approval or the permittee's operating permit, the permittee may be required to conduct test methods and procedures deemed necessary by the Department to determine the actual emissions rate. Such testing shall be conducted in accordance with 25 Pa. Code Chapter 139, where applicable, and in accordance with any restrictions or limitations established by the Department at such time as it notifies the company that testing is required.

[25 Pa. Code §127.12b]

Plan approval terms and conditions.

The Owner/Operator shall submit a Compliance Assurance Monitoring ("CAM") plan for the operation of each of the NID systems. The CAM plan shall be submitted with the revision to the Facility's pending TVOP renewal application or with the application for an administrative amendment to the Facility's TVOP to incorporate changes authorized under this Plan Approval.

COMPLIANCE CERTIFICATION.

No additional compliance certifications exist except as provided in other sections of this plan approval including Section B (relating to Plan Approval General Requirements).



32-00055H



SECTION C. Site Level Plan Approval Requirements

IX. COMPLIANCE SCHEDULE.

No compliance milestones exist.



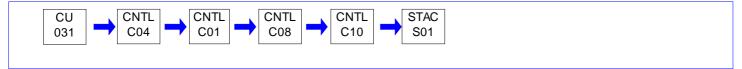


SECTION D. Source Level Plan Approval Requirements

Source ID: 031 Source Name: BOILER NO.1 (UNIT 1)

Source Capacity/Throughput: 6,792.000 MMBTU/HR

Conditions for this source occur in the following groups: G01



I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).



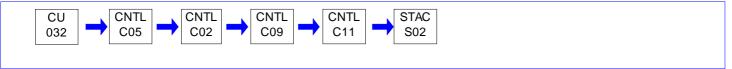


SECTION D. Source Level Plan Approval Requirements

Source ID: 032 Source Name: BOILER NO.2 (UNIT 2)

Source Capacity/Throughput: 6,792.000 MMBTU/HR

Conditions for this source occur in the following groups: G01



I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).



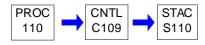




SECTION D. Source Level Plan Approval Requirements

Source ID: 110 Source Name: LIME & BYPRODUCT STORAGE & HANDLING SYSTEMS

Source Capacity/Throughput:



L RESTRICTIONS.

Emission Restriction(s).

001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Visible emissions from each lime and NID byproduct storage silo shall not equal or exceed 10% opacity at any time.

Throughput Restriction(s).

002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Lime deliveries to the Facility shall not exceed 476,544 tons in any consecutive 12-month period.

003 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Lime deliveries to the Facility by truck shall not exceed 47,654.4 tons in any consecutive 12-month period.

TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

MONITORING REQUIREMENTS. III.

004 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Once during each week that lime is delivered to the Facility, the Owner/Operator shall conduct an inspection during daylight hours while the sources covered in this plan approval are in operation for the presence of any visible stack emissions, and also any fugitive emissions or malodors from those same sources. If visible stack emissions, fugitive emissions, or malodors are apparent, the Owner/Operator shall take corrective action. Records of each inspection shall be maintained in a log and at the minimum include the date, time, name and title of the observer, along with any corrective action taken as a result.

RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

WORK PRACTICE REQUIREMENTS.

005 [25 Pa. Code §127.25]

Compliance requirement.

Lime may be delivered to the Facility by the following methods:

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SECTION D. Source Level Plan Approval Requirements

- * Railcar with transfer to underground hoppers followed by transfer to the railcar storage silos equipped with bin vent filters; or,
- * Enclosed trucks with transfer to the underground rail load-out hoppers or enclosed transfer to the storage silos equipped with bin vent filters.

006 [25 Pa. Code §127.25]

Compliance requirement.

Lime and byproduct storage silos shall not be loaded unless the enclosed transfer equipment and bin vent filters are operating properly.

007 [25 Pa. Code §127.25]

Compliance requirement.

Material handling conveyors shall be enclosed and all transfer points controlled by bin vent or exhaust filters.

VII. ADDITIONAL REQUIREMENTS.

008 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The Owner/Operator shall submit vendor-supplied bin vent filter specifications to the Department at least 60 days prior to installing the bin vent filters at the Facility. These specifications shall include a guaranteed maximum concentration of particulate matter not in excess of 0.004 gr/dscf.



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SECTION E. Source Group Plan Approval Restrictions.

Group Name: G01
Group Description:

Sources included in this group

ID	Name
031	BOILER NO.1 (UNIT 1)
032	BOILER NO.2 (UNIT 2)

I. RESTRICTIONS.

Emission Restriction(s).

001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Emissions of SO2 from Unit 1 & 2 shall not exceed the following:

- * 0.20 lb/MMBtu from each Unit on a 30-day rolling average (excluding periods of startup or shutdown), and the emission rate demonstrated by air dispersion modeling required by Section C. Conditions #010 and #011 showing that the Facility will not cause an exceedance of the SO2 NAAQS; and
- * 5,950 tons from each Unit in a consecutive 12-month period beginning after 1 year of operation of each NID system, and the emission rate demonstrated by air dispersion modeling required by Section C. Conditions #010 and #011 showing that the Facility will not cause an exceedance of the SO2 NAAQS.

Startup for Unit 1 & 2 is defined as beginning upon firing fuel in a boiler after a shutdown event for any purpose and ending when any of the steam from the boiler is used to generate electricity for sale over the grid or for any other purpose (including on-site use). Startup duration may not exceed the time necessary to reach the minimum effective operating temperature of the NID system.

Shutdown for Unit 1 & 2 is defined as beginning when none of the steam from the boiler is used to generate electricity for sale over the grid or for any other purpose (including on-site use), or when no fuel is being fired in the boiler, and when the flue gas temperature entering the NID system drops below the minimum effective operating temperature. Shutdown ends when all three conditions are met.

002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Emissions of PM (filterable + condensable) from Unit 1 & 2 shall not exceed 0.10 lb/MMBtu from each Unit. Compliance with this condition shall be determined by stack testing for filterable PM in accordance with EPA Method 5 or 5B; and for condensable PM by stack testing in accordance with EPA Method 202 or other Department approved methods.

003 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Emissions of filterable particulate matter from Unit 1 & 2 shall not exceed 0.050 lb/MMBtu from each Unit. Compliance with this condition shall be determined by stack testing for filterable particulate matter in accordance with EPA Method 5, 5B, or other Department approved methods.

II. TESTING REQUIREMENTS.

004 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The Owner/Operator shall perform EPA Method stack testing for PM, PM10, PM2.5, HCI, VOC, H2SO4 (including H2SO4 mist and SO3), fluorides, lead, and mercury on the Unit 1 & 2 stacks at the Facility within 60 days of completion of optimization of each NID system as verified by the EPC contractor. Other test methods may be used if approved by the Department in writing prior to testing. Department-approved CEMS may be used in lieu of stack tests for any particular air contaminant.

005 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Performance testing shall be conducted as follows:

a. The Owner/Operator shall submit three copies of a pre-test protocol to the Department for review at least 60 days prior to



SECTION E. Source Group Plan Approval Restrictions.

the performance of any EPA reference method stack test. All proposed performance test methods shall be identified in the pre-test protocol and approved by the Department prior to testing.

- b. The Owner/Operator shall notify the Regional Air Quality Manager at least 15 days prior to any performance test so that an observer may be present at the time of the test. Notification shall also be sent to the Division of Source Testing and Monitoring. Notification shall not be made without prior receipt of a protocol acceptance letter from the Department.
- c. All relevant operating parameters as identified in the Department-approved pre-test protocol (e.g boiler steam flow, air flow, gross megawatts, and O2; CEMS heat input and stack flue gas volumetric flow rate; and NID hydrated lime feed flow rate, pressure differential, and temperature) shall be recorded during the duration of the stack tests. Operating data recorded shall be sufficient to establish that the units and the air cleaning devices are operating at maximum routine operating conditions. A discussion of the recorded operating parameters and values shall be included in the test report.
- d. Three (3) copies of complete test reports shall be submitted to the Department no later than 60 calendar days after completion of the on-site testing portion of an emission test program.
- e. Pursuant to 25 Pa. Code Section 139.53(b) a complete test report shall include a summary of the emission results on the first page of the report indicating if each pollutant measured is within permitted limits and a statement of compliance or non-compliance with all applicable permit conditions. The summary results will include, at a minimum, the following information:
- 1. A statement that the owner or operator has reviewed the report from the emissions testing body and agrees with the findings.
 - 2. Permit number(s) and condition(s) which are the basis for the evaluation.
 - 3. Summary of results with respect to each applicable permit condition.
 - 4. Statement of compliance or non-compliance with each applicable permit condition.
- f. Pursuant to 25 Pa. Code § 139.3 all submittals shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual.
- g. All testing shall be performed in accordance with the provisions of Chapter 139 of the Rules and Regulations of the Department of Environmental Protection.
- h. Pursuant to 25 Pa. Code Section 139.53(a)(1) and 139.53(a)(3) all submittals, besides notifications, shall be accomplished through PSIMS*Online available through https://www.depgreenport.state.pa.us/ecomm/Login.jsp when it becomes available. If internet submittal can not be accomplished, three copies of the submittal shall be sent to the Pennsylvania Department of Environmental Protection, Bureau of Air Quality, Division of Source Testing and Monitoring, 400 Market Street, 12th Floor Rachael Carson State Office Building, Harrisburg, PA 17105-8468 with deadlines verified through document postmarks.

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

006 [25 Pa. Code §127.12b]

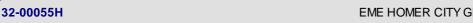
Plan approval terms and conditions.

The Owner/Operator shall continuously monitor and record the following NID system and fabric filter parameters for both Unit 1 and 2:

- * Flue gas temperature at the inlet to the NID system and outlet of the fabric filters;
- * Combined pressure differential across the NID system absorbers and fabric filters; and
- * Hydrated lime/byproduct mixture injection rate.

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SECTION E. Source Group Plan Approval Restrictions.

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

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SECTION F. Alternative Operation Requirements.

No Alternative Operations exist for this Plan Approval facility.

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SECTION G. Emission Restriction Summary.

No emission restrictions listed in this section of the permit.

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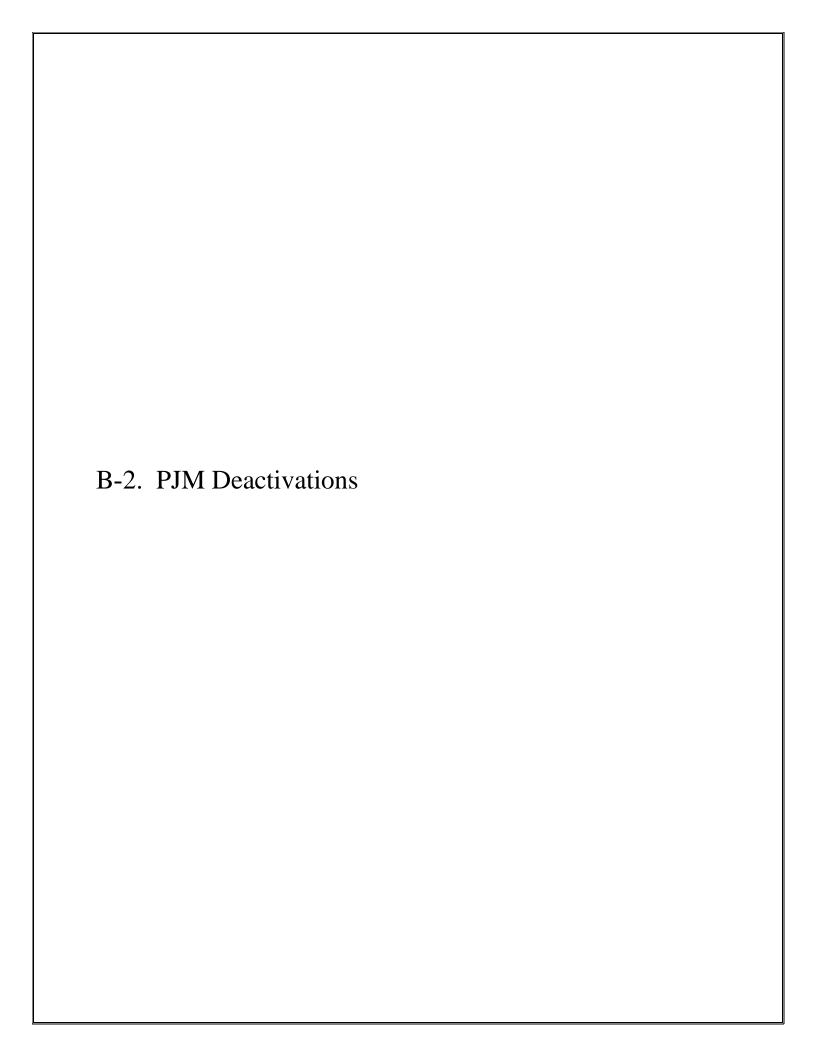


SECTION H. Miscellaneous.





***** End of Report ******



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				Official	Requested	Actual	
		Trans	Age	Owner	Deactivation	Deactivation	D IN Daliability Ctatus
Unit	Capacity	Zone	(Years)	Request	Date	Date	PJM Reliability Status
Warren 1	41	PN	54		9/27/2002	9/28/2002	No Reliability Issues
Warren 2	41	PN	53		9/27/2002	9/28/2002	No Reliability Issues
Undered O.O.T	400	00		40/40/0000	40/40/0000		
Hudson 3 CT	129	PS	36	10/16/2003	10/16/2003	10/17/2003	No Reliability Issues
	00	DN	50	4.4.4.0.100000	44/40/0000	4.4/00/0000	N. 5. F. 175. 1
Seward 4	60	PN	53	11/19/2003	11/19/2003	11/20/2003	No Reliability Issues
Od 5	400	DNI	47	44/40/0000	44/40/0000	44/00/0000	Nie Delleh III de de
Seward 5	136	PN	47	11/19/2003	11/19/2003	11/20/2003	No Reliability Issues
Course villa 4	444	10	40	44/4/2002	2/4 4/2004	0/40/0004	Reliability Issues Identified and
Sayreville 4	114	JC	49	11/1/2003	2/14/2004	2/19/2004	Resolved
Course tille 5	445	10	45	44/4/2002	2/4 4/2004	2/19/2004	Reliability Issues Identified and
Sayreville 5	115	JC	45	11/1/2003	2/14/2004	2/19/2004	Resolved
						- /- / /	
Delaware 7	126	PE	50	12/12/2003	3/1/2004	3/5/2004	No Reliability Issues
	404	DE		40/40/0000	0/4/0004	0/5/0004	N. 5. F. 175.
Delaware 8	124	PE	51	12/12/2003	3/1/2004	3/5/2004	No Reliability Issues
Burlington 101-104	208	PS	10	1/8/2004	4/4/2004	4/4/2004	No Reliability Issues
V							
Burlington 105	52	PS	31	1/8/2004		4/4/2004	No Reliability Issues
Wayne CT	56	PN	31	2/12/2004	As soon as possible	5/5/2004	No Reliability Issues
Sherman VCLP	46.6	AE	9	2/2/2004	3/15/2004	6/25/2004	No Reliability Issues
					Currently		
Calumet 31	56	CE	36	10/12/2004	Mothballed - ASAP	7/1/2004	No Reliability Issues
					Currently		
Calumet 33	42	CE	36	10/12/2004	Mothballed - ASAP	7/1/2004	No Reliability Issues
Calamot Co		02	- 50	. 0, 12,200 1	Currently	77 17 200 1	THE THE HEAD IN TH
Calumet 34	51	CE	35	10/12/2004	Mothballed - ASAP	7/1/2004	No Reliability Issues
					Currently		·
Joliet 31	59	CE	36	10/12/2004	Mothballed - ASAP	7/1/2004	No Reliability Issues
					Currently Mothballed -		
Joliet 32	57	CE	36	10/12/2004	ASAP	7/1/2004	No Reliability Issues
					Currently Mothballed -	n/a - never a	
Bloom 33	24	CE	33	10/12/2004	ASAP		No Reliability Issues
					Currently Mothballed -	n/a - never a PJM capacity	
Bloom 34	26	CE	33	10/12/2004	ASAP		No Reliability Issues
Colline 1	554	CE	26	6/2/2004	12/31/2004	1/1/2005	No Reliability Issues
Collins 1	554	CE	20	0/2/2004	12/31/2004	1/1/2005	INO INCHIADHILLY ISSUES
					3rd/4th Quarter		
Collins 2	554	CE	27	6/2/2004	2004	1/1/2005	No Reliability Issues
Collins 3	530	CE	27	6/2/2004	12/31/2004 Currently	1/1/2005	No Reliability Issues
					Mothballed -		
Collins 4	530	CE	26	6/2/2004	ASAP Currently	1/1/2005	No Reliability Issues
					Mothballed -		
Collins 5	530	CE	25	6/2/2004	ASAP Planned to retire	1/1/2005	No Reliability Issues
					6/30/04, request		
Riegel Paper NUG (Milford Power LP)	27	JC	33	6/11/2004	delayed until 12/31/04	1/1/2005	No Reliability Issues
(WIIIOIU FOWEI LF)	27	JU	33	6/11/2004	12/31/04	1/1/2005	No Reliability Issues

				Official	Requested	Actual	
		Trans	Age	Owner	Deactivation	Deactivation	
Unit	Capacity	Zone	(Years)	Request	Date	Date	PJM Reliability Status
STI 3 & 4							
(Cat Tractor)	20	ME	15	9/29/2004	1/1/2005	1/1/2005	No Reliability Issues
					40/04/04		
					12/31/04 - when contract is		
Electric Junction 31	59	CE	34	10/12/2004	complete	1/1/2005	No Reliability Issues after 1/1/05
					40/04/04		
					12/31/04 - when contract is		
Electric Junction 32	59	CE	34	10/12/2004	complete	1/1/2005	No Reliability Issues after 1/1/05
					12/31/04 - when		
					contract is		
Electric Junction 33	59	CE	34	10/12/2004	complete	1/1/2005	No Reliability Issues after 1/1/05
					Currently Mothballed -		
Lombard 32	31	CE	35	10/12/2004	ASAP	1/1/2005	No Reliability Issues
					Currently		·
Lombard 33	32	CE	35	10/12/2004	Mothballed - ASAP	1/1/2005	No Reliability Issues
Lombard 35	52	OL	- 55	10/12/2004	12/31/04 - when	17 172003	No renability 133de3
0 1 04	0.5	0.5	0.5	40/40/0004	contract is	4.44.000.0	N. D. F. 1977
Sabrooke 31	25	CE	35	10/12/2004	complete 12/31/04 - when	1/1/2005	No Reliability Issues
					contract is		
Sabrooke 32	25	CE	35	10/12/2004	complete	1/1/2005	No Reliability Issues
					12/31/04 - when contract is		
Sabrooke 33	24	CE	34	10/12/2004	complete	1/1/2005	No Reliability Issues after 1/1/05
					12/31/04 - when		
Sabrooke 34	13	CE	34	10/12/2004	contract is complete	1/1/2005	No Reliability Issues after 1/1/05
							-
Madison St. CT	10	DPL	41	10/13/2004	12/31/2004	1/7/2005	No Reliability Issues
							Reliability issue identified and
Crawford 31	59	CE	36	10/12/2004	ASAP	3/1/2005	resolved
						- / / /	Reliability issue identified and
Crawford 32	58	CE	36	10/12/2004	ASAP	3/1/2005	resolved
0	50	05	00	40/40/0004	404B	0/4/0005	Reliability issue identified and
Crawford 33	59	CE	36	10/12/2004	ASAP	3/1/2005	resolved
Deepwater CT A	19	AE	37	10/13/2004	4/1/2005		Reliability Issue resolved (Blackstart)
Koorny 7	150	PS	E1	0/9/2004	12/7/2004		Reliability issue identified and resolved
Kearny 7	150	P 5	51	9/8/2004	12/7/2004	6/1/2005	Reliability issue identified and
Kearny 8	150	PS	50	9/8/2004	12/7/2004	6/1/2005	resolved
Howard M. Down							
(Vineland) Unit 7	8	AE	53	2/24/2005	5/31/2005	6/17/2005	No Reliability Issues
							-
DSM (Hoffman LaRoche)	9	JC	7	9/1/2005	10/1/2005	10/6/2005	No Reliability Issues
				= 15.1-	40/5/0055	40/44/222	Reliability issue identified and
Newark Boxboard	52	PS	15	7/6/2005	10/5/2005	10/11/2005	expected to be resolved by 6/2007
							Reliability issue (black start) identified
Conesville 1	115	AEP	46	9/20/2005	12/31/2005	1/1/2006	and resolved
							Reliability issue (black start) identified
Conesville 2	115	AEP	48	9/20/2005	12/31/2005	1/1/2006	and resolved
Guda Landfill 190	2.0	DED	20	0/40/0004	2/25/2000	2/25/2000	No Poliobility Joseph
Gude Landfill 1&2	2.2	PEP	20	8/12/2004	3/25/2006 As soon as	3/25/2006	No Reliability Issues
Bayonne CT1	21	PS	35	3/30/2006	possible	5/20/2006	No Reliability Issues

				Official	Requested	Actual	
Unit	Capacity	Trans Zone	Age (Years)	Owner Request	Deactivation Date	Deactivation Date	PJM Reliability Status
Bayonne CT2	21	PS	35	3/30/2006	As soon as possible	5/20/2006	No Reliability Issues
					As soon as		, ,
Delaware Diesel Buzzard Point East	2.7	PE	39	8/30/2006	possible	10/24/2006	No Reliability Issues
Bank 3	16	PEP	39	2/28/2007	5/31/2007	5/31/2007	Reliability Issues Identified
Martins Creek 1	140	PPL	53	3/19/2004	9/15/2007	9/15/2007	No Reliability Issues
Martins Creek 2	140	PPL	51	3/19/2004	9/15/2007	9/15/2007	No Reliability Issues
							Reliability issue (black start) identified
Martins Creek D1-D2	5	PPL	40	9/1/2005	9/15/2007	9/15/2007	and resolved
Waukegan 6 Howard M. Down	100	CE	55	1/3/2007	9/1/2007	12/31/2007	No Reliability Issues
(Vineland) Unit 8	11	AE	53	5/6/2009	5/7/2009	6/5/2009	No Reliability Issues Reliability issue identified and
Indian River 2	89	DPL	48	9/28/2007	5/1/2010	5/1/2010	resolved
Howard M. Down (Vineland) Unit 9	17	ACE	49	5/28/2010	8/28/2010	8/28/2010	Reliability analysis complete - impacts identified - generator has elected to deactivate as requested
INGENCO Richmond Plant	3	DOM	18	2/9/2010	8/31/2010	9/21/2010	Reliability analysis complete - no impacts identified
INGENCO RICIIIIONI FIANC	3	DOW	10	2/9/2010	0/31/2010	0/31/2010	
North Branch	74	DOM	18	5/11/2010	7/5/2010	8/1/2010	Reliability analysis complete - no impacts identified
Hall Branch (aka Altavista)	63	DOM	19	6/8/2010	9/6/2010	10/13/2010	Reliability analysis complete - impacts identified - generator has elected to deactivate as requested
							Reliability analysis complete - impacts identified - generator has elected to
Gorsuch	189	AEP	59	5/28/2010	12/15/2010	11/11/2010	deactivate as requested Reliability analysis complete - no impacts
Baleville Landfill	3.8	PSEG	9	11/24/2010	2/22/2011	12/22/2010	identified Reliability analysis complete - no impacts
Kingsland Landfill	2.8	PSEG	11	11/24/2010	2/22/2011		identified Potential reliability issues identified - can
Will County 1	151	CE	55	6/4/2007	9/1/2010	12/30/2010	be resolved by summer 2011 Potential reliability issues identified - can
Will County 2	148	CE	55	6/4/2007	9/1/2010	12/30/2010	be resolved by summer 2011 Reliability analysis complete - no impacts
Kitty Hawk GT1	18	DOM	39	1/19/2011	4/19/2011	3/15/2011	identified Reliability analysis complete - no impacts
Kitty Hawk GT2	16	DOM	39	1/19/2011	4/19/2011	3/15/2011	
Chesapeake 8	17.5	DOM	41	1/19/2011	4/19/2011	3/15/2011	
Chesapeake 9	16.9	DOM	41	1/19/2011	4/19/2011	3/15/2011	identified Reliability analysis complete - no impacts
Chesapeake 10	16.9	DOM	41	1/19/2011	4/19/2011	3/15/2011	identified Reliability analysis complete - no impacts
Chesapeake 7	16	DOM	40	7/28/2010	7/28/2012	4/8/2011	identified Reliability issues identified and expected
Indian River 1	90	DPL	50	9/28/2007	5/1/2011	5/1/2011	to be resolved by 5/1/2011 Reliability analysis complete - no impacts
							identified. Interconnection request
Brunot Island 1B	15	DUQ	39	4/20/2011	7/19/2011	6/1/2011	
							Reliability analysis complete - no impacts identified. Interconnection request
Brunot Island 1C	15	DUQ	39	4/20/2011	7/19/2011	6/1/2011	
Cromby 1	144	PE	55	12/2/2009	5/31/2011	5/31/2011	Reliability analysis complete - Reliability Impacts identified - Results posted - Necessary upgrades completed
Cromby 1	144		55	121212003	0/01/2011	5/51/2011	Reliability analysis complete - Reliability Impacts identified - Results posted -
Eddystone 1	279	PE	49	12/2/2009	5/31/2011	5/31/2011	Necessary upgrades completed Reliability analysis complete - no impacts
Cromby Diesel	2.7	PE	43	5/27/2010	5/31/2011	5/31/2011	identified Reliability Analysis complete. Impacts
Burger 3	94	ATSI	61	6/3/2011	9/1/2011	9/1/2011	identified. TO plans to complete all required upgrades by June 1, 2013. Gen owner elected to deactivate unit as requested on 9/1/2011.
Cromby 2	201	PE	54	12/2/2009	5/31/2011	12/31/2011	Reliability analysis complete - Reliability Impacts identified - Results posted - Necessary upgrades completed

		_		Official	Requested	Actual	
Unit	Capacity	Trans Zone	Age (Years)	Owner Request	Deactivation Date	Deactivation Date	PJM Reliability Status
Hudson 1	383	PS	39	9/8/2004	12/7/2004	12/8/2011	PJM has determined that Hudson 1 is no longer needed for reliability purposes effective December 7, 2011.
							Reliability analysis complete - no impacts identified. AEP received approval from Ohio PUC to deactivate unit. AEP informed PJM on 2/13/2012. Unit
Sporn 5	440	AEP	49	10/1/2010	12/31/2010	2/13/2012	deactivated. Capacity rights from Hunlock 3 re-used as part of interconnection project T117. T117 is
Hunlock 3 State Line 3	197	UGI	<u>48</u> 55	1/16/2008 8/25/2011	6/1/2010 4/1/2012	6/1/2010 3/25/2012	Reliability Analysis complete for April 1, 2012 deactivation date - no impacts identified. Potential re-use of CIRs in interconnection
State Line 4	318		49	8/25/2011	4/1/2012	3/25/2012	Reliability Analysis complete for April 1, 2012 deactivation date - no impacts identified. Potential re-use of CIRs in interconnection project Y3-063.
Viking Energy NUG	16	PPL	21	7/2/2011	3/1/2012	3/31/2012	Reliability Analysis complete - no impacts identified
Walter C Beckjord 1	94	DEOK	59	2/1/2012	5/1/2012	5/1/2012	Reliability Analysis complete - impacts identified - upgrades scheduled to be completed by May 1, 2012
Buzzard Point East Banks 1, 2, 4-8	112	PEP	39	2/28/2007	5/31/2012	5/31/2012	Reliability issues identified and expected to be resolved by 5/31/2012.
Buzzard Point West Banks 1-8	128	PEP	39	2/28/2007	5/31/2012	5/31/2012	Reliability issues identified and expected to be resolved by 5/31/2012.
Eddystone 2	309	PE	49	12/2/2009	5/31/2011	5/31/2012	Reliability analysis complete - Reliability
Niles 2	108	ATSI	58	2/29/2012	6/1/2012	6/1/2012	Reliability Analysis complete - impacts identified - upgrades scheduled to be completed by June 2014. Unit deactivated on June 1, 2012.
							Reliability Analysis complete - impacts identified - upgrades scheduled to be completed by June 2014. Unit deactivated on June 1, 2012. Potential re-use of CIRs in
Elrama 1	93	DUQ	59 59	2/29/2012	6/1/2012	6/1/2012	interconnection project Y3-042. Reliability Analysis complete - impacts identified - upgrades scheduled to be completed by June 2014. Unit deactivated on June 1, 2012. Potential re-use of CIRs in interconnection project Y3-042.
Elrama 3	103	DUQ	57	2/29/2012	6/1/2012	6/1/2012	Reliability Analysis complete - impacts identified - upgrades scheduled to be completed by June 2014. Unit deactivated on June 1, 2012. Potential re-use of CIRs in interconnection project Y3-042.
Kearny 10	122	PSEG	39	4/22/2009	6/1/2012	6/1/2012	Kearny 10 deactivated and capacity rights re- used on new interconnection project
Kearny 11	128	PSEG	40	4/22/2009	6/1/2012	6/1/2012	Kearny 11 deactivated and capacity rights re- used on new interconnection project
Benning 15	275	PEP	39	2/28/2007	5/31/2012	7/17/2012	Benning 15 deactivated - required system upgrades completed.
							Benning 16 deactivated - required system
Benning 16	275	PEP	35	2/28/2007	5/31/2012 12/31/2014	7/17/2012	upgrades completed. Reliability Analysis Complete. No impacts
Crawford 8 Fisk Street 19	319 326	ComEd	50 52	3/8/2012	(no later than) 12/31/2012 (no later than)	8/24/2012 8/30/2012	identified. Reliability Analysis Complete. No impacts identified.
Crawford 7	213		53	3/8/2012	12/31/2014 (no later than)	8/28/2012	Reliability Analysis Complete. No impacts identified.
							Reliability Analysis complete - no impacts for deactivation Sept. 2012. Previously identified baseline upgrade completed as
Vineland 10	23	AE	41	6/13/2011	9/1/2012	9/1/2012	scheduled (summer 2012).

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		Trans	Age	Official Owner	Requested Deactivation	Actual Deactivation	
Unit	Capacity	Zone	(Years)	Request	Date	Date	PJM Reliability Status
							Reliability analysis complete. Impacts identified and expected to be resolved by June 2016. Further refinement of the reliability analysis, required upgrades, and generator deactivation schedule continues. Unit will deactivate as scheduled. See posting - FE Generator Deactivation Study Results and Required
Armstrong 1	172	AP	53	1/26/2012	9/1/2012	9/1/2012	Upgrades.
Armstrong 2	171	AP	52	1/26/2012	9/1/2012	9/1/2012	Reliability analysis complete. Impacts identified and expected to be resolved by June 2016. Further refinement of the reliability analysis, required upgrades, and generator deactivation schedule continues. Unit will deactivate as scheduled. See posting - FE Generator Deactivation Study Results and Required Upgrades.
Armstrong 2	171	AP	52	1/26/2012	9/1/2012	9/1/2012	<u>Opgrades.</u>
Bay Shore 2	138	ATSI	53	1/26/2012	9/1/2012	9/1/2012	Reliability analysis complete. Impacts identified and expected to be resolved by June 2016. Further refinement of the reliability analysis, required upgrades, and generator deactivation schedule continues. Unit will deactivate as scheduled. See posting - FE Generator Deactivation Study Results and Required Upgrades. Interconnection project Z1-030 requests to re-use capacity rights (CIRs) from Bay Shore U2, U3 and U4.
							Reliability analysis complete.
Bay Shore 3	142	ATSI	48	1/26/2012	9/1/2012	9/1/2012	Impacts identified and expected to be resolved by June 2016. Further refinement of the reliability analysis, required upgrades, and generator deactivation schedule continues. Unit will deactivate as scheduled. See posting - FE Generator Deactivation Study Results and Required Upgrades. Interconnection project Z1-030 requests to re-use capacity rights (CIRs) from Bay Shore U2, U3 and U4.
.,							
Bay Shore 4	215	ATSI	43	1/26/2012	9/1/2012	9/1/2012	Reliability analysis complete. Impacts identified and expected to be resolved by June 2016. Further refinement of the reliability analysis, required upgrades, and generator deactivation schedule continues. Unit will deactivate as scheduled. See posting - FE Generator Deactivation Study Results and Required Upgrades. Interconnection project Z1-030 requests to re-use capacity rights (CIRs) from Bay Shore U2, U3 and U4.
24, 011010 1	210	71101	73	1/20/2012	0,1,2012	5/ 1/201Z	Reliability analysis complete.
Eastlake 4	240	ATSI	55	1/26/2012	9/1/2012	9/1/2012	Impacts identified and expected to be resolved by June 2016. Further refinement of the reliability analysis, required ungrades, and generator deactivation schedule continues. Unit will deactivate as scheduled. See posting - FE Generator Deactivation Study Results and Required Upgrades.
							Reliability analysis complete.
Eastlake 5	597	ATSI	39	1/26/2012	9/1/2012	9/1/2012	Impacts identified and expected to be resolved by June 2016. Further refinement of the reliability analysis, required ungrades, and generator deactivation schedule continues. Unit will deactivate as scheduled. See posting - FE Generator Deactivation Study Results and Required Upgrades.
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		_	_	Official	Requested	Actual	
Unit	Capacity	Trans Zone	Age (Years)	Owner Request	Deactivation Date	Deactivation Date	PJM Reliability Status
R Paul Smith 3	28	AP	64	1/26/2012	9/1/2012	9/1/2012	Reliability analysis complete. Impacts identified and expected to be resolved by June 2016. Further refinement of the reliability analysis, required upgrades, and generator deactivation schedule continues. Unit will deactivate as scheduled. See posting - FE Generator Deactivation Study Results and Required Upgrades.
K Paul Silliul S							Reliability analysis complete. Impacts identified and expected to be resolved by June 2016. Eurther refinement of the reliability analysis, required upgrades, and generator deactivation schedule continues. Unit will deactivate as scheduled. See posting - FE Generator Deactivation Study Results and Required
R Paul Smith 4	87	AP	43	1/26/2012	9/1/2012	9/1/2012	Upgrades. Reliability Analysis complete - impacts identified - upgrades scheduled to be completed by May 2013. Thus generator can be allowed to deactivate as scheduled on 9/1/2012 assuming all upgrades are still on track to be completed as
Albright 1	73	APS	59	2/8/2012	9/1/2012	9/1/2012	scheduled. Reliability Analysis complete - impacts identified - upgrades scheduled to be completed by May 2013. Thus generator can be allowed to deactivate as scheduled on 9/1/2012 assuming all upgrades are still on track to be completed as
Albright 2	73	APS	59	2/8/2012	9/1/2012	9/1/2012	scheduled. Reliability Analysis complete - impacts identified - upgrades scheduled to be completed by May 2013. Thus generator can be allowed to deactivate as scheduled on 9/1/2012 assuming all upgrades are still on track to be completed as
Albright 3	137	APS	57	2/8/2012	9/1/2012		scheduled. Reliability Analysis complete - impacts identified - upgrades scheduled to be completed by May 2013. Thus generator can be allowed to deactivate as scheduled on 9/1/2012 assuming all upgrades are still on track to be completed as
Rivesville 5	35		68	2/8/2012	9/1/2012		scheduled. Reliability Analysis complete - impacts identified - upgrades scheduled to be completed by May 2013. Thus generator can be allowed to deactivate as scheduled on 9/1/2012 assuming all upgrades are still on track to be completed as
Rivesville 6	86	APS	60	2/8/2012	9/1/2012	9/1/2012	scheduled. Reliability Analysis complete - impacts identified - upgrades scheduled to be completed by May 2013. Thus generator can be allowed to deactivate as scheduled on 9/1/2012 assuming all upgrades are still on track to be completed as
Willow Island 1 Willow Island 2	51	APS	63 51	2/8/2012	9/1/2012		scheduled. Reliability Analysis complete - impacts identified - upgrades scheduled to be completed by May 2013. Thus generator can be allowed to deactivate as scheduled on 9/1/2012 assuming all upgrades are still on track to be completed as scheduled.

				Official	Doguantad	A 0411	
		Trans	Age	Official Owner	Requested Deactivation	Actual Deactivation	
Unit	Capacity	Zone	_	Request	Date		PJM Reliability Status
Niles 1	109	ATSI	58	2/29/2012	6/1/2012	10/1/2012	Reliability Analysis complete - impacts identified - upgrades scheduled to be completed by June 2014. Evaluating options. Unit to be kept in service until October 1, 2012, pending analysis of outages required to implement required system upgrades. Unit deactivated on Oct. 1, 2012. Potential Re-use of cap rights from Niles 1 in interconnection project Z1-034
Elrama 4	171	DUQ	51	2/29/2012	6/1/2012	10/1/2012	Reliability Analysis complete - impacts identified - upgrades scheduled to be completed by June 2014. Evaluating options. Unit to be kept in service until October 1, 2012, pending analysis of outages required to implement required system upgrades. Unit deactivated on Oct. 1, 2012. Potential re-use of CIRs in interconnection project Y3-042.
Eliana i	17.1	DOG	01	L/LO/LOTE	0/1/2012	10/1/2012	Reliability Analysis complete - no
Potomac River 1-5	482	PEP	62	8/30/2011	10/1/2012	10/1/2012	impacts identified. Units deactivated on Oct. 1, 2012.
1 Otomac River 1-0	402	I EP	02	0/00/2011	10/1/2012	10/1/2012	Reliability Analysis Complete. No
SMART Paper	25	DEOK	50	5/14/2012	8/10/2012	10/8/2012	impacts identified. Unit deactivated. Reliability Analysis complete - impacts
Conesville 3	165	AEP	49	3/22/2012	12/31/2012	12/31/2012	identified - upgrades scheduled to be completed by June 2014. Generator has deactivated as planned on December 31,
Schuylkill 1	166	PECO	54	10/31/2012	2/1/2013	1/1/2013	Reliability analysis complete - no impacts identified. Unit deactivated on 1/1/13.
Schuylkill Diesel	3	PECO	45	10/31/2012	2/1/2013	1/1/2013	Reliability analysis complete - no impacts identified. Unit deactivated on 1/1/13.
Hutchings 4	62	Dayton	61	6/28/2012	6/1/2013	6/1/2013	Reliability Analysis Complete. No impacts identified. Unit deactivated on 6/1/2013.
Ingenco Petersburg Plant	2.9	DOM	20	7/16/2010	5/31/2013	5/31/2013	Reliability analysis complete - no impacts identified. Unit deactivated on 5/31/13.
Titus 1	81	MetEd	61	2/29/2012 5/15/2013	4/16/2015 9/1/2013	9/1/2013	Reliability Analysis complete - impacts identified - upgrades and operating procedures expected to be in place by May 2015 to allow generators to deactivate as scheduled. On May 15, 2013 NRG submitted an updated deactivation notice with an effective deactivation date of 9/1/2013. New reliability analysis complete and impacts identified and upgrades cannot be completed by new deactivation date. Generation owner has informed PJM that Titus will deactivate as scheduled on 9/1/2013. Unit deactivated on 9/1/2013.
Titus 2	94	Mo+Ed	60	2/29/2012	4/16/2015 9/1/2013	0/4/2042	Reliability Analysis complete - impacts identified - upgrades and operating procedures expected to be in place by May 2015 to allow generators to deactivate as scheduled. On May 15, 2013 NRG submitted an updated deactivation notice with an effective deactivation date of 91/2013. New reliability analysis complete and impacts identified and upgrades cannot be completed by new deactivation date. Generation owner has informed P.IM that Titus will deactivate as scheduled on 01/2013. List decemberate on 01/2013.
Titus 2	81 81	MetEd MetEd	60 58	2/29/2012 5/15/2013	9/1/2013 4/16/2015 9/1/2013	9/1/2013 9/1/2013	scheduled on 9/1/2013. Unit deactivated on 9/1/2013. Reliability Analysis complete - impacts identified - upgrades and operating procedures expected to be in place by May 2015 to allow generators to deactivate as scheduled. On May 15, 2013 NRG submitted an updated deactivation notice with an effective deactivation date of 9/1/2013. New reliability analysis complete and impacts identified and upgrades cannot be completed by new deactivation date. Generation owner has informed PJM that Titus will deactivate as scheduled on 9/1/2013. Unit deactivated on 9/1/2013.
Total Deactivated:	15513						

NOTE (1): This list includes retirements addressed as part of the PJM retirement process started in 2003. The list does not include generators

FUTURE DEACTIVATIONS (as of September 5, 2013)

				Official	Requested	Projected	
		Trans	Age	Owner	Deactivation	Deactivation	
Unit	Capacity	Zone	(Years)	Request	Date	Date	PJM Reliability Status ¹
Kearny9	21	PSEG	43	4/21/2010 12/1/2011	6/1/2013 5/1/2015		Reliability Analysis complete - impacts identified, however impacts resolved with the interconnection of projects T41 and T42 which are in-service.
Indian River 3	169.7	DPL	40	8/13/2010	12/31/2013	12/31/2013	Reliability analysis complete - reliability impacts identified and expected to be resolved before unit is deactivated
Chesapeake 1	111	DOM	58	11/15/2011	12/31/2014	12/31/2014	Reliability Analysis complete. Impacts identified. Upgrades expected to be completed by June 2015.
Chesapeake 2	111	DOM	56	11/15/2011	12/31/2014	12/31/2014	Reliability Analysis complete. Impacts identified. Upgrades expected to be completed by June 2015. Reliability Analysis complete. Impacts identified. Upgrades
Chesapeake 3	147	DOM	52	11/15/2011 10/11/12	12/31/2015 12/31/14		expected to be completed by June 2016. On 10/11/12 generator submitted an updated deactivation request changing the deactivation date to 12/31/14. Reliability analysis complete. Previously identified baseline upgrades are still needed to be completed by June 2015. In addition a new reliability issue was identified and a previously identified baseline upgrade will need to be accelerated and completed by June 2015. It is expected that the Chesapeake 3 generating unit will deactivate on December 31, 2014.
				11/15/2011	12/31/2015	12/31/2015	Reliability Analysis complete. Impacts identified. Upgrades expected to be completed by June 2016. On 10/11/12 generator submitted an updated deactivation request changing the deactivation date to 12/31/14. Reliability analysis complete. Previously identified baseline upgrades are still needed to be completed by June 2015. In addition a new reliability issue was identified and a previously identified baseline upgrade will need to be accelerated and completed by June 2015. It is expected that the Chesapeake 4 generating unit will deactivate on December
Chesapeake 4	207	DOM	49	10/11/12	12/31/14		31, 2014.
Yorktown 1	159	DOM	54	11/15/2011	12/31/2014	12/31/2014	Reliability Analysis complete. Impacts identified. Upgrades expected to be completed by June 2015.
Bergen 3	21	PSEG	44	12/1/2011	6/1/2015	6/1/2015	Reliability Analysis Complete. Impacts identified and expected to be resolved in three - four years. Working with affected TO to finalize upgrade schedule.
Burlington 8	21	PSEG	44	12/1/2011	6/1/2015	6/1/2015	Reliability Analysis Complete. Impacts identified and expected to be resolved in three - four years. Working with affected TO to finalize upgrade schedule.
National Park 1	21	PSEG	42	12/1/2011	6/1/2015	6/1/2015	Reliability Analysis Complete. Impacts identified and expected to be resolved in three - four years. Working with affected TO to finalize upgrade schedule.
Mercer 3	115	PSEG	44	12/1/2011	6/1/2015	6/1/2015	Reliability Analysis Complete. Impacts identified and expected to be resolved in three - four years. Working with affected TO to finalize upgrade schedule.
Sewaren 6	111	PSEG	46	12/1/2011	6/1/2015	6/1/2015	Reliability Analysis Complete. Impacts identified and expected to be resolved in three - four years. Working with affected TO to finalize upgrade schedule.

		Trans	Age	Official Owner	Requested Deactivation	Deactivation	
Unit	Capacity	Zone	(Years)	Request	Date	Date	PJM Reliability Status ¹
Ashtabula 5	244	ATSI	53	1/26/2012	9/1/2012	6/1/2015	Reliability analysis complete. Impacts identified and expected to be resolved by June 2016. Further refinement of the reliability analysis, required upgrades, and generator deactivation schedule continues. Unit will continue to operate as upgrades to transmission system are constructed - estimated till June 1, 2015. See posting - FE Generator Deactivation Study Results and Required Upgrades.
Factlake 1	132	ATSI	58	1/26/2012	9/1/2012	6/1/2015	Reliability analysis complete. Impacts identified and expected to be resolved by June 2016. Further refinement of the reliability analysis, required upgrades, and generator deactivation schedule continues. Unit will continue to operate as upgrades to transmission system are constructed - estimated till June 1, 2015. See posting - FE Generator Deactivation Study Results and Required Upgrades.
Eastlake 1			58			6/1/2015	Reliability analysis complete. Impacts identified and expected to be resolved by June 2016. Further refinement of the reliability analysis, required upgrades, and generator deactivation schedule continues. Unit will continue to operate as upgrades to transmission system are constructed - estimated till June 1, 2015. See posting - FE Generator Deactivation Study Results
Eastlake 2	132	ATSI	58	1/26/2012	9/1/2012	6/1/2015	and Required Upgrades.
Eastlake 3	132	ATSI	57	1/26/2012	9/1/2012	6/1/2015	Reliability analysis complete. Impacts identified and expected to be resolved by June 2016. Further refinement of the reliability analysis, required upgrades, and generator deactivation schedule continues. Unit will continue to operate as upgrades to transmission system are constructed - estimated till June 1, 2015. See posting - FE Generator Deactivation Study Results and Required Upgrades.
							Reliability analysis complete. Impacts identified and expected to be resolved by June 2016. Further refinement of the reliability analysis, required upgrades, and generator deactivation schedule continues. Unit will continue to operate as upgrades to transmission system are constructed - estimated till June 1, 2015. See posting - FE Generator Deactivation Study Results
Lake Shore 18 Walter C Beckjord 2	245	ATSI DEOK	49 58	2/1/2012 2/1/2012 4/2/2012 8/27/2013	9/1/2012 5/1/2012 4/1/2015 11/21/2013	5/1/2012 4/1/2015	and Required Upgrades. Reliability Analysis complete - impacts identified - upgrades scheduled to be completed by May 1, 2012. On April 2, 2012 Duke submitted a updated notice to PJM indicating the Deactivation Date for Beckjord 2 and 3 would now be April 1, 2015. On 8/27/2013 PJM received another updated deactivation notice from Duke requesting to deactivate unit no later than 11/21/2013.
				2/1/2012 4/2/2012	5/1/2012 4/1/2015	5/1/2012 4/1/2015	Reliability Analysis complete - impacts identified - upgrades scheduled to be completed by May 1, 2012. On April 2, 2012 Duke submitted a updated notice to PJM indicating the Deactivation Date for Beckjord 2 and 3 would now be April 1, 2015. On 8/27/2013 PJM received another updated deactivation notice from Duke requesting to deactivate unit no
Walter C Beckjord 3	128	DEOK	57	8/27/2013	11/21/2013	11/21/2013	Reliability Analysis complete - impacts identified - upgrades
Walter C Beckjord 4	150	DEOK	53	2/1/2012	4/1/2015	4/1/2015	scheduled to be completed by June 2014 Reliability Analysis complete - impacts identified - upgrades
Walter C Beckjord 5	238	DEOK	49	2/1/2012	4/1/2015	4/1/2015	scheduled to be completed by June 2014
Walter C Beckjord 6	414	DEOK	42	2/1/2012	4/1/2015	4/1/2015	Reliability Analysis complete - impacts identified - upgrades scheduled to be completed by June 2014

		Trans	Age	Official Owner	Requested Deactivation	Projected Deactivation	
Unit	Capacity		(Years)	Request	Date		PJM Reliability Status ¹
Portland 1	158	MetEd	53	2/29/2012 5/15/2013	1/7/2015 6/1/2014		Reliability Analysis complete - impacts identified - upgrades and operating procedures expected to be in place by May 2015 to allow generators to deactivate as scheduled. On May 15, 2013 NRG submitted an updated deactivation notice with an effective deactivation date of 6/1/2014. New reliability analysis complete. Impacts identified and upgrades expected to be completed by new deactivation date (June 1, 2014).
Portland 2	243	MetEd	49	2/29/2012 5/15/2013	1/7/2015 6/1/2014		Reliability Analysis complete - impacts identified - upgrades and operating procedures expected to be in place by May 2015 to allow generators to deactivate as scheduled. On May 15, 2013 NRG submitted an updated deactivation notice with an effective deactivation date of 6/1/2014. New reliability analysis complete. Impacts identified and upgrades expected to be completed by new deactivation date (June 1, 2014).
Glen Gardner CT 1	20	JCPL	40	2/29/2012	5/1/2015	5/1/2015	Reliability Analysis complete - impacts identified - upgrades and operating procedures expected to be in place by May 2015 to allow generators to deactivate as scheduled.
Glen Gardner CT 2	20	JCPL	40	2/29/2012	5/1/2015	5/1/2015	Reliability Analysis complete - impacts identified - upgrades and operating procedures expected to be in place by May 2015 to allow generators to deactivate as scheduled.
Glen Gardner CT 3	20	JCPL	40	2/29/2012	5/1/2015	5/1/2015	Reliability Analysis complete - impacts identified - upgrades and operating procedures expected to be in place by May 2015 to allow generators to deactivate as scheduled.
Glen Gardner CT 4	20	JCPL	40	2/29/2012	5/1/2015	5/1/2015	Reliability Analysis complete - impacts identified - upgrades and operating procedures expected to be in place by May 2015 to allow generators to deactivate as scheduled.
Glen Gardner CT 5	20	JCPL	40	2/29/2012	5/1/2015		Reliability Analysis complete - impacts identified - upgrades and operating procedures expected to be in place by May 2015 to allow generators to deactivate as scheduled.
Glen Gardner CT 6	20	JCPL	40	2/29/2012	5/1/2015	5/1/2015	Reliability Analysis complete - impacts identified - upgrades and operating procedures expected to be in place by May 2015 to allow generators to deactivate as scheduled.
Glen Gardner CT 7	20	JCPL	40	2/29/2012	5/1/2015	5/1/2015	Reliability Analysis complete - impacts identified - upgrades and operating procedures expected to be in place by May 2015 to allow generators to deactivate as scheduled.
Glen Gardner CT 8	20	JCPL	40	2/29/2012	5/1/2015	5/1/2015	Reliability Analysis complete - impacts identified - upgrades and operating procedures expected to be in place by May 2015 to allow generators to deactivate as scheduled.
Shawville 1	122	PenElec	57	2/29/2012	4/16/2015	4/16/2015	Reliability Analysis complete - impacts identified - upgrades and operating procedures expected to be in place by May 2015 to allow generators to deactivate as scheduled.
Shawville 2	125	PenElec	58	2/29/2012	4/16/2015	4/16/2015	Reliability Analysis complete - impacts identified - upgrades and operating procedures expected to be in place by May 2015 to allow generators to deactivate as scheduled.
Shawville 3		PenElec		2/29/2012	4/16/2015		Reliability Analysis complete - impacts identified - upgrades and operating procedures expected to be in place by May 2015 to allow generators to deactivate as scheduled.

		_		Official	Requested		
Unit	Capacity	Trans Zone		Owner Request	Deactivation Date	Deactivation Date	PJM Reliability Status ¹
	Cupucity		(
							Reliability Analysis complete - impacts identified - upgrades and operating procedures expected to be in place by May 2015 to
Shawville 4	175	PenElec	51	2/29/2012	4/16/2015	4/16/2015	allow generators to deactivate as scheduled.
Clinch River 3	230	AEP	50	3/22/2012	6/1/2015	6/1/2015	Reliability Analysis complete - impacts identified - upgrades scheduled to be completed by June 2015.
Clan Lyn F	00	۸۲۵	67	2/22/2012	6/1/2015	6/1/2015	Reliability Analysis complete - impacts identified - upgrades
Glen Lyn 5	90	AEP	67	3/22/2012	6/1/2015	6/1/2015	scheduled to be completed by June 2015.
							Reliability Analysis complete - impacts identified - upgrades
Glen Lyn 6	235	AEP	54	3/22/2012	6/1/2015	6/1/2015	scheduled to be completed by June 2015.
							Daliah iir Aasla ii aasla ka
Kammer 1	200	AEP	53	3/22/2012	6/1/2015	6/1/2015	Reliability Analysis complete - impacts identified - upgrades scheduled to be completed by June 2015.
Kammer 2	200	AEP	53	3/22/2012	6/1/2015	6/1/2015	Reliability Analysis complete - impacts identified - upgrades scheduled to be completed by June 2015.
Rammer 2	200	ALF	33	3/22/2012	0/1/2013	0/1/2013	Scrieduled to be completed by June 2013.
							Reliability Analysis complete - impacts identified - upgrades
Kammer 3	200	AEP	53	3/22/2012	6/1/2015	6/1/2015	scheduled to be completed by June 2015.
							Reliability Analysis complete - impacts identified - upgrades
Kanawha River 1	200	AEP	58	3/22/2012	6/1/2015	6/1/2015	scheduled to be completed by June 2015.
Kanawha River 2	200	AEP	58	3/22/2012	6/1/2015	6/1/2015	Reliability Analysis complete - impacts identified - upgrades scheduled to be completed by June 2015.
Muskingum Divor 4	190	AEP	58	2/22/2012	6/1/2015	6/1/2015	Reliability Analysis complete - impacts identified - upgrades scheduled to be completed by June 2015.
Muskingum River 1	190	AEP	36	3/22/2012	6/1/2015	6/1/2015	scrieduled to be completed by June 2015.
							Reliability Analysis complete - impacts identified - upgrades
Muskingum River 2	190	AEP	57	3/22/2012	6/1/2015	6/1/2015	scheduled to be completed by June 2015.
							Poliability Analysis complete, impacts identified improdes
Muskingum River 3	205	AEP	54	3/22/2012	6/1/2015	6/1/2015	Reliability Analysis complete - impacts identified - upgrades scheduled to be completed by June 2015.
Muskingum River 4	205	AEP	53	3/22/2012	6/1/2015	6/1/2015	Reliability Analysis complete - impacts identified - upgrades scheduled to be completed by June 2015.
	203	/ \LI	33	5, LL, LU 1Z	0/1/2010	5/1/2013	consulted to be completed by dutio 2010.
							Reliability Analysis complete - impacts identified - upgrades
Picway 5	95	AEP	56	3/22/2012	6/1/2015	6/1/2015	scheduled to be completed by June 2015.

				Official	Requested	Projected	
		Trans	Age	Owner	Deactivation	Deactivation	
Unit	Capacity	Zone	(Years)	Request	Date	Date	PJM Reliability Status ¹
Sporn 1	145	AEP	62	3/22/2012	6/1/2015	6/1/2015	Reliability Analysis complete - impacts identified - upgrades scheduled to be completed by June 2015.
Оронг т	140	711	02	0/22/2012	0/1/2010	0/1/2010	Sometiment to be completed by dune 2010.
Sporn 2	145	AEP	61	3/22/2012	6/1/2015	6/1/2015	Reliability Analysis complete - impacts identified - upgrades scheduled to be completed by June 2015.
Oponi 2	110	7 (12)	01	O/LL/LOTE	0/1/2010	0/1/2010	Goriodation to be completed by durie 2010.
Sporn 3	145	AEP	60	3/22/2012	6/1/2015	6/1/2015	Reliability Analysis complete - impacts identified - upgrades scheduled to be completed by June 2015.
Sporn 4	145	AEP	60	3/22/2012	6/1/2015	6/1/2015	Reliability Analysis complete - impacts identified - upgrades scheduled to be completed by June 2015.
Tanner Creek 1	145	AEP	61	3/22/2012	6/1/2015	6/1/2015	Reliability Analysis complete - impacts identified - upgrades scheduled to be completed by June 2015.
Tanner Creek 2	145	AEP	59	3/22/2012	6/1/2015	6/1/2015	Reliability Analysis complete - impacts identified - upgrades scheduled to be completed by June 2015.
Tanner Creek 3	198	AEP	57	3/22/2012	6/1/2015	6/1/2015	Reliability Analysis complete - impacts identified - upgrades scheduled to be completed by June 2015.
Sewaren 1	104	PSEG	63	3/21/2012	6/1/2015	6/1/2015	Reliability Analysis complete. No impacts expected with PSEG contemplating re-use of Capacity Rights for a new generation project
Sewaren 2	118	PSEG	63	3/21/2012	6/1/2015	6/1/2015	Reliability Analysis complete. No impacts expected with PSEG contemplating re-use of Capacity Rights for a new generation project
Sewaren 3	107	PSEG	62	3/21/2012	6/1/2015	6/1/2015	Reliability Analysis complete. No impacts expected with PSEG contemplating re-use of Capacity Rights for a new generation project
Sewaren 4	124	PSEG	60	3/21/2012	6/1/2015	6/1/2015	Reliability Analysis complete. No impacts expected with PSEG contemplating re-use of Capacity Rights for a new generation project
	127	. 525	- 55	5.2 2012	5, 1/2010	5, 1,2010	Reliability Analysis complete - impacts identified - upgrades
Cedar 1	44	AE	39	4/5/2012	5/31/2015	5/31/2015	scheduled to be completed by May 2015.
Cedar 2	22	AE	39	4/5/2012 4/5/2012	5/31/2015 5/31/2015	5/31/2015	Reliability Analysis complete - impacts identified - upgrades scheduled to be completed by May 2015. Reliability Analysis complete - impacts identified - upgrades scheduled to be completed by May 2015. On Sept 4, 2013 PJM received an updated deactivation notice from Calpine indicating the Deepwater units would now be deactivated on May 31, 2014.
Deepwater 1	78	AE	53	9/4/2013	5/31/2014 5/31/2015		Updated reliability analysis underway. Reliability Analysis complete - impacts identified - upgrades scheduled to be completed by May 2015. On Sept 4, 2013 PJM received an updated deactivation notice from Calpine indicating the Deepwater units would now be deactivated on May 31, 2014.
Deepwater 6	80	AE	57	9/4/2013	5/31/2014		Updated reliability analysis underway.
Missouri Ave CT B	20	AE	42	4/5/2012	5/31/2015	5/31/2015	Reliability Analysis complete - impacts identified - upgrades scheduled to be completed by May 2015.

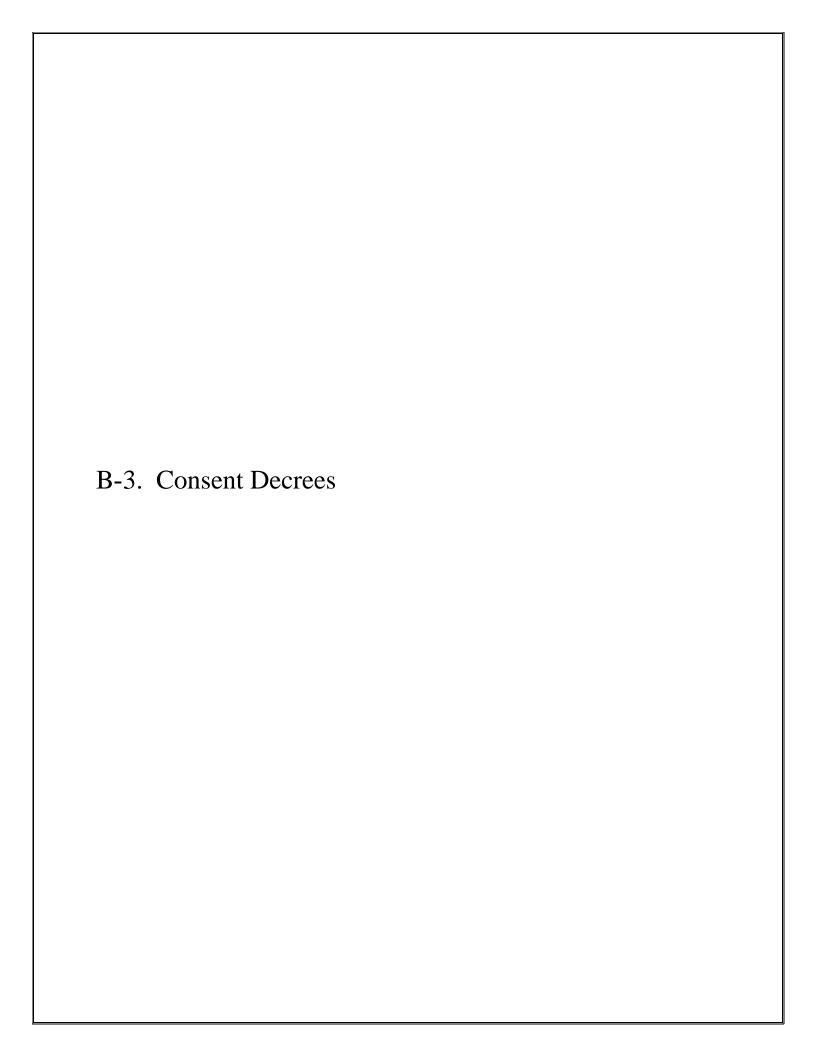
Unit	Capacity	Trans Zone	Age (Years)	Official Owner Request	Requested Deactivation Date	Deactivation	
Missouri Ave CT C	20	AE	43	4/5/2012	5/31/2015	5/31/2015	Reliability Analysis complete - impacts identified - upgrades scheduled to be completed by May 2015.
Missouri Ave CT D	20	AE	43	4/5/2012	5/31/2015		Reliability Analysis complete - impacts identified - upgrades scheduled to be completed by May 2015.
Hutchings 1	53	Dayton	63	5/3/2012	6/1/2015	6/1/2015	Reliability Analysis Complete. No impacts identified.
Hutchings 2	50	Dayton	63	5/3/2012	6/1/2015	6/1/2015	Reliability Analysis Complete. No impacts identified.
Burlington 9 GT	184	PSEG	40	9/10/2012	6/1/2014	6/1/2014	Reliability Analysis complete. Impacts identified and not expected to be completed till June 2015. Upgrades identified are already identified baseline upgrades with a June 2015 expected in-service date. Transmission owners cannot commit to completing these upgrades by June 2014. In addition, generator is affected by the conversion of the interconnect sub to 230 kV which is a required baseline upgrade and scheduled to be completed by June 2014.
_							Reliability Analysis complete. No impacts identified. Also requested to re-use capacity rights for interconnection project Y2-
Warren County Landfill	1.9	JCPL	7	10/11/2012	1/9/2013	1/9/2013	018. Reliability analysis complete. No new reliability impacts identified. Previously identified baseline upgrades are still needed to be completed prior to June 2015. Yorktown 2 is expected to
Yorktown 2	165	Dom	53	10/11/2012	12/31/2014	12/31/2014	deactivate as scheduled on December 31, 2014.
Riverside 6	118	BGE	42	10/31/2012	6/1/2014	6/1/2014	Reliability Analysis complete. No impacts identified.
Essex 12 (#121)	46	PSEG	41	11/20/2012	5/31/2015		Reliability analysis complete. No impacts with Capacity Interconnection rights re-used in interconnection project(s) T107, X3-004, and / or Y2-019. Reliability analysis complete. No impacts with Capacity
Essex 12 (#122)	46	PSEG	41	11/20/2012	5/31/2015	5/31/2015	Interconnection rights re-used in interconnection project(s) T107, X3-004, and / or Y2-019.
Essex 12 (#123)	46	PSEG	41	11/20/2012	5/31/2015	5/31/2015	Reliability analysis complete. No impacts with Capacity Interconnection rights re-used in interconnection project(s) T107, X3-004, and / or Y2-019.
Essex 12 (#124)	46	PSEG	41	11/20/2012	5/31/2015	5/31/2015	Reliability analysis complete. No impacts with Capacity Interconnection rights re-used in interconnection project(s) T107, X3-004, and / or Y2-019.
BL England Diesel(s) {IC1, IC2, IC3, IC4}	8	AE	51	1/7/2013	10/1/2015	10/1/2015	No reliability impacts - with request to transfer CIRs to Y1-001.
Hutchings 3	59	Dayton	62	1/11/2013	6/1/2015		Reliability analysis complete. Impacts identified and expected to be resolved by June 1, 2015.
Hutchings 5	58	Dayton	60	1/11/2013	6/1/2015		Reliability analysis complete. Impacts identified and expected to be resolved by June 1, 2015.
Hutchings 6	57	Dayton	59	1/11/2013	6/1/2015	6/1/2015	Reliability analysis complete. Impacts identified and expected to be resolved by June 1, 2015.
Burlington 11 #111	46	PSEG	40	1/11/2013	6/1/2015	6/1/2015	Reliability analysis complete. Impacts identified and expected to be resolved by June 1, 2015.
Burlington 11 #112	46	PSEG	40	1/11/2013	6/1/2015	6/1/2015	Reliability analysis complete. Impacts identified and expected to be resolved by June 1, 2015.
Burlington 11 #113	46	PSEG	40	1/11/2013	6/1/2015	6/1/2015	Reliability analysis complete. Impacts identified and expected to be resolved by June 1, 2015.
Burlington 11 #114	46	PSEG	40	1/11/2013	6/1/2015	6/1/2015	Reliability analysis complete. Impacts identified and expected to be resolved by June 1, 2015.
Edison 1 #11	42	PSEG	41	1/11/2013	6/1/2015	6/1/2015	Reliability analysis complete. Impacts identified and expected to be resolved by June 1, 2015.
Edison 1 #12	42	PSEG	41	1/11/2013	6/1/2015	6/1/2015	Reliability analysis complete. Impacts identified and expected to be resolved by June 1, 2015.
Edison 1 #13	42	PSEG	41	1/11/2013	6/1/2015	6/1/2015	Reliability analysis complete. Impacts identified and expected to be resolved by June 1, 2015.

Unit	Capacity	Trans Zone	Age (Years)	Official Owner Request	Requested Deactivation Date	Projected Deactivation Date	
Edison 1 #14	42	PSEG	41	1/11/2013	6/1/2015	6/1/2015	Reliability analysis complete. Impacts identified and expected to be resolved by June 1, 2015.
Edison 2 #21	42	PSEG	41	1/11/2013	6/1/2015	6/1/2015	Reliability analysis complete. Impacts identified and expected to be resolved by June 1, 2015.
Edison 2 #22	42	PSEG	41	1/11/2013	6/1/2015	6/1/2015	Reliability analysis complete. Impacts identified and expected to be resolved by June 1, 2015.
Edison 2 #23	42	PSEG	41	1/11/2013	6/1/2015	6/1/2015	Reliability analysis complete. Impacts identified and expected to be resolved by June 1, 2015.
Edison 2 #24	42	PSEG	41	1/11/2013	6/1/2015	6/1/2015	Reliability analysis complete. Impacts identified and expected to be resolved by June 1, 2015.
Edison 3 #31	42	PSEG	41	1/11/2013	6/1/2015	6/1/2015	Reliability analysis complete. Impacts identified and expected to be resolved by June 1, 2015.
Edison 3 #32	42	PSEG	41	1/11/2013	6/1/2015	6/1/2015	Reliability analysis complete. Impacts identified and expected to be resolved by June 1, 2015.
Edison 3 #33	42	PSEG	41	1/11/2013	6/1/2015	6/1/2015	Reliability analysis complete. Impacts identified and expected to be resolved by June 1, 2015.
Edison 3 #34	42	PSEG	41	1/11/2013	6/1/2015	6/1/2015	Reliability analysis complete. Impacts identified and expected to be resolved by June 1, 2015.
Essex 10 #101	42	PSEG	41	1/11/2013	6/1/2015	6/1/2015	Reliability analysis complete. Impacts identified and expected to be resolved by June 1, 2015.
Essex 10 #102	42	PSEG	41	1/11/2013	6/1/2015	6/1/2015	Reliability analysis complete. Impacts identified and expected to be resolved by June 1, 2015. Reliability analysis complete. Impacts identified and expected to
Essex 10 #103	42	PSEG	41	1/11/2013	6/1/2015	6/1/2015	be resolved by June 1, 2015.
Essex 10 #104	42	PSEG	41	1/11/2013	6/1/2015	6/1/2015	Reliability analysis complete. Impacts identified and expected to be resolved by June 1, 2015. Reliability analysis complete. Impacts identified and expected to
Essex 11 #111	46	PSEG	41	1/11/2013	6/1/2015		be resolved by June 1, 2015. Reliability analysis complete. Impacts identified and expected to
Essex 11 #112	46	PSEG	41	1/11/2013	6/1/2015		be resolved by June 1, 2015.
Essex 11 #113	46	PSEG	41	1/11/2013	6/1/2015	6/1/2015	Reliability analysis complete. Impacts identified and expected to be resolved by June 1, 2015. Reliability analysis complete. Impacts identified and expected to
Essex 11 #114	46	PSEG	41	1/11/2013	6/1/2015	6/1/2015	be resolved by June 1, 2015.
Middle Energy Center 1	19	AE	42	1/11/2013	5/31/2015	5/31/2015	Reliability analysis complete. Impacts identified and expected to be resolved by May 2015.
Middle Energy Center 2 Middle Energy Center	20	AE	42	1/11/2013	5/31/2015	5/31/2015	Reliability analysis complete. Impacts identified and expected to be resolved by May 2015. Reliability analysis complete. Impacts identified and expected to
3	36	AE	41	1/11/2013	5/31/2015	5/31/2015	be resolved by May 2015.
Werner CT C1	53	JCPL	40	1/22/2013	5/1/2015	5/1/2015	Reliability analysis complete. Impacts identified and expected to be resolved by May 2015.
Werner CT C2	53	JCPL	40	1/22/2013	5/1/2015	5/1/2015	Reliability analysis complete. Impacts identified and expected to be resolved by May 2015.
Werner CT C3	53	JCPL	40	1/22/2013	5/1/2015	5/1/2015	Reliability analysis complete. Impacts identified and expected to be resolved by May 2015.
Werner CT C4	53	JCPL	40	1/22/2013	5/1/2015	5/1/2015	Reliability analysis complete. Impacts identified and expected to be resolved by May 2015.
Gilbert CT C1	23	JCPL	42	1/22/2013	5/1/2015	5/1/2015	Reliability analysis complete. Impacts identified and expected to be resolved by May 2015.
Gilbert CT C2	25	JCPL	42	1/22/2013	5/1/2015	5/1/2015	Reliability analysis complete. Impacts identified and expected to be resolved by May 2015.
Gilbert CT C3	25	JCPL	42	1/22/2013	5/1/2015	5/1/2015	Reliability analysis complete. Impacts identified and expected to be resolved by May 2015.
Gilbert CT C4	25	JCPL	42	1/22/2013	5/1/2015	5/1/2015	Reliability analysis complete. Impacts identified and expected to be resolved by May 2015.

				Official	Requested	Projected	
		Trans	Age	Owner	Deactivation	Deactivation	
Unit	Capacity	Zone	(Years)	Request	Date	Date	PJM Reliability Status ¹
BL England Unit 1	129	AE	50	3/27/2013	5/1/2014	5/1/2014	Reliability analysis complete. No reliability impacts - with request to transfer CIRs to Y1-001.
Piney Creek NUG	31	PenElec	20	6/25/2013	4/12/2013	4/12/2013	PJM was informed on 6/25/13 that unit had ceased operations on 4/12/13 and was being decommissioned starting on 6/13/13. PJM determined that this was not a PJM generator since it was operating under a State Tariff. However, since the unit was a capacity resource, and in both the Planning and Operations models, PJM has completed Reliability analysis and identified impacts. Solution is an already identified baseline upgrade with a June 2014 expected in-service date. Interim operating procedures are being discussed for implementation.
T IIICY OTCCK 1400	01	TOTILICO	20	0/20/2010	4/ 12/2010	4/12/2010	procedures are being discussed for implementation.
Koppers Co. IPP	8	PPL	23	7/1/2013	9/30/2013	9/30/2013	Reliability analysis complete. No impacts identified. Reliability analysis complete. Impacts identified and upgrades not
Hatfield's Ferry 1	530	AP	43	7/9/2013	10/9/2013	10/9/2013	expected to be completed by proposed deactivation date of October 9, 2013. PJM continues to work with affected Transmission Owners to identify upgrades and expected completion dates along with temporary operating solutions to mitigate reliability impacts, in accordance with Part 113.2 of Section V of the Tariff.
Hatfield's Ferry 2	530	AP	42	7/9/2013	10/9/2013	10/9/2013	Reliability analysis complete. Impacts identified and upgrades not expected to be completed by proposed deactivation date of October 9, 2013. PJM continues to work with affected Transmission Owners to identify upgrades and expected completion dates along with temporary operating solutions to mitigate reliability impacts, in accordance with Part 113.2 of Section V of the Tariff.
Hatfield's Ferry 3	530	AP	41	7/9/2013	10/9/2013	10/9/2013	Reliability analysis complete. Impacts identified and upgrades not expected to be completed by proposed deactivation date of October 9, 2013. PJM continues to work with affected Transmission Owners to identify upgrades and expected completion dates along with temporary operating solutions to mitigate reliability impacts, in accordance with Part 113.2 of Section V of the Tariff.
Mitchell 2	82	AP	63	7/9/2013	10/9/2013		Reliability analysis complete. Impacts identified and upgrades not expected to be completed by proposed deactivation date of October 9, 2013. PJM continues to work with affected Transmission Owners to identify upgrades and expected completion dates along with temporary operating solutions to mitigate reliability impacts, in accordance with Part 113.2 of Section V of the Tariff.
Mitchell 3	277	AP	49	7/9/2013	10/9/2013	10/9/2013	Reliability analysis complete. Impacts identified and upgrades not expected to be completed by proposed deactivation date of October 9, 2013. PJM continues to work with affected Transmission Owners to identify upgrades and expected completion dates along with temporary operating solutions to mitigate reliability impacts, in accordance with Part 113.2 of Section V of the Tariff.
TOTAL:					<u> </u>		

Note (1): PJM Reliability Status column also contains links to additional information for requests with reliability issues posted to the PJM website.

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IN THE UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF OHIO EASTERN DIVISION

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 JUDGE EDMUND A. SARGUS, JR. Magistrate Judge Terence P. Kemp
)
Civil Action No C2-99-1250 (Consolidated with C2-99-1182)
)) _) _)
))
)) JUDGE GREGORY L. FROST) Magistrate Judge Norah McCann King
)) Civil Action No C2-05-360)

OHIO CITIZEN ACTION, ET AL.,))
Plaintiffs,)
V.	JUDGE GREGORY L. FROSTMagistrate Judge Norah McCann King
AMERICAN ELECTRIC POWER SERVICE CORP., ET AL.,)) Civil Action No. C2-04-1098
Defendants.))

CONSENT DECREE

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Appendix A: Environmental Mitigation Projects

Appendix B: Reporting Requirements

Appendix C: Monitoring Strategy and Calculation of 30-Day Rolling Average Removal Efficiency for Conesville Units 5 and 6

WHEREAS, the following complaints have been filed against American Electric Power Service Corporation, Indiana Michigan Power Company, Ohio Power Company, Appalachian Power Company, Cardinal Operating Company, and Columbus Southern Power Company in the above-captioned cases, *United States, et al. v. American Electric Power Service Corp., et al.*, Civil Action Nos. C2-99-1182 and C2-99-1250 ("AEP I") and United States, et al. v. American Electric Power Service Corp., et al., Civil Action Nos. C2-04-1098 and C2-05-360 ("AEP II"):

- (a) the United States of America ("United States"), on behalf of the United States Environmental Protection Agency ("EPA"), filed initial complaints on November 3, 1999 and April 8, 2005, and filed amended complaints on March 3, 2000 and September 17, 2004, pursuant to Sections 113(b), 165, and 167 of the Clean Air Act (the "Act"), 42 U.S.C. §§ 7413, 7475, and 7477;
- (b) the States of New York, Connecticut, New Jersey, Vermont, New Hampshire, Maryland, and Rhode Island, and the Commonwealth of Massachusetts, after their motion to intervene was granted, filed initial complaints on December 14, 1999 and November 18, 2004, and filed amended complaints on April 5, 2000, September 24, 2002, and September 17, 2004, pursuant to Section 304 of the Act, 42 U.S.C. § 7604; and
- (c) Ohio Citizen Action, Citizens Action Coalition of Indiana, Hoosier

 Environmental Council, Valley Watch, Inc., Ohio Valley Environmental Coalition, West

 Virginia Environmental Council, Clean Air Council, Izaak Walton League of America, United

 States Public Interest Research Group, National Wildlife Federation, Indiana Wildlife

 Federation, League of Ohio Sportsmen, Sierra Club, and Natural Resources Defense Council,

Inc. filed an initial complaint on November 19, 1999, and filed amended complaints on January 1, 2000 and September 16, 2004, pursuant to Section 304 of the Act, 42 U.S.C. § 7604;

WHEREAS, the complaints filed against Defendants in *AEP I* and *AEP II* sought injunctive relief and the assessment of civil penalties for alleged violations of, *inter alia*, the:

- (a) Prevention of Significant Deterioration and Nonattainment New Source Review provisions in Part C and D of Subchapter I of the Act, 42 U.S.C. §§ 7470-7492, 7501-7515; and
- (b) federally-enforceable state implementation plans developed by Indiana,Ohio, Virginia, and West Virginia;

WHEREAS, EPA issued notices of violation ("NOVs") to Defendants with respect to such allegations on November 2, 1999, November 22, 1999, and June 18, 2004;

WHEREAS, EPA provided Defendants and the States of Indiana, Ohio, and West Virginia, and the Commonwealth of Virginia, with actual notice pertaining to Defendants' alleged violations, in accordance with Section 113(a)(1) and (b) of the Act, 42 U.S.C. § 7413(a)(1) and (b);

WHEREAS, in their complaints, the United States, the States, and Citizen Plaintiffs (collectively, the "Plaintiffs") alleged, *inter alia*, that Defendants made major modifications to major emitting facilities, and failed to obtain the necessary permits and install the controls necessary under the Act to reduce sulfur dioxide, nitrogen oxides, and/or particulate matter emissions, and further alleged that such emissions damage human health and the environment;

WHEREAS, the Plaintiffs' complaints state claims upon which relief can be granted against Defendants under Sections 113, 165, and 167 of the Act, 42 U.S.C. §§ 7413, 7475, and 7477, and 28 U.S.C. § 1355;

WHEREAS, Defendants have denied and continue to deny the violations alleged in the complaints and NOVs, maintain that they have been and remain in compliance with the Act and are not liable for civil penalties or injunctive relief, and state that they are agreeing to the obligations imposed by this Consent Decree solely to avoid the costs and uncertainties of litigation and to improve the environment;

WHEREAS, Defendants have installed and operated SCR technology on several Units in the AEP Eastern System, as those terms are defined herein, during the five (5) month ozone season to achieve emission reductions in compliance with the NO_x SIP Call;

WHEREAS, the Plaintiffs and Defendants anticipate that this Consent Decree, including the installation and operation of pollution control technology and other measures adopted pursuant to this Consent Decree, will achieve significant reductions of emissions from the AEP Eastern System and thereby significantly improve air quality;

WHEREAS, the liability phase of *AEP I* was tried on July 6-7, 2005, and July 11-12, 2005, and no decision has been rendered;

WHEREAS, the Parties have agreed, and the Court by entering this Consent Decree finds, that this Consent Decree has been negotiated in good faith and at arm's length; that this settlement is fair, reasonable, and in the public interest, and consistent with the goals of the Act; and that entry of this Consent Decree without further litigation is the most appropriate means of resolving this matter;

NOW, THEREFORE, without any admission by Defendants, and without adjudication of the violations alleged in the complaints or the NOVs, it is hereby ORDERED, ADJUDGED, AND DECREED as follows:

I. JURISDICTION AND VENUE

1. This Court has jurisdiction over this action, the subject matter herein, and the Parties consenting hereto, pursuant to 28 U.S.C. §§ 1331, 1345, 1355, and 1367, Sections 113, 167, and 304 of the Act, 42 U.S.C. §§ 7413, 7477, and 7604. Solely for the purposes of this Consent Decree, venue is proper under Section 113(b) of the Act, 42 U.S.C. § 7413(b), and under 28 U.S.C. § 1391(b) and (c). Solely for the purposes of this Consent Decree and the underlying complaints, and for no other purpose, Defendants waive all objections and defenses that they may have to the Court's jurisdiction over this action, to the Court's jurisdiction over Defendants, and to venue in this District. Defendants shall not challenge the terms of this Consent Decree or this Court's jurisdiction to enter and enforce this Consent Decree. Solely for the purposes of the complaints filed by the Plaintiffs in this matter and resolved by the Consent Decree, for the purposes of entry and enforcement of this Consent Decree, and for no other purpose, Defendants waive any defense or objection based on standing. Except as expressly provided for herein, this Consent Decree shall not create any rights in or obligations of any party other than the Plaintiffs and Defendants. Except as provided in Section XXV (Public Comment) of this Consent Decree, the Parties consent to entry of this Consent Decree without further notice. To facilitate entry of this Consent Decree, upon the Date of Lodging of this Consent Decree the Parties shall file a Joint Motion to Consolidate AEP I and AEP II so that AEP II is consolidated into AEP I.

II. APPLICABILITY

- 2. Upon entry, the provisions of the Consent Decree shall apply to and be binding upon and inure to the benefit of Plaintiffs and Defendants, and their respective successors and assigns, and upon their officers, employees, and agents, solely in their capacities as such.
- 3. Defendants shall be responsible for providing a copy of this Consent Decree to all vendors, suppliers, consultants, contractors, agents, and any other company or other organization retained to perform any of the work required by this Consent Decree. Notwithstanding any retention of contractors, subcontractors, or agents to perform any work required under this Consent Decree, Defendants shall be responsible for ensuring that all work is performed in accordance with the requirements of this Consent Decree. For this reason, in any action to enforce this Consent Decree, Defendants shall not assert as a defense the failure of their officers, directors, employees, servants, agents, or contractors to take actions necessary to comply with this Consent Decree, unless Defendants establish that such failure resulted from a Force Majeure Event, as defined in Paragraph 158 of this Consent Decree.

III. <u>DEFINITIONS</u>

Every term expressly defined by this Consent Decree shall have the meaning given to that term by this Consent Decree and, except as otherwise provided in this Consent Decree, every other term used in this Consent Decree that is also a term under the Act or the regulations implementing the Act shall mean in this Consent Decree what such term means under the Act or those implementing regulations.

4. A "1-hour Average NO_x Emission Rate" for a re-powered gas-fired, electric generating unit means, and shall be expressed as, the average concentration in parts per million

("ppm") by dry volume, corrected to 15% O₂, as averaged over one (1) hour. In determining the 1-Hour Average NO_x Emission Rate, Defendants shall use CEMS in accordance with applicable reference methods specified in 40 C.F.R. Part 60 to calculate the emissions for each 15-minute interval within each clock hour, except as provided in this Paragraph. Compliance with the 1-Hour Average NO_x Emission Rate shall be shown by averaging all 15-minute CEMS interval readings within a clock hour, except that any 15-minute CEMS interval that contains any part of a startup or shutdown shall not be included in the calculation of that 1-Hour average. A minimum of two 15-minute CEMS interval readings within a clock hour, not including startup or shutdown intervals, is required to determine compliance with the 1-Hour average NO_x Emission Rate. All emissions recorded by CEMS shall be reported in 1-Hour averages.

- 5. A "30-Day Rolling Average Emission Rate" for a Unit means, and shall be expressed as, a lb/mmBTU and calculated in accordance with the following procedure: first, sum the total pounds of the pollutant in question emitted from the Unit during an Operating Day and the previous twenty-nine (29) Operating Days; second, sum the total heat input to the Unit in mmBTU during the Operating Day and the previous twenty-nine (29) Operating Days; and third, divide the total number of pounds of the pollutant emitted during the thirty (30) Operating Days by the total heat input during the thirty (30) Operating Days. A new 30-Day Rolling Average Emission Rate shall be calculated for each new Operating Day. Each 30-Day Rolling Average Emission Rate shall include all emissions that occur during all periods of startup, shutdown, and Malfunction within an Operating Day, except as follows:
 - a. Emissions and BTU inputs that occur during a period of Malfunction shall be excluded from the calculation of the 30-Day Rolling Average Emission

- Rate if Defendants provide notice of the Malfunction to EPA in accordance with Paragraph 159 in Section XIV (Force Majeure) of this Consent Decree;
- b. Emissions of NO_x and BTU inputs that occur during the fifth and subsequent Cold Start Up Period(s) that occur at a given Unit during any 30-day period shall be excluded from the calculation of the 30-Day Rolling Average Emission Rate if inclusion of such emissions would result in a violation of any applicable 30-Day Rolling Average Emission Rate and Defendants have installed, operated, and maintained the SCR in question in accordance with manufacturers' specifications and good engineering practices. A "Cold Start Up Period" occurs whenever there has been no fire in the boiler of a Unit (no combustion of any Fossil Fuel) for a period of six (6) hours or more. The NO_x emissions to be excluded during the fifth and subsequent Cold Start Up Period(s) shall be the lesser of (i) those NO_x emissions emitted during the eight (8) hour period commencing when the Unit is synchronized with a utility electric distribution system and concluding eight (8) hours later, or (ii) those NO_x emissions emitted prior to the time that the flue gas has achieved the minimum SCR operational temperature specified by the catalyst manufacturer; and
- c. For SO₂, shall include all emissions and BTUs commencing from the time the Unit is synchronized with a utility electric distribution system through

the time that the Unit ceases to combust fossil fuel and the fire is out in the boiler.

- 6. A "30-Day Rolling Average Removal Efficiency" means, for SO₂, at a Unit other than Conesville Unit 5 and Conesville Unit 6, the percent reduction in the mass of SO₂ achieved by a Unit's FGD system over a 30-Operating Day period and shall be calculated as follows: step one, sum the total pounds of SO₂ emitted as measured at the outlet of the FGD system for the Unit during the current Operating Day and the previous twenty-nine (29) Operating Days as measured at the outlet of the FGD system for that Unit; step two, sum the total pounds of SO₂ delivered to the inlet of the FGD system for the Unit during the current Operating Day and the previous twenty-nine (29) Operating Days as measured at the inlet to the FGD system for that Unit; step three, subtract the outlet SO₂ emissions calculated in step one from the inlet SO₂ emissions calculated in step two; step four, divide the remainder calculated in step three by the inlet SO₂ emissions calculated in step two; and step five, multiply the quotient calculated in step four by 100 to express as a percentage of removal efficiency. A new 30-day Rolling Average Removal Efficiency shall be calculated for each new Operating Day, and shall include all emissions that occur during all periods within each Operating Day except that emissions that occur during a period of Malfunction may be excluded from the calculation if Defendants provide Notice of the Malfunction to Plaintiffs in accordance with Section XIV (Force Majeure) and it is determined to be a Force Majeure Event pursuant to that Section.
- 7. "AEP Eastern System" means, solely for purposes of this Consent Decree, the following coal-fired, electric steam generating Units (with the nominal nameplate net capacity of each Unit):

- a. Amos Unit 1 (800 MW), Amos Unit 2 (800 MW), and Amos Unit 3 (1300 MW) located in St. Albans, West Virginia;
- Big Sandy Unit 1 (260 MW) and Big Sandy Unit 2 (800 MW) located in Louisa, Kentucky;
- c. Cardinal Unit 1 (600 MW), Cardinal Unit 2 (600 MW), and Cardinal Unit3 (630 MW) located in Brilliant, Ohio;
- d. Clinch River Unit 1 (235 MW), Clinch River Unit 2 (235 MW), and
 Clinch River Unit 3 (235 MW) located in Carbo, Virginia;
- e. Conesville Unit 1 (125 MW), Conesville Unit 2 (125 MW), Conesville Unit 3 (165 MW), Conesville Unit 4 (780 MW), Conesville Unit 5 (375 MW), and Conesville Unit 6 (375 MW) located in Conesville, Ohio;
- f. Gavin Unit 1 (1300 MW) and Gavin Unit 2 (1300 MW) located in Cheshire, Ohio;
- g. Glen Lyn Unit 5 (95 MW) and Glen Lyn Unit 6 (240 MW) located in GlenLyn, Virginia;
- h. Kammer Unit 1 (210 MW), Kammer Unit 2 (210 MW), and Kammer Unit3 (210 MW) located in Moundsville, West Virginia;
- Kanawha River Unit 1 (200 MW) and Kanawha River Unit 2 (200 MW) located in Glasgow, West Virginia;
- j. Mitchell Unit 1 (800 MW) and Mitchell Unit 2 (800 MW) located in Moundsville, West Virginia;
- k. Mountaineer Unit 1 (1300 MW) located in New Haven, West Virginia;

- 1. Muskingum River Unit 1 (205 MW), Muskingum River Unit 2 (205 MW), Muskingum River Unit 3 (215 MW), Muskingum River Unit 4 (215 MW), and Muskingum River Unit 5 (585 MW) located in Beverly, Ohio;
- m. Picway Unit 9 (100 MW) located in Lockbourne, Ohio;
- n. Rockport Unit 1 (1300 MW) and Rockport Unit 2 (1300 MW) located in Rockport, Indiana;
- o. Sporn Unit 1 (150 MW), Sporn Unit 2 (150 MW), Sporn Unit 3 (150 MW), Sporn Unit 4 (150), and Sporn Unit 5 (450 MW) located in New Haven, West Virginia; and
- p. Tanners Creek Unit 1 (145 MW), Tanners Creek Unit 2 (145 MW),
 Tanners Creek Unit 3 (205 MW), and Tanners Creek Unit 4 (500 MW)
 located in Lawrenceburg, Indiana.
- 8. "Boiler Island" means: a Unit's (a) fuel combustion system (including bunker, coal pulverizers, crusher, stoker, and fuel burners); (b) combustion air system; (c) steam generating system (firebox, boiler tubes, and walls); and (d) draft system (excluding the stack), all as further described in "Interpretation of Reconstruction," by John B. Rasnic, U.S. EPA (November 25, 1986) and attachments thereto.
- 9. "CEMS" or "Continuous Emission Monitoring System" means, for obligations involving NO_x and SO_2 under this Consent Decree, the devices defined in 40 C.F.R. § 72.2 and installed and maintained as required by 40 C.F.R. Part 75.
- 10. "Citizen Plaintiffs" means, collectively, Ohio Citizen Action, Citizens Action Coalition of Indiana, Hoosier Environmental Council, Ohio Valley Environmental Coalition,

West Virginia Environmental Council, Clean Air Council, Izaak Walton League of America, United States Public Interest Research Group, National Wildlife Federation, Indiana Wildlife Federation, League of Ohio Sportsmen, Sierra Club, and Natural Resources Defense Council, Inc.

- 11. "Clean Air Act" or "Act" means the federal Clean Air Act, 42 U.S.C. §§ 7401-7671q, and its implementing regulations.
- 12. "Clean Air Interstate Rule" or "CAIR" means the regulations promulgated by EPA on May 12, 2005, at 70 Fed. Reg. 25,161, which are entitled, "Rule to Reduce Interstate Transport of Fine Particulate Matter and Ozone (Clean Air Interstate Rule); Revisions to Acid Rain Program; Revisions to NO_x SIP Call; Final Rule," and any subsequent amendments to that regulation, and any applicable, federally-approved state implementation plan or the federal implementation plan to implement CAIR.
- 13. "Consent Decree" or "Decree" means this Consent Decree and the appendices attached hereto, which are incorporated into this Consent Decree.
- 14. "Continuously Operate" or "Continuous Operation" means that when an SCR, FGD, ESP, or Other NO_x Pollution Controls are used at a Unit, except during a Malfunction, they shall be operated at all times such Unit is in operation, consistent with the technological limitations, manufacturers' specifications, and good engineering and maintenance practices for such equipment and the Unit so as to minimize emissions to the greatest extent practicable.
- 15. "Date of Entry" means the date this Consent Decree is approved or signed by the United States District Court Judge; provided, however, that if the Parties' Joint Motion to Consolidate, as specified in Paragraph 1, is denied or not decided, then the "Date of Entry"

means the date that the last of the two United States District Court Judges hearing these cases approves or signs this Consent Decree.

- 16. "Date of Lodging" means the date this Consent Decree is filed for lodging with the Clerk of the Court for the United States District Court for the Southern District of Ohio.
 - 17. "Day" means, unless otherwise specified, calendar day.
- 18. "Defendants" or "AEP" means American Electric Power Service Corporation, Kentucky Power Company d/b/a American Electric Power, Indiana Michigan Power Company d/b/a American Electric Power, Ohio Power Company d/b/a American Electric Power, Cardinal Operating Company and its owners (Ohio Power and Buckeye Power, Inc.), Appalachian Power Company d/b/a American Electric Power, and Columbus Southern Power Company d/b/a American Electric Power.
- 19. "Eastern System-Wide Annual Tonnage Limitation" means the limitations, as specified in this Consent Decree, on the number of tons of the air pollutants that may be emitted from the AEP Eastern System during the relevant calendar year (i.e., January 1 through December 31), and shall include all emissions of the air pollutants emitted during all periods of startup, shutdown, and Malfunction, except that emissions that occur during a period of Malfunction may be excluded from the calculation if Defendants provide Notice of the Malfunction to Plaintiffs in accordance with Section XIV (Force Majeure) and it is determined to be a Force Majeure Event pursuant to that Section.
- 20. "Emission Rate" means the number of pounds of pollutant emitted per million BTU of heat input ("lb/mmBTU"), measured in accordance with this Consent Decree.
 - 21. "EPA" means the United States Environmental Protection Agency.

- 22. "ESP" means electrostatic precipitator, a pollution control device for the reduction of PM.
- 23. "Environmental Mitigation Project" means a project funded or implemented by Defendants as a remedial measure to mitigate alleged damage to human health or the environment, including National Parks or Wilderness Areas, claimed to have been caused by the alleged violations described in the complaints or to compensate Plaintiffs for costs necessitated as a result of the alleged damages.
- 24. "Existing Unit" means a Unit that commenced operation prior to the Date of Lodging of this Consent Decree.
- 25. "Flue Gas Desulfurization System," or "FGD," means a pollution control device with one or more absorber vessels that employs flue gas desulfurization technology for the reduction of SO₂.
- 26. "Fossil Fuel" means any hydrocarbon fuel, including coal, petroleum coke, petroleum oil, or natural gas.
- 27. An "Improved Unit" for NO_x means an AEP Eastern System Unit equipped with an SCR or scheduled under this Consent Decree to be equipped with an SCR, or required to be Retired, Retrofitted, or Re-powered. A Unit may be an Improved Unit for one pollutant without being an Improved Unit for another. Any Other Unit in the AEP Eastern System can become an Improved Unit for NO_x if it is equipped with an SCR and the requirement to Continuously Operate such SCR is incorporated into a federally-enforceable non-Title V permit or site-specific amendment to the state implementation plan and the Title V Permit applicable to that Unit.

- An "Improved Unit" for SO_2 means an AEP Eastern System Unit equipped with an FGD or scheduled under this Consent Decree to be equipped with an FGD, or required to be Retired, Retrofitted, or Re-powered. A Unit may be an Improved Unit for one pollutant without being an Improved Unit for another. Any Other Unit in the AEP Eastern System can become an Improved Unit for SO_2 if it is equipped with an FGD and the requirement to Continuously Operate such FGD is incorporated into a federally-enforceable non-Title V permit or site-specific amendment to the state implementation plan and the Title V Permit applicable to that Unit.
 - 29. "KW" means kilowatt or one thousand watts.
 - 30. "lb/mmBTU" means one pound per million British thermal units.
- 31. "Malfunction" means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not Malfunctions.
 - 32. "MW" means a megawatt or one million watts.
- 33. "NSR Permit" means a preconstruction permit issued by the permitting authority pursuant to Parts C or D of Subchapter I of the Clean Air Act.
- 34. "National Ambient Air Quality Standards" or "NAAQS" means national ambient air quality standards that are promulgated pursuant to Section 109 of the Act, 42 U.S.C. § 7409.
- 35. "New and Newly Permitted Unit" means a Unit that commenced operation after the Date of Lodging of this Consent Decree, and that has been issued a final NSR Permit for SO₂ and NO_x that includes applicable Best Available Control Technology ("BACT") and/or Lowest

Achievable Emission Rate ("LAER") limitations, as those terms are respectively defined at 42 U.S.C. §§ 7479(3), 7501(3).

- 36. "Nonattainment NSR" means the nonattainment area New Source Review program within the meaning of Part D of Subchapter I of the Act, 42 U.S.C. §§ 7501-7515, and its regulations, 40 C.F.R. Part 51.
- 37. "NO_x" means oxides of nitrogen, measured in accordance with the provisions of this Consent Decree.
- 38. "NO_x Allowance" means an authorization to emit a specified amount of NO_x that is allocated or issued under an emissions trading or marketable permit program of any kind that has been established under the Clean Air Act or a state implementation plan.
- 39. "NO_x CAIR Allocations" means the number of NO_x Allowances allocated to the AEP Eastern System Units pursuant to the Clean Air Interstate Rule, excluding any NO_x Allowances awarded by Indiana, Kentucky, Ohio, West Virginia, and Virginia to an AEP Eastern System Unit from the "compliance supplement pool," as that phrase is defined at 40 C.F.R. § 96.143, in a federally-approved state implementation plan, or federal implementation plan to implement CAIR.
 - 40. "Operating Day" means any day on which a Unit fires Fossil Fuel.
- 41. "Other NO_x Pollution Controls" means the measures identified in the table in Paragraph 69 that will achieve reductions in NO_x emissions at the Units specified therein.
- 42. "Other SO₂ Measures" means the measures identified in Paragraph 90 that will achieve reductions in SO₂ emissions at the Units specified therein.

- 43. "Other Unit" means any Unit of the AEP Eastern System that is not an Improved Unit for the pollutant in question.
- 44. "Operational or Ownership Interest" means part or all of Defendants' legal or equitable operational or ownership interests in any Unit in the AEP Eastern System.
- 45. "Parties" means the United States, the States, the Citizen Plaintiffs, and Defendants. "Party" means one of the Parties.
 - 46. "Plaintiffs" means the United States, the States, and the Citizen Plaintiffs.
- 47. "Plant-Wide Annual Rolling Tonnage Limitation for SO₂ at Clinch River" means the sum of the tons of SO₂ emitted during all periods of operation from the Clinch River plant, including, without limitation, all SO₂ emitted during periods of startup, shutdown, and Malfunction, in the most recent month and the previous eleven (11) months. A new Annual Rolling Average Tonnage Limitation for years 2010 through 2014, and for 2015 and continuing thereafter, shall be calculated in accordance with Paragraph 88.
- 48. "Plant-Wide Annual Tonnage Limitation for SO₂ at Kammer" means the sum of the tons of SO₂ emitted during all periods of operation from the Kammer plant, including, without limitation, all SO₂ emitted during periods of startup, shutdown, and Malfunction, during the relevant calendar year (<u>i.e.</u>, January 1 through December 31). A new Plant-Wide Annual Tonnage Limitation shall be calculated for each new calendar year.
- 49. "PM" means particulate matter, as measured in accordance with the provisions of this Consent Decree.

- 50. "PM CEMS" or "PM Continuous Emission Monitoring System" means the equipment that samples, analyzes, measures, and provides, by readings taken at frequent intervals, an electronic or paper record of PM emissions.
- 51. "PM Emission Rate" means the number of pounds of PM emitted per million BTU of heat input (lb/mmBTU), as measured in annual stack tests in accordance with EPA Method 5, 5B, or 17, 40 C.F.R. Part 60, including Appendix A.
- 52. "Project Dollars" means Defendants' expenditures and payments incurred or made in carrying out the Environmental Mitigation Projects identified in Section VIII (Environmental Mitigation Projects) of this Consent Decree to the extent that such expenditures or payments both: (a) comply with the requirements set forth in Section VIII (Environmental Mitigation Projects) and Appendix A of this Consent Decree, and (b) constitute Defendants' direct payments for such projects, or Defendants' external costs for contractors, vendors, and equipment.
- 53. "PSD" means Prevention of Significant Deterioration within the meaning of Part C of Subchapter I of the Clean Air Act, 42 U.S.C. §§ 7470-7492, and its regulations, 40 C.F.R. Part 52.
- 54. "Re-power" means either (1) the replacement of an existing pulverized coal boiler through the construction of a new circulating fluidized bed ("CFB") boiler or other technology of equivalent environmental performance that at a minimum achieves and maintains a 30-Day Rolling Average Emission Rate not greater than 0.100 lb/mmBTU or a 30-Day Rolling Average Removal Efficiency of at least ninety-five percent (95%) for SO₂ and a 30-Day Rolling Average Emission Rate not greater than 0.070 lb/mmBTU for NO_x; or (2) the modification of

such Unit, or removal and replacement of Unit components, such that the modified or replaced Unit generates electricity through the use of new combined cycle combustion turbine technology fueled by natural gas containing no more than 0.5 grains of sulfur per 100 standard cubic feet of natural gas, and at a minimum, achieves a 1-hour Average NO_x Emission Rate not greater than 2.0 ppm.

- 55. "Retire" means that Defendants shall: (a) permanently shut down and cease to operate the Unit; and (b) comply with any state and/or federal requirements applicable to that Unit. Defendants shall amend any applicable permits so as to reflect the permanent shutdown status of such Unit.
- 56. "Retrofit" means that the Unit must install and Continuously Operate both an SCR and an FGD. For the 600 MW listed in the table in Paragraph 68 and 87, "Retrofit" means that the Unit must meet a federally-enforceable 30-Day Rolling Average Emission Rate of 0.100 lb/mmBTU for NO_x and a 30-Day Rolling Average Emission Rate of 0.100 lb/mmBTU for SO₂, measured in accordance with the requirements of this Consent Decree.
- 57. "Selective Catalytic Reduction System" or "SCR" means a pollution control device that employs selective catalytic reduction technology for the reduction of NO_x emissions.
- 58. "Selective Non-Catalytic Reduction" means a pollution control device for the reduction of NO_x emissions that utilizes ammonia or urea injection into the boiler.
- 59. "SO₂" means sulfur dioxide, as measured in accordance with the provisions of this Consent Decree.

- 60. "SO₂ Allowance" means "allowance" as defined at 42 U.S.C. § 7651a(3): "an authorization, allocated to an affected unit by the Administrator of EPA under Subchapter IV of the Act, to emit, during or after a specified calendar year, one ton of sulfur dioxide."
- 61. "SO₂ Allocations" means the number of SO₂ Allowances allocated to the AEP Eastern System Units.
- 62. "Super-Compliant NO_x Allowance" means an allowance attributable to reductions beyond the requirements of this Consent Decree as determined in accordance with Paragraph 80.
- 63. "Super-Compliant SO₂ Allowance" means an allowance attributable to reductions beyond the requirements of this Consent Decree as determined in accordance with Paragraph 98.
- 64. "States" means the States of Connecticut, Maryland, New Hampshire, New Jersey, New York, Rhode Island, and Vermont, and the Commonwealth of Massachusetts.
- 65. "Title V Permit" means the permit required for Defendants' major sources under Subchapter V of the Act, 42 U.S.C. §§ 7661-7661e.
- 66. "Unit" means collectively, the coal pulverizer, stationary equipment that feeds coal to the boiler, the boiler that produces steam for the steam turbine, the steam turbine, the generator, the equipment necessary to operate the generator, steam turbine, and boiler, and all ancillary equipment, including pollution control equipment. An electric steam generating station may comprise one or more Units.

IV. NO_x EMISSION REDUCTIONS AND CONTROLS

- A. <u>Eastern System-Wide Annual Tonnage Limitations for NO_x</u>.
- 67. Notwithstanding any other provisions of this Consent Decree, except Section XIV (Force Majeure), during each calendar year specified in the table below, all Units in the AEP

Eastern System, collectively, shall not emit NO_x in excess of the following Eastern System-Wide Annual Tonnage Limitations:

Calendar Year	Eastern System-Wide Annual Tonnage Limitations for NO _x
2009	96,000 tons
2010	92,500 tons
2011	92,500 tons
2012	85,000 tons
2013	85,000 tons
2014	85,000 tons
2015	75,000 tons
2016, and each year thereafter	72,000 tons

- B. NO_x Emission Limitations and Control Requirements.
- 68. No later than the dates set forth in the table below, Defendants shall install and Continuously Operate SCR on each Unit identified therein, or, if indicated in the table, Retire, Retrofit, or Re-power such Unit:

Unit	NO _x Pollution Control	Date
Amos Unit 1	SCR	January 1, 2008
Amos Unit 2	SCR	January 1, 2009
Amos Unit 3	SCR	January 1, 2008
Big Sandy Unit 2	SCR	January 1, 2009
Cardinal Unit 1	SCR	January 1, 2009
Cardinal Unit 2	SCR	January 1, 2009

Unit	NO _x Pollution Control	Date
Cardinal Unit 3	SCR	January 1, 2009
Conesville Unit 1	Retire, Retrofit, or Re-power	Date of Entry of this Consent Decree
Conesville Unit 2	Retire, Retrofit, or Re-power	Date of Entry of this Consent Decree
Conesville Unit 3	Retire, Retrofit, or Re-power	December 31, 2012
Conesville Unit 4	SCR	December 31, 2010
Gavin Unit 1	SCR	January 1, 2009
Gavin Unit 2	SCR	January 1, 2009
Mitchell Unit 1	SCR	January 1, 2009
Mitchell Unit 2	SCR	January 1, 2009
Mountaineer Unit 1	SCR	January 1, 2008
Muskingum River Units 1-4	Retire, Retrofit, or Re-power	December 31, 2015
Muskingum River Unit 5	SCR	January 1, 2008
Rockport Unit 1	SCR	December 31, 2017
Rockport Unit 2	SCR	December 31, 2019
Sporn Unit 5	Retire, Retrofit, or Re-power	December 31, 2013
A total of at least 600 MW from the following list of Units: Sporn Units 1-4, Clinch River Units 1-3, Tanners Creek Units 1-3, and/or Kammer Units 1-3	Retire, Retrofit, or Re-power	December 31, 2018

69. Other NO_x Pollution Controls. No later than the dates set forth in the table below, Defendants shall Continuously Operate the Other NO_x Pollution Controls on the Units identified therein:

Unit	Other NO _x Pollution Controls	Date
Big Sandy Unit 1	Low NO _x Burners	Date of Entry
Glen Lyn Units 5 and 6	Low NO _x Burners	Date of Entry
Clinch River Units 1, 2, and 3	Low NO _x Burners, and Selective Non-catalytic Reduction	For Low NO _x Burners, Date of Entry, and, for Selective Non-Catalytic Reduction, December 31, 2009
Conesville Units 5 and 6	Low NO _x Burners	Date of Entry
Kammer Units 1, 2, and 3	Overfire Air	Date of Entry
Kanawha River Units 1 and 2	Low NO _x Burners	Date of Entry
Picway Unit 9	Low NO _x Burners	Date of Entry
Tanners Creek Units 1, 2, and 3	Low NO _x Burners	Date of Entry
Tanners Creek Unit 4	Overfire Air	Date of Entry

- C. General Provisions for Use and Surrender of NO_x Allowances.
- 70. Except as may be necessary to comply with this Section and Section XIII (Stipulated Penalties), Defendants may not use NO_x Allowances to comply with any requirement of this Consent Decree, including by claiming compliance with any emission limitation or Eastern System-Wide Annual Tonnage Limitation required by this Decree, by using, tendering,

or otherwise applying NO_x Allowances to achieve compliance or offset any emissions above the limits specified in this Consent Decree.

- 71. As required by this Section IV of this Consent Decree, Defendants shall surrender NO_x Allowances that would otherwise be available for sale, trade, or transfer as a result of actions taken by Defendants to comply with the requirements of this Consent Decree.
- 72. NO_x Allowances allocated to the AEP Eastern System may be used by Defendants to meet their own federal and/or state Clean Air Act regulatory requirements for the Units included in the AEP Eastern System. Subject to Paragraph 70, nothing in this Consent Decree shall prevent Defendants from purchasing or otherwise obtaining NO_x Allowances from another source for purposes of complying with their own federal and/or state Clean Air Act requirements to the extent otherwise allowed by law.
- 73. The requirements in this Consent Decree pertaining to Defendants' use and surrender of NO_x Allowances are permanent injunctions not subject to any termination provision of this Consent Decree. These provisions shall survive any termination of this Consent Decree.
 - D. <u>Use of Excess NO_x Allowances.</u>
- 74. <u>Calculation of Unrestricted and Restricted NO_x Allowances.</u> On an annual basis, beginning in 2009, Defendants shall calculate the difference between the NO_x CAIR Allocations for the Units in the AEP Eastern System for that year and the annual Eastern System-Wide Tonnage Limitations for NO_x for that calendar year. This difference represents the total Excess NO_x Allowances for that calendar year. For purposes of this Consent Decree, for each year commencing in 2009 and ending in 2015, forty-two percent (42%) of the Excess NO_x Allowances shall be Unrestricted Excess NO_x Allowances and fifty-eight percent (58%) shall be

Restricted Excess NO_x Allowances. Commencing in 2016, and continuing thereafter, all Excess NO_x Allowances shall be Restricted Excess NO_x Allowances.

- 75. <u>Use and Surrender of Unrestricted Excess NO_x Allowances.</u> For each calendar year commencing in 2009 and ending in 2015, Defendants may use Unrestricted Excess NO_x Allowances in any manner authorized by law. No later than March 1, 2016, Defendants must surrender, or transfer to a non-profit third party selected by Defendants for surrender, all unused Unrestricted Excess NO_x Allowances subject to surrender accumulated during the period from 2009 through 2015.
- 76. <u>Use and Surrender of Restricted Excess NO_x Allowances.</u> Beginning in calendar year 2009, and for each calendar year thereafter, Defendants shall calculate the difference between the number of any Restricted Excess NO_x Allowances and the number of NO_x Allowances that is equal to the amount of actual NO_x emissions from: (a) any New and Newly Permitted Unit as defined in this Consent Decree, and (b) the following five natural-gas plants but only up to a cumulative total of 1200 tons of NO_x in any single year: Ceredo Generating Station located near Ceredo, West Virginia, with a nominal generating capacity of 505 megawatts; Waterford Energy Center located in southeastern Ohio, with a nominal generating capacity of 821 megawatts; Darby Electric Generating Station located near Columbus, Ohio, with a nominal generating capacity of 480 megawatts; Lawrenceburg Generating Station located in Lawrenceburg, Indiana, with a generating capacity of 1,096 megawatts; and a natural gas-fired power plant under construction near Dresden, Ohio, with a nominal generating capacity of 580 megawatts. This difference shall be the amount of Restricted Excess NO_x Allowances

potentially subject to surrender in 2016. During calendar years 2009 through 2015, Defendants may accumulate Restricted Excess NO_x Allowances potentially subject to surrender in 2016.

- 77. NO_x Allowances from Renewable Energy. Beginning in calendar year 2009, and for each calendar year thereafter, Defendants may subtract from the number of Restricted Excess NO_x Allowances potentially subject to surrender, a number of allowances calculated in accordance with this Paragraph. To calculate such number, Defendants shall use the following method: multiply 0.0002 by the sum of (a) the actual annual generation in MWH/year generated from solar or wind power projects first owned or operated by Defendants after the Date of Lodging of this Consent Decree, and (b) the actual annual generation in MWH/year purchased by Defendants from solar or wind power projects in any year after the Date of Lodging of this Consent Decree. Such figure so calculated shall be subtracted from the number of Restricted Excess NO_x Allowances potentially subject to surrender each year. The remainder shall be the Restricted Excess NO_x Allowances subject to surrender.
- 78. Defendants may, solely at their discretion, use Restricted Excess NO_x Allowances at a New and Newly Permitted Unit for which Defendants have received a final NSR Permit from the permitting agency even if the NSR Permit has been appealed but not stayed during the permit appeal process. If Defendants use Restricted Excess NO_x Allowances at such New and Newly Permitted Unit, and the emissions from such New and Newly Permitted Unit are greater than what such Unit is permitted to emit after final adjudication of the appeal process, Defendants shall, within thirty (30) days of such final adjudication, retire an amount of NO_x Allowances equal to the number of tons of NO_x actually emitted that exceeded the finally adjudicated permit limit.

79. No later than March 1, 2016, the total number of Restricted Excess NO_x Allowances subject to surrender accumulated during 2009 through 2015 as calculated in accordance with Paragraphs 74, 76, and 77, shall be surrendered or transferred to a non-profit third party selected by Defendants for surrender, pursuant to Subsection F, below. Beginning in calendar year 2016, and for each calendar year thereafter, the total number of Restricted Excess NO_x Allowances subject to surrender for that year calculated in accordance with Paragraph 74, 76 and 77, shall be surrendered, or transferred to a non-profit third party selected by Defendants for surrender, by March 1 of the following calendar year.

E. <u>Super-Compliant NO_x Allowances.</u>

- 80. In each calendar year beginning in 2009, and continuing thereafter, Defendants may use in any manner authorized by law any NO_x Allowances made available in that year as a result of maintaining actual NO_x emissions from the AEP Eastern System below the Eastern System-Wide Annual Tonnage Limitations for NO_x under this Consent Decree for each calendar year. Defendants shall timely report the generation of such Super-Compliant NO_x Allowances in accordance with Section XI (Periodic Reporting) and Appendix B of this Consent Decree.
 - F. Method for Surrender of Excess NO_x Allowances.
- 81. For purposes of this Consent Decree, the "surrender" of Excess Restricted or Unrestricted Excess NO_x Allowances subject to surrender means permanently surrendering to EPA NO_x Allowances from the accounts administered by EPA so that such NO_x Allowances can never be used thereafter to meet any compliance requirement under the Clean Air Act, a state implementation plan, or this Consent Decree.

- 82. For all Restricted or Unrestricted Excess NO_x Allowances subject to surrender required to be surrendered to EPA in Paragraphs 79 and 75, above, Defendants or the third party recipient(s) (as the case may be) shall first submit a NO_x Allowance transfer request form to EPA's Office of Air and Radiation's Clean Air Markets Division directing the transfer of such NO_x Allowances to the EPA Enforcement Surrender Account or to any other EPA account that EPA may direct in writing. As part of submitting these transfer requests, Defendants or the third party recipient(s) shall irrevocably authorize the transfer of these NO_x Allowances and identify by name of account and any applicable serial or other identification numbers or station names the source and location of the NO_x Allowances being surrendered.
- transferred directly to a non-profit third party, Defendants shall include a description of such transfer in the next report submitted to EPA as required by Section XI (Periodic Reporting) of this Consent Decree. Such report shall: (a) identify the non-profit third party recipient(s) of the NO_x Allowances and list the serial numbers of the transferred NO_x Allowances; and (b) include a certification by the third party recipient(s) stating that the recipient(s) will not sell, trade, or otherwise exchange any of the NO_x Allowances and will not use any of the NO_x Allowances to meet any obligation imposed by any environmental law. No later than the second periodic report due after the transfer of any NO_x Allowances, Defendants shall include a statement that the third party recipient(s) surrendered the NO_x Allowances for permanent surrender to EPA in accordance with the provisions of Paragraph 82 within one (1) year after Defendants transferred the NO_x Allowances to them. Defendants shall not have complied with the NO_x Allowance

surrender requirements of this Paragraph until all third party recipient(s) have actually surrendered the transferred NO_x Allowances to EPA.

- G. Reporting Requirements for NO_x Allowances.
- 84. Defendants shall comply with the reporting requirements for NO_x Allowances as described in Section XI (Periodic Reporting) and Appendix B.
 - H. General NO_x Provisions.
- 85. To the extent a NO_x Emission Rate is required under this Consent Decree,

 Defendants shall use CEMS in accordance with the reference methods specified in 40 C.F.R.

 Part 75 to determine such Emission Rate.

V. SO₂ EMISSION REDUCTIONS AND CONTROLS

- A. <u>Eastern System-Wide Annual Tonnage Limitations for SO₂.</u>
- 86. Notwithstanding any other provisions of this Consent Decree, except Section XIV (Force Majeure), during each calendar year specified in the table below, all Units in the AEP Eastern System, collectively, shall not emit SO₂ in excess of the following Eastern System-Wide Annual Tonnage Limitations:

Calendar Year	Eastern System-Wide Annual Tonnage Limitations for SO ₂
2010	450,000 tons
2011	450,000 tons
2012	420,000 tons
2013	350,000 tons
2014	340,000 tons

Calendar Year	Eastern System-Wide Annual Tonnage Limitations for SO ₂
2015	275,000 tons
2016	260,000 tons
2017	235,000 tons
2018	184,000 tons
2019, and each year thereafter	174,000 tons

- B. <u>SO₂ Emission Limitations and Control Requirements</u>.
- 87. No later than the dates set forth in the table below, Defendants shall install and Continuously Operate an FGD on each Unit identified therein, or, if indicated in the table, Retire, Retrofit, or Re-power such Unit:

Unit	SO ₂ Pollution Control	Date
Amos Units 1 and 3	FGD	December 31, 2009
Amos Unit 2	FGD	December 31, 2010
Big Sandy Unit 2	FGD	December 31, 2015
Cardinal Units 1 and 2	FGD	December 31, 2008
Cardinal Unit 3	FGD	December 31, 2012
Conesville Units 1 and 2	Retire, Retrofit, or Re-power	Date of Entry
Conesville Unit 3	Retire, Retrofit, or Re-power	December 31, 2012
Conesville Unit 4	FGD	December 31, 2010
Conesville Unit 5	Upgrade existing FGD and meet a 95% 30-day Rolling Average Removal Efficiency	December 31, 2009

Unit	SO ₂ Pollution Control	Date
Conesville Unit 6	Upgrade existing FGD and meet a 95% 30-day Rolling Average Removal Efficiency	December 31, 2009
Gavin Units 1 and 2	FGD	Date of Entry
Mitchell Units 1 and 2	FGD	December 31, 2007
Mountaineer Unit 1	FGD	December 31, 2007
Muskingum River Units 1-4	Retire, Retrofit, or Re-power	December 31, 2015
Muskingum River Unit 5	FGD	December 31, 2015
Rockport Unit 1	FGD	December 31, 2017
Rockport Unit 2	FGD	December 31, 2019
Sporn Unit 5	Retire, Retrofit, or Re-power	December 31, 2013
A total of at least 600 MW from the following list of Units: Sporn Units 1-4, Clinch River Units 1-3, Tanners Creek Units 1-3, and/or Kammer Units 1-3	Retire, Retrofit, or Re-power	December 31, 2018

88. Plant-Wide Annual Rolling Average Tonnage Limitation for SO₂ at Clinch River. Beginning on January 1, 2010, and continuing through December 31, 2014, Defendants shall limit their total annual SO₂ emissions at the Clinch River plant to a Plant-Wide Annual Rolling Average Tonnage Limitation of 21,700 tons. Beginning on January 1, 2015, and continuing thereafter, Defendants shall limit their total annual SO₂ emissions at the Clinch River plant to a Plant-Wide Annual Rolling Average Tonnage Limitation of 16,300 tons. For purposes of calculating the Plant-Wide Annual Rolling Average Tonnage Limitation that begins in 2010, Defendants shall use the period beginning January 1, 2010 through December 31, 2010 to

Tonnage Limitation for 2010 through 2014. Defendants shall then calculate a new Plant-Wide Annual Rolling Average Tonnage Limitation each month thereafter through December 31, 2014, by averaging the most recent month with the previous eleven (11) months. For purposes of calculating the Plant-Wide Annual Rolling Average Tonnage Limitation that begins in 2015, Defendants shall use the period beginning January 1, 2015 through December 31, 2015 to establish the initial annual period that is subject to the Plant-Wide Annual Average Rolling Tonnage Limitation for 2015. Defendants shall then calculate a new Plant-Wide Annual Rolling Average Tonnage Limitation each month thereafter by averaging the most recent month with the previous eleven (11) months.

- 89. <u>Plant-Wide Annual Tonnage Limitation for SO₂ at Kammer</u>. Beginning on January 1, 2010, and continuing annually thereafter, Defendants shall limit their total annual SO₂ emissions at the Kammer plant to a Plant-Wide Annual Tonnage Limitation of 35,000 tons.
- 90. Other SO₂ Measures. No later than the dates set forth in the table below,

 Defendants shall comply with the limit on coal sulfur content for such Units, at all times that the

 Units are in operation:

Unit	Other SO ₂ Measures	Date
Big Sandy Unit 1	Units can only burn coal with a sulfur content no greater than 1.75 lb/mmBTU on an annual average basis	Date of Entry
Glen Lyn Units 5 and 6	Units can only burn coal with a sulfur content no greater than 1.75 lb/mmBTU on an annual average basis.	Date of Entry

Unit	Other SO ₂ Measures	Date
Kanawha River Units 1 and 2	Units can only burn coal with a sulfur content no greater than 1.75 lb/mmBTU on an annual average basis	Date of Entry
Tanners Creek Units 1, 2, and 3	Units can only burn coal with a sulfur content no greater than 1.2 lb/mmBTU on an annual average basis	Date of Entry
Tanners Creek Unit 4	Unit can only burn coal with a sulfur content no greater than 1.2 % on an annual average basis	Date of Entry

- C. <u>Use and Surrender of SO₂ Allowances.</u>
- 91. Defendants may use SO₂ Allowances allocated to the AEP Eastern System by the Administrator of EPA under the Act, or by any state under its state implementation plan, to meet their own federal and/or state regulatory requirements for the Units included in the AEP Eastern System. Subject to Paragraph 92, nothing in this Consent Decree shall prevent Defendants from purchasing or otherwise obtaining SO₂ Allowances from another source for purposes of complying with their own federal and/or state Clean Air Act requirements to the extent otherwise allowed by law.
- 92. Except as may be necessary to comply with this Section and Section XIII (Stipulated Penalties), Defendants may not use any SO₂ Allowances to comply with any requirement of this Consent Decree, including by claiming compliance with any emission limitation, Eastern System-Wide Annual Tonnage Limitations, Plant-Wide Annual Rolling Average Tonnage Limitation for SO₂ at Clinch River, or Plant-Wide Annual Tonnage Limitation

for SO₂ at Kammer required by this Consent Decree by using, tendering, or otherwise applying SO₂ Allowances to achieve compliance or offset any emissions above the limits specified in this Consent Decree.

- 93. On an annual basis beginning in 2010, and continuing thereafter, Defendants shall calculate the number of Excess SO₂ Allowances by subtracting the number of SO₂ Allowances equal to the annual Eastern System-Wide Tonnage Limitations for SO₂ for each calendar year times the applicable allowance surrender ratio from the annual SO₂ Allocations for all Units within the AEP Eastern System for the same calendar year. Defendants shall surrender, or transfer to a non-profit third party selected by Defendants for surrender, all Excess SO₂ Allowances that have been allocated to the AEP Eastern System for the specified calendar year by the Administrator of EPA under the Act or by any state under its state implementation plan. Defendants shall make the surrender of SO₂ Allowances required by this Paragraph to EPA by March 1 of the immediately following calendar year.
 - D. Method for Surrender of Excess SO₂ Allowances.
- 94. For purposes of this Subsection, the "surrender" of Excess SO₂ Allowances means permanently surrendering allowances from the accounts administered by EPA so that such allowances can never be used thereafter to meet any compliance requirement under the Clean Air Act, a state implementation plan, or this Consent Decree.
- 95. If any SO₂ Allowances required to be surrendered under this Consent Decree are transferred directly to a non-profit third party, Defendants shall include a description of such transfer in the next report submitted to EPA pursuant to Section XI (Periodic Reporting) of this Consent Decree. Such report shall: (i) identify the non-profit third party recipient(s) of the SO₂

Allowances and list the serial numbers of the transferred SO₂ Allowances; and (ii) include a certification by the third party recipient(s) stating that the recipient(s) will not sell, trade, or otherwise exchange any of the allowances and will not use any of the SO₂ Allowances to meet any obligation imposed by any environmental law. No later than the second periodic report due after the transfer of any SO₂ Allowances, Defendants shall include a statement that the third party recipient(s) surrendered the SO₂ Allowances for permanent surrender to EPA in accordance with the provisions of Paragraph 96 within one (1) year after Defendants transferred the SO₂ Allowances to them. Defendants shall not have complied with the SO₂ Allowance surrender requirements of this Paragraph until all third party recipient(s) have actually surrendered the transferred SO₂ Allowances to EPA.

- 96. For all SO₂ Allowances surrendered to EPA, Defendants or the third party recipient(s) (as the case may be) shall first submit an SO₂ Allowance transfer request form to EPA's Office of Air and Radiation's Clean Air Markets Division directing the transfer of such SO₂ Allowances to the EPA Enforcement Surrender Account or to any other EPA account that EPA may direct in writing. As part of submitting these transfer requests, Defendants or the third party recipient(s) shall irrevocably authorize the transfer of these SO₂ Allowances and identify by name of account and any applicable serial or other identification numbers or station names the source and location of the SO₂ Allowances being surrendered.
- 97. The requirements in this Consent Decree pertaining to Defendants' surrender of SO₂ Allowances are permanent injunctions not subject to any termination provision of this Decree. These provisions shall survive any termination of this Consent Decree in whole or in part.

- E. Super-Compliant SO₂ Allowances.
- 98. In each calendar year beginning in 2010, and continuing thereafter, Defendants may use in any manner authorized by law any SO₂ Allowances made available in that year as a result of maintaining actual SO₂ emissions from the AEP Eastern System below the Eastern System-Wide Annual Tonnage Limitations for SO₂ under this Consent Decree for each calendar year. Defendants shall timely report the generation of such Super-Compliant SO₂ Allowances in accordance with Section XI (Periodic Reporting) and Appendix B of this Consent Decree.
 - F. Reporting Requirements for SO₂ Allowances.
- 99. Defendants shall comply with the reporting requirements for SO₂ Allowances as described in Section XI (Periodic Reporting) and Appendix B.
 - G. General SO₂ Provisions.
- 100. To the extent an Emission Rate or 30-Day Rolling Average Removal Efficiency for SO₂ is required under this Consent Decree, Defendants shall use CEMS in accordance with the reference methods specified in 40 C.F.R. Part 75 to determine such Emission Rate.
- 101. Notwithstanding Paragraphs 6 and 100, the 30-Day Rolling Average Removal Efficiency for SO₂ at Conesville Unit 5 and Conesville Unit 6 shall be determined in accordance with Appendix C.

VI. PM EMISSION REDUCTIONS AND CONTROLS

- A. Optimization of Existing ESPs.
- 102. Beginning thirty (30) days after the Date of Entry, and continuing thereafter,
 Defendants shall Continuously Operate each ESP on Cardinal Unit 1, Cardinal Unit 2, and
 Muskingum River Unit 5 to maximize PM emission reductions at all times when the Unit is in

operation, provided that such operation of the ESP is consistent with the technological limitations, manufacturers' specifications, and good engineering and maintenance practices for the ESP. Defendants shall, at a minimum, to the extent reasonably practicable: (a) fully energize each section of the ESP for each unit, and repair any failed ESP section at the next planned Unit outage (or unplanned outage of sufficient length); (b) operate automatic control systems on each ESP to maximize PM collection efficiency; (c) maintain power levels delivered to the ESPs, consistent with manufacturers' specifications, the operational design of the Unit, and good engineering practices; and (d) inspect for and repair during the next planned Unit outage (or unplanned outage of sufficient length) any openings in ESP casings, ductwork, and expansion joints to minimize air leakage.

B. PM Emission Rate and Testing.

103. No later than the dates specified in the table below, Defendants shall Continuously Operate each Unit specified therein to achieve and maintain a PM Emission Rate no greater than 0.030 lb/mmBTU:

Unit	Date to Achieve and Maintain PM Emission Rate
Cardinal Unit 1	December 31, 2009
Cardinal Unit 2	December 31, 2009
Muskingum River Unit 5	December 31, 2012

104. On or before the date established by this Consent Decree for Defendants to achieve and maintain 0.030 lb/mmBTU at Cardinal Unit 1, Cardinal Unit 2, and Muskingum River Unit 5, Defendants shall conduct a performance test for PM that demonstrates compliance with the PM Emission Rate required by this Consent Decree. Within forty-five (45) days of each such performance test, Defendants shall submit the results of the performance test to Plaintiffs pursuant to Section XVIII (Notices) of this Consent Decree.

C. PM Emissions Monitoring.

- 105. Beginning in calendar year 2010 for Cardinal Unit 1 and Cardinal Unit 2, and calendar year 2013 for Muskingum River Unit 5, and continuing in each calendar year thereafter, Defendants shall conduct a stack test for PM on each stack servicing Cardinal Unit 1, Cardinal Unit 2, and Muskingum River Unit 5. The annual stack test requirement imposed by this Paragraph may be satisfied by stack tests conducted by Defendants as required by their permits from the State of Ohio for any year that such stack tests are required under the permits.
- 106. The reference methods and procedures for determining compliance with PM Emission Rates shall be those specified in 40 C.F.R. Part 60, Appendix A, Method 5, 5B, or 17, or an alternative method that is promulgated by EPA, requested for use herein by Defendants, and approved for use herein by EPA. Use of any particular method shall conform to the EPA requirements specified in 40 C.F.R. Part 60, Appendix A and 40 C.F.R. § 60.48Da(b) and (e), or any federally-approved method contained in the Ohio State Implementation Plan. Defendants shall calculate the PM Emission Rates from the stack test results in accordance with 40 C.F.R. § 60.8(f). The results of each PM stack test shall be submitted to EPA within forty-five (45) days of completion of each test.

- D. <u>Installation and Operation of PM CEMS.</u>
- 107. Defendants shall install, calibrate, operate, and maintain PM CEMS, as specified below. Each PM CEMS shall comprise a continuous particle mass monitor measuring particulate matter concentration, directly or indirectly, on an hourly average basis and a diluent monitor used to convert the concentration to units of lb/mmBTU. Defendants shall maintain, in an electronic database, the hourly average emission values produced by all PM CEMS in lb/mmBTU. Defendants shall use reasonable efforts to keep each PM CEMS running and producing data whenever any Unit served by the PM CEMS is operating.
- 108. No later than December 31, 2011, Defendants shall submit to EPA pursuant to Section XII (Review and Approval of Submittals) of this Consent Decree: (a) a plan for the installation and certification of each PM CEMS, and (b) a proposed Quality Assurance/Quality Control ("QA/QC") protocol that shall be followed in calibrating such PM CEMS. In developing both the plan for installation and certification of the PM CEMS and the QA/QC protocol, Defendants shall use the criteria set forth in 40 C.F.R. Part 60, Appendix B, Performance Specification 11, and Appendix F, Procedure 3. Following approval by EPA of the protocol, Defendants shall thereafter operate each PM CEMS in accordance with the approved protocol.
- 109. No later than the dates specified below, Defendants shall install, certify, and operate PM CEMS on the stacks or common stacks for Cardinal Unit 1, Cardinal Unit 2, and a third Unit, as further described in Paragraph 110:

Stack	Date to Commence Operation of PM CEMS
Cardinal Unit 1	December 31, 2012
Cardinal Unit 2	December 31, 2012
Unit to be identified pursuant to Paragraph 110	December 31, 2012

- 110. No later than December 31, 2011, Defendants shall identify, subject to Plaintiffs' approval, the third Unit required by Paragraph 109.
- 111. No later than ninety (90) days after Defendants begin operation of the PM CEMS,
 Defendants shall conduct tests of each PM CEMS to demonstrate compliance with the PM
 CEMS installation and certification plan submitted to and approved by EPA.
- 112. Demonstration that PM CEMS are Infeasible. Defendants shall operate the PM CEMS for at least two (2) years on each of the Units specified in Paragraphs 109 and 110. After two (2) years of operation, Defendants may attempt to demonstrate that it is infeasible to continue operating PM CEMS. As part of such demonstration, Defendants shall submit an alternative PM monitoring plan for review and approval by EPA. The plan shall explain the basis for stopping operation of the PM CEMS and propose an alternative PM monitoring plan. If the United States disapproves the alternative PM monitoring plan, or if the United States rejects Defendants' claim that it is infeasible to continue operating PM CEMS, such disagreement is subject to Section XV (Dispute Resolution).
- 113. <u>"Infeasible to Continue Operating PM CEMS" Standard.</u> Operation of a PM CEMS shall be considered no longer feasible if: (a) the PM CEMS cannot be kept in proper

condition for sufficient periods of time to produce reliable, adequate, or useful data consistent with the QA/QC protocol, or (b) Defendants demonstrate that recurring, chronic, or unusual equipment adjustment or servicing needs in relation to other types of continuous emission monitors cannot be resolved through reasonable expenditures of resources. If EPA determines that Defendants have demonstrated pursuant to this Paragraph that operation is no longer feasible, Defendants shall be entitled to discontinue operation of and remove the PM CEMS.

Alternative Monitoring. Until EPA approves an alternative monitoring plan, or until the conclusion of any proceeding under Section XV (Dispute Resolution), Defendants shall continue to operate the PM CEMS. If EPA has not issued a decision regarding an alternative monitoring plan within 120 days, Defendants may initiate action under Section XV (Dispute Resolution).

E. <u>PM Reporting.</u>

115. Defendants shall comply with the reporting requirements for PM as described in Section XI (Periodic Reporting) and Appendix B.

F. General PM Provisions.

116. Although stack testing shall be used to determine compliance with the PM Emission Rate established by this Consent Decree, data from the PM CEMS shall be used, at a minimum, to monitor progress in reducing PM emissions.

VII. PROHIBITION ON NETTING CREDITS OR OFFSETS FROM REQUIRED CONTROLS

- 117. Emission reductions that result from actions required to be taken by Defendants after the Date of Entry of this Consent Decree to comply with the requirements of this Consent Decree shall not be considered as a creditable contemporaneous emission decrease for the purpose of obtaining a netting credit or offset under the Clean Air Act's Nonattainment NSR and PSD programs.
- 118. Nothing in this Consent Decree is intended to preclude the emission reductions generated under this Consent Decree from being considered by a State or EPA as creditable contemporaneous emission decreases for the purpose of attainment demonstrations submitted pursuant to § 110 of the Act, 42 U.S.C. § 7410, or in determining impacts on NAAQS, PSD increment, or air quality related values, including visibility, in a Class I area.

VIII. ENVIRONMENTAL MITIGATION PROJECTS

described in Appendix A to this Consent Decree and fund the categories of Projects described in Subsection B, below, in compliance with the approved plans and schedules for such Projects and other terms of this Consent Decree. In funding and/or implementing all such Projects in Appendix A and Subsection B, Defendants shall expend moneys and/or implement Projects valued at no less than \$36 million for the Projects identified in Appendix A and \$24 million for the payments to the States to fund Projects within the categories set forth in Subsection B. Defendants shall fund and/or implement such Projects over a period of no later than five (5) years from the Date of Entry. Defendants may propose establishing one or more qualified settlement funds within the meaning of Treas. Reg. §1.468B-1 in conjunction with one or more

Mitigation Projects. Any such trust would be established pursuant to a trust agreement in a form to be mutually agreed upon by the affected Parties. Nothing in the foregoing is intended by the United States to be a determination or opinion regarding whether such trust would meet the requirements of Treas. Reg. §1.468B-1 or is otherwise appropriate.

- A. Requirements for Projects Described in Appendix A (\$36 million).
- 120. Defendants shall maintain, and present to EPA upon request, all documents to substantiate the Project Dollars expended to implement the Projects described in Appendix A, and shall provide these documents to EPA within thirty (30) days of a request for the documents.
- 121. All plans and reports prepared by Defendants pursuant to the requirements of this Section of the Consent Decree and required to be submitted to EPA shall be publicly available from Defendants without charge.
- 122. Defendants shall certify, as part of each plan submitted to EPA for any Project, that Defendants are not otherwise required by law to perform the Project described in the plan, that Defendants are unaware of any other person who is required by law to perform the Project, and that Defendants will not use any Project, or portion thereof, to satisfy any obligations that it may have under other applicable requirements of law, including any applicable renewable portfolio standards.
- 123. Defendants shall use good faith efforts to secure as much benefit as possible for the Project Dollars expended, consistent with the applicable requirements and limits of this Consent Decree.
- 124. If Defendants elect (where such an election is allowed) to undertake a Project by contributing funds to another person or entity that will carry out the Project in lieu of Defendants, but not including Defendants' agents or contractors, that person or instrumentality

must, in writing: (a) identify its legal authority for accepting such funding; and (b) identify its legal authority to conduct the Project for which Defendants contribute the funds. Regardless of whether Defendants elect (where such election is allowed) to undertake a Project by itself or to do so by contributing funds to another person or instrumentality that will carry out the Project, Defendants acknowledge that they will receive credit for the expenditure of such funds as Project Dollars only if Defendants demonstrate that the funds have been actually spent by either Defendants or by the person or instrumentality receiving them, and that such expenditures met all requirements of this Consent Decree.

- 125. Defendants shall comply with the reporting requirements for Appendix A Projects as described in Section XI (Periodic Reporting) and Appendix B.
- 126. Within sixty (60) days following the completion of each Project required under this Consent Decree (including any applicable periods of demonstration or testing), Defendants shall submit to the United States a report that documents the date that the Project was completed, Defendants' results of implementing the Project, including the emission reductions or other environmental benefits achieved, and the Project Dollars expended by Defendants in implementing the Project.
 - B. <u>Mitigation Projects to be Conducted by the States (\$24 million).</u>
- 127. The States, by and through their respective Attorneys General, shall jointly submit to Defendants Projects within the categories identified in this Subsection B for funding in amounts not to exceed \$4.8 million per calendar year for no less than five (5) years following the Date of Entry of this Consent Decree beginning as early as calendar year 2008. The funds for these Projects will be apportioned by and among the States, and Defendants shall not have approval rights for the Projects or the apportionment. Defendants shall pay proceeds as

designated by the States in accordance with the Projects submitted for funding each year within seventy-five (75) days after being notified in writing by the States. Notwithstanding the \$4.8 million and 5-year limitation above, if the total costs of the projects submitted in any one or more years are less than \$4.8 million, the difference between that amount and \$4.8 million will be available for funding by Defendants of new or previously submitted projects in the following years, except that all amounts not designated by the States within ten (10) years after the Date of Entry of this Consent Decree shall expire.

- 128. <u>Categories of Projects.</u> The States agree to use money funded by Defendants to implement Projects that pertain to energy efficiency and/or pollution reduction. Such projects may include, but are not limited by, the following:
 - a. Retrofitting land and marine vehicles (<u>e.g.</u>, automobiles, off-road and onroad construction and other vehicles, trains, ferries) and transportation terminals and ports, with pollution control devices, such as particulate matter traps, computer chip reflashing, and battery hybrid technology;
 - b. Truck-stop and marine port electrification;
 - c. Purchase and installation of photo-voltaic cells on buildings;
 - d. Projects to conserve energy use in new and existing buildings, including appliance efficiency improvement projects, weatherization projects, and projects intended to meet EPA's Green Building guidelines (see http://www.epa.gov/greenbuilding/pubs/enviro-issues.htm) and/or the Leadership in Energy and Environmental Design (LEED) Green Building Rating System (see

http://www.usgbc.org/DisplayPage.aspx?CategoryID=19), and projects to

- collect information in rental markets to assist in design of efficiency and conservation programs;
- e. Construction associated with the production of energy from wind, solar, and biomass;
- f. "Buy back" programs for dirty old motors (<u>e.g.</u>, automobile, lawnmowers, landscape equipment);
- g. Programs to remove and/or replace oil-fired home heating equipment to allow use of ultra-low sulfur oil, and outdoor wood-fired boilers;
- h. Purchase and retirement of SO₂ and NO_x allowances; and
- i. Funding program to improve modeling of mobile source sector.

IX. CIVIL PENALTY

129. Within thirty (30) days after the Date of Entry, Defendants shall pay to the United States a civil penalty in the amount of \$15,000,000. The civil penalty shall be paid by Electronic Funds Transfer ("EFT") to the United States Department of Justice, in accordance with current EFT procedures, referencing USAO File Number 1999v01542 and DOJ Case Number 90-5-2-1-06893 and the civil action case name and consolidated case numbers of this action. The costs of such EFT shall be Defendants' responsibility. Payment shall be made in accordance with instructions provided to Defendants by the Financial Litigation Unit of the U.S. Attorney's Office for the Southern District of Ohio. Any funds received after 2:00 p.m. EDT shall be credited on the next business day. At the time of payment, Defendants shall provide notice of payment, referencing the USAO File Number, the DOJ Case Number, and the civil action case name and consolidated case numbers, to the Department of Justice and to EPA in accordance with Section XVIII (Notices) of this Consent Decree.

- 130. Failure to timely pay the civil penalty shall subject Defendants to interest accruing from the date payment is due until the date payment is made at the rate prescribed by 28 U.S.C. § 1961, and shall render Defendants liable for all charges, costs, fees, and penalties established by law for the benefit of a creditor or of the United States in securing payment.
- 131. Payment made pursuant to this Section is a penalty within the meaning of Section 162(f) of the Internal Revenue Code, 26 U.S.C. § 162(f), and is not a tax-deductible expenditure for purposes of federal law.

X. RESOLUTION OF CIVIL CLAIMS AGAINST DEFENDANTS

- A. Resolution of the United States' Civil Claims.
- Consent Decree. Entry of this Decree shall resolve all civil claims of the United States against Defendants that arose from any modifications commenced at any AEP Eastern System Unit prior to the Date of Lodging of this Consent Decree, including but not limited to, those modifications alleged in the Notices of Violation and complaints filed in *AEP I* and *AEP II*, under any or all of:

 (a) Parts C or D of Subchapter I of the Clean Air Act, 42 U.S.C. §§ 7470-7492, 7501-7515; (b)

 Section 111 of the Clean Air Act, 42 U.S.C. § 7411, and 40 C.F.R. § 60.14; (c) the federally-approved and enforceable Indiana State Implementation Plan, Kentucky State Implementation Plan, Ohio State Implementation Plan, Virginia State Implementation Plan, and West Virginia State Implementation Plan; or (d) Sections 502(a) and 504(a) of Title V of the Clean Air Act, 42 U.S.C. §§ 7611(a) and 7611(c), but only to the extent that such claims are based on Defendants' failure to obtain an operating permit that reflects applicable requirements imposed under Parts C or D of Subchapter I, or Section 111 of the Clean Air Act.

- Decree. Entry of this Consent Decree also shall resolve all civil claims of the United States against Defendants that arise based on a modification commenced before December 31, 2018, or solely for Rockport Unit 2, before December 31, 2019, for all pollutants, except Particulate Matter, regulated under Parts C or D of Subchapter I of the Clean Air Act, and under regulations promulgated thereunder, as of the Date of Lodging of this Consent Decree, and:
 - a. where such modification is commenced at any AEP Eastern System Unit after the Date of Lodging of this Consent Decree; or
 - where such modification is one this Consent Decree expressly directs
 Defendants to undertake.

The term "modification" as used in this Paragraph shall have the meaning that term is given under the Clean Air Act and under the regulations in effect as of the Date of Lodging of this Consent Decree, as alleged in the complaints in *AEP I* and *AEP II*.

134. <u>Reopener.</u> The resolution of the United States' civil claims against Defendants, as provided by this Subsection A, is subject to the provisions of Subsection B of this Section.

- B. Pursuit by the United States of Civil Claims Otherwise Resolved by Subsection

 A.
- 135. Bases for Pursuing Resolved Claims for the AEP Eastern System. If Defendants violate: (a) the Eastern System-Wide Annual Tonnage Limitations for NO_x required pursuant to Paragraph 67; (b) the Eastern System-Wide Annual Tonnage Limitations for SO₂ required pursuant to Paragraph 86; or (c) operate a Unit more than ninety (90) days past a date established in this Consent Decree without completing the required installation, upgrade, or commencing Continuous Operation of any emission control device required pursuant to Paragraphs 68, 69, 87, 102, and 103 then the United States may pursue any claim at any AEP Eastern System Unit that is otherwise resolved under Subsection A (Resolution of United States' Civil Claims), subject to (a) and (b) below.
 - a. For any claims based on modifications undertaken at any Unit in the AEP Eastern System that is not an Improved Unit for the pollutant in question, claims may be pursued only where the modification(s) on which such claim is based was commenced within the five (5) years preceding the violation or failure specified in this Paragraph.
 - b. For any claims based on modifications undertaken at an Improved Unit, claims may be pursued only where the modification(s) on which such claim is based was commenced: (1) after the Date of Lodging of this Consent Decree and (2) within the five (5) years preceding the violation or failure specified in this Paragraph.
- 136. Additional Bases for Pursuing Resolved Claims for Modifications at an Improved

 <u>Unit.</u> Solely with respect to an Improved Unit, the United States may also pursue claims arising

from a modification (or collection of modifications) at an Improved Unit that has otherwise been resolved under Subsection A (Resolution of the United States' Civil Claims) if the modification (or collection of modifications) at the Improved Unit on which such claim is based (a) was commenced after the Date of Lodging of this Consent Decree and (b) individually (or collectively) increased the maximum hourly emission rate of that Unit for NO_x or SO_2 (as measured by 40 C.F.R. § 60.14 (b) and (h)) by more than ten percent (10%).

- 137. Any Other Unit can become an Improved Unit for NO_x if (a) it is equipped with an SCR, and (b) the operation of such SCR is incorporated into a federally-enforceable non-Title V permit or site-specific amendment to the state implementation plan and incorporated into a Title V permit applicable to that Unit. Any Other Unit can become an Improved Unit for SO₂ if (a) it is equipped with an FGD, and (b) the operation of such FGD is incorporated into a federally-enforceable non-Title V permit or site-specific amendment to the state implementation plan and incorporated into a Title V permit applicable to that Unit.
 - 138. Additional Bases for Pursuing Resolved Claims for Modifications at Other Units.
- a. Solely with respect to Other Units, <u>i.e.</u>, a Unit that is not an Improved Unit under the terms of this Consent Decree, the United States may also pursue claims arising from a modification (or collection of modifications) at an Other Unit that has otherwise been resolved under Subsection A (Resolution of the United States' Civil Claims), if the modification (or collection of modifications) at the Other Unit on which the claim is based was commenced within the five (5) years preceding any of the following events:
- 1. a modification (or collection of modifications) at such Other Unit commenced after the Date of Lodging of this Consent Decree increases the maximum hourly

emission rate for such Other Unit for the relevant pollutant (NO_x or SO_2) (as measured by 40 C.F.R. § 60.14(b) and (h));

- 2. the aggregate of all Capital Expenditures made at such Other Unit exceed \$125/KW on the Unit's Boiler Island (based on the generating capacities identified in Paragraph 7) during the period from the Date of Entry of this Consent Decree through December 31, 2015. (Capital Expenditures shall be measured in calendar year 2007 constant dollars, as adjusted by the McGraw-Hill Engineering News-Record Construction Cost Index); or
- a modification (or collection of modifications) at such Other Unit commenced after the Date of Lodging of this Consent Decree results in an emissions increase of NO_x and/or SO₂ at such Other Unit, and such increase: (i) presents, by itself, or in combination with other emissions or sources, "an imminent and substantial endangerment" within the meaning of Section 303 of the Act, 42 U.S.C. §7603; (ii) causes or contributes to violation of a NAAQS in any Air Quality Control Area that is in attainment with that NAAQS; (iii) causes or contributes to violation of a PSD increment; or (iv) causes or contributes to any adverse impact on any formally-recognized air quality and related values in any Class I area. The introduction of any new or changed NAAQS shall not, standing alone, provide the showing needed under Subparagraphs (3)(ii) or (3)(iii) of this Paragraph, to pursue any claim for a modification at an Other Unit resolved under Subparagraph A of this Section.
- b. Solely with respect to Other Units at the plant listed below, the United States may also pursue claims arising from a modification (or collection of modifications) at such Other Units commenced after the Date of Lodging of this Consent Decree if such modification (or collection of modifications) results in an emissions increase of SO₂ at such Other Unit, and such increase causes the emissions at the plant at issue to exceed the Plant-Wide Annual Rolling

Average Tonnage Limitation for SO₂ at Clinch River listed in the table below for year 2010-2014 and/or 2015 and beyond:

<u>Plant</u>	<u>Year</u>	SO ₂ Tons Limit
Clinch River	2010 - 2014	21,700
Clinch River	2015 and each year thereafter	16,300

- C. Resolution of Past Claims of the States and Citizen Plaintiffs and Reservation of Rights.
- 139. The States and Citizen Plaintiffs agree that this Consent Decree resolves all civil claims that have been alleged in their respective complaints or could have been alleged against Defendants prior to the Date of Lodging of this Consent Decree for violations of: (a) Parts C or D of Subchapter I of the Clean Air Act, 42 U.S.C. §§ 7470-7492, 7501-7515, and (b) Section 111 of the Act, 42 U.S.C. § 7411, and 40 C.F.R § 60.14, at Units within the AEP Eastern System.
- 140. The States and Citizen Plaintiffs expressly do not join in giving the Defendants the covenant provided by the United States through Paragraph 133 of this Consent Decree, do not release any claims under the Clean Air Act and its implementing regulations arising after the Date of Lodging of this Consent Decree, and reserve their rights, if any, to bring any actions against the Defendants pursuant to 42 U.S.C. § 7604 for any claims arising after the Date of Lodging of this Consent Decree.
- 141. Notwithstanding Paragraph 140, the States and Citizen Plaintiffs release

 Defendants from any civil claim that may arise under the Clean Air Act for Defendants'

 performance of activities that this Consent Decree expressly directs Defendants to undertake,

except to the extent that such activities would cause a significant increase in the emission of a criteria pollutant other than SO₂, NO_x, or PM.

142. Retention of Authority Regarding NAAQS Exceedences. Nothing in this Consent Decree shall be construed to affect the authority of the United States or any state under applicable federal statutes or regulations and applicable state statutes or regulations to impose appropriate requirements or sanctions on any Unit in the AEP Eastern System, including, but not limited to, the Units at the Clinch River plant, if the United States or a state determines that emissions from any Unit in the AEP Eastern System result in violation of, or interfere with the attainment and maintenance of, any ambient air quality standard.

XI. PERIODIC REPORTING

- 143. Beginning on March 31, 2008, and continuing annually thereafter on March 31 until termination of this Consent Decree, and in addition to any other express reporting requirement in this Consent Decree, Defendants shall submit to the Unites States, the States, and the Citizen Plaintiffs a progress report in compliance with Appendix B of this Consent Decree.
- 144. In any periodic progress report submitted pursuant to this Section, Defendants may incorporate by reference information previously submitted under their Title V permitting requirements, provided that Defendants attach the Title V permit report, or the relevant portion thereof, and provide a specific reference to the provisions of the Title V permit report that are responsive to the information required in the periodic progress report.
- 145. In addition to the progress reports required pursuant to this Section, Defendants shall provide a written report to the United States, the States, and the Citizen Plaintiffs of any violation of the requirements of this Consent Decree within fifteen (15) days of when Defendants knew or should have known of any such violation. In this report, Defendants shall explain the

cause or causes of the violation and all measures taken or to be taken by Defendants to prevent such violations in the future.

146. Each report shall be signed by Defendants' Vice President of Environmental Services or his or her equivalent or designee of at least the rank of Vice President, and shall contain the following certification:

This information was prepared either by me or under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my evaluation, or the direction and my inquiry of the person(s) who manage the system, or the person(s) directly responsible for gathering the information, I hereby certify under penalty of law that, to the best of my knowledge and belief, this information is true, accurate, and complete. I understand that there are significant penalties for submitting false, inaccurate, or incomplete information to the United States.

147. If any SO₂ or NO_x Allowances are surrendered to any third party pursuant to this Consent Decree, the third party's certification pursuant to Paragraphs 83 and 95 shall be signed by a managing officer of the third party and shall contain the following language:

I certify under penalty of law that,_____ [name of third party] will not sell, trade, or otherwise exchange any of the allowances and will not use any of the allowances to meet any obligation imposed by any environmental law. I understand that there are significant penalties for submitting false, inaccurate, or incomplete information to the United States.

XII. REVIEW AND APPROVAL OF SUBMITTALS

- 148. Defendants shall submit each plan, report, or other submission required by this Consent Decree to the Plaintiffs specified, whenever such a document is required to be submitted for review or approval pursuant to this Consent Decree. The Plaintiff(s) to whom the report is submitted, as required, may approve the submittal or decline to approve it and provide written comments explaining the bases for declining such approval as soon as reasonably practicable. Such Plaintiff(s) will endeavor to coordinate their comments into one document when explaining their bases for declining such approval. Within sixty (60) days of receiving written comments from any of the Plaintiff(s), Defendants shall either: (a) revise the submittal consistent with the written comments and provide the revised submittal to the Plaintiff(s); or (b) submit the matter for dispute resolution, including the period of informal negotiations, under Section XV (Dispute Resolution) of this Consent Decree.
- 149. Upon receipt of Plaintiffs' or Plaintiff's (as the case may be) final approval of the submittal, or upon completion of the submittal pursuant to dispute resolution, Defendants shall implement the approved submittal in accordance with the schedule specified therein.

XIII. <u>STIPULATED PENALTIES</u>

150. For any failure by Defendants to comply with the terms of this Consent Decree, and subject to the provisions of Sections XIV (Force Majeure) and XV (Dispute Resolution), Defendants shall pay, within thirty (30) days after receipt of written demand to Defendants by the United States, the following stipulated penalties to the United States:

Consent Decree Violation	Stipulated Penalty (Per Day, Per Violation, Unless Otherwise Specified)
a. Failure to pay the civil penalty as specified in Section IX (Civil Penalty) of this Consent Decree	\$10,000 per day
b. Failure to comply with any applicable 30-Day Rolling Average Emission Rate, 30-Day Rolling Average Removal Efficiency, Emission Rate for PM, or Other SO ₂ Measures where the violation is less than 5% in excess of the limits set forth in this Consent Decree	\$2,500 per day per violation
c. Failure to comply with any applicable 30-Day Rolling Average Emission Rate, 30-Day Rolling Average Removal Efficiency, Emission Rate for PM, or Other SO ₂ Measures where the violation is equal to or greater than 5% but less than 10% in excess of the limits set forth in this Consent Decree	\$5,000 per day per violation
d. Failure to comply with any applicable 30-Day Rolling Average Emission Rate, 30-Day Rolling Average Removal Efficiency, Emission Rate for PM, or Other SO ₂ Measures where the violation is equal to or greater than 10% in excess of the limits set forth in this Consent Decree	\$10,000 per day per violation

Consent Decree Violation	Stipulated Penalty (Per Day, Per Violation, Unless Otherwise Specified)
e. Failure to comply with the Eastern System-Wide Annual Tonnage Limitation for SO_2	\$5,000 per ton for the first 1000 tons, and \$10,000 per ton for each additional ton above 1000 tons, plus the surrender, pursuant to the procedures set forth in Paragraphs 82 and 83, of NO _x Allowances in an amount equal to two times the number of tons by which the limitation was exceeded
f. Failure to comply with the Plant-Wide Annual Rolling Tonnage Limitation for SO ₂ at Clinch River	\$40,000 per ton, plus the surrender, pursuant to the procedures set forth in Paragraphs 95 and 96, of SO ₂ Allowances in an amount equal to two times the number of tons by which the limitation was exceeded
g. Failure to comply with the Eastern System-Wide Annual Tonnage Limitation for NO_x	\$5,000 per ton for the first 1000 tons, and \$10,000 per ton for each additional ton above 1000 tons, plus the surrender, pursuant to the procedures set forth in Paragraphs 82 and 83, of NO _x Allowances in an amount equal to two times the number of tons by which the limitation was exceeded
h. Failure to install, commence operation, or Continuously Operate a pollution control device required under this Consent Decree	\$10,000 per day per violation during the first 30 days, \$32,500 per day per violation thereafter
i. Failure to Retire, Retrofit, or Re-power a Unit by the date specified in this Consent Decree	\$10,000 per day per violation during the first 30 days, \$32,500 per day per violation thereafter

Consent Decree Violation	Stipulated Penalty (Per Day, Per Violation, Unless Otherwise Specified)
j. Failure to install or operate CEMS as required in this Consent Decree	\$1,000 per day per violation
k. Failure to conduct performance tests of PM emissions, as required in this Consent Decree	\$1,000 per day per violation
1. Failure to apply for any permit required by Section XVI (Permits)	\$1,000 per day per violation
m. Failure to timely submit, modify, or implement, as approved, the reports, plans, studies, analyses, protocols, or other submittals required in this Consent Decree	\$750 per day per violation during the first ten days, \$1,000 per day per violation thereafter
n. Using NO _x Allowances except as permitted by Paragraphs 75, 76, and 78	The surrender of NO _x Allowances in an amount equal to four times the number of NO _x Allowances used in violation of this Consent Decree
o. Failure to surrender NO _x Allowances as required by Paragraphs 75 and 79	(a) \$32,500 per day plus (b) \$7,500 per NO _x Allowance not surrendered
p. Failure to surrender SO ₂ Allowances as required by Paragraph 93	(a) \$32,500 per day plus (b) \$1,000 per SO ₂ Allowance not surrendered
q. Failure to demonstrate the third party surrender of an SO ₂ Allowance or NO _x Allowance in accordance with Paragraphs 95-96 and 82-83.	\$2,500 per day per violation
r. Failure to implement any of the Environmental Mitigation Projects described in Appendix A in compliance with Section VIII (Environmental Mitigation Projects) of this Consent Decree	The difference between the cost of the Project, as identified in Appendix A, and the dollars Defendants spent to implement the Project

Consent Decree Violation	Stipulated Penalty (Per Day, Per Violation, Unless Otherwise Specified)
s. Failure to fund an Environmental Mitigation Project, as submitted by the States, in compliance with Section VIII (Environmental Mitigation Projects) of this Consent Decree	\$1,000 per day per violation during the first 30 days, \$5,000 per day per violation thereafter
t. Failure to Continuously Operate required Other NO _x Pollution Controls required in Paragraph 69	\$10,000 per day during the first 30 days, and \$32,500 each day thereafter
u. Failure to comply with the Plant-Wide Annual Tonnage Limitation for SO_2 at Kammer	\$40,000 per ton, plus the surrender, pursuant to the procedures set forth in Paragraphs 95 and 96 of SO ₂ Allowances in an amount equal to two times the number of tons by which the limitation was exceeded
v. Any other violation of this Consent Decree	\$1,000 per day per violation

- 151. Violation of an Emission Rate or 30-Day Rolling Average Removal Efficiency that is based on a 30-Day Rolling Average is a violation on every day on which the average is based. Where a violation of a 30-Day Rolling Average Emission Rate or 30-Day Rolling Average Removal Efficiency (for the same pollutant and from the same source) recurs within periods of less than thirty (30) days, Defendants shall not pay a daily stipulated penalty for any day of the recurrence for which a stipulated penalty has already been paid.
- 152. All stipulated penalties shall begin to accrue on the day after the performance is due or on the day a violation occurs, whichever is applicable, and shall continue to accrue until performance is satisfactorily completed or until the violation ceases, whichever is applicable. Nothing in this Consent Decree shall prevent the simultaneous accrual of separate stipulated penalties for separate violations of this Consent Decree.

- 153. Defendants shall pay all stipulated penalties to the United States within thirty (30) days of receipt of written demand to Defendants from the United States, and shall continue to make such payments every thirty (30) days thereafter until the violation(s) no longer continues, unless Defendants elect within twenty (20) days of receipt of written demand to Defendants from the United States to dispute the accrual of stipulated penalties in accordance with the provisions in Section XV (Dispute Resolution) of this Consent Decree.
- 154. Stipulated penalties shall continue to accrue as provided in accordance with Paragraph 152 during any dispute, with interest on accrued stipulated penalties payable and calculated at the rate established by the Secretary of the Treasury, pursuant to 28 U.S.C. § 1961, but need not be paid until the following:
 - a. If the dispute is resolved by agreement, or by a decision of Plaintiffs pursuant to Section XV (Dispute Resolution) of this Consent Decree that is not appealed to the Court, accrued stipulated penalties agreed or determined to be owing, together with accrued interest, shall be paid within thirty (30) days of the effective date of the agreement or of the receipt of Plaintiffs' decision;
 - b. If the dispute is appealed to the Court and Plaintiffs prevail in whole or in part, Defendants shall, within sixty (60) days of receipt of the Court's decision or order, pay all accrued stipulated penalties determined by the Court to be owing, together with interest accrued on such penalties determined by the Court to be owing, except as provided in Subparagraph c, below;

c. If the Court's decision is appealed by any Party, Defendants shall, within fifteen (15) days of receipt of the final appellate court decision, pay all accrued stipulated penalties determined to be owing, together with interest accrued on such stipulated penalties determined to be owing by the appellate court.

Notwithstanding any other provision of this Consent Decree, the accrued stipulated penalties agreed by the Plaintiffs and Defendants, or determined by the Plaintiffs through Dispute Resolution, to be owing may be less than the stipulated penalty amounts set forth in Paragraph 150.

- 155. All stipulated penalties shall be paid in the manner set forth in Section IX (Civil Penalty) of this Consent Decree.
- 156. Should Defendants fail to pay stipulated penalties in compliance with the terms of this Consent Decree, the United States shall be entitled to collect interest on such penalties, as provided for in 28 U.S.C. § 1961.
- 157. The stipulated penalties provided for in this Consent Decree shall be in addition to any other rights, remedies, or sanctions available to Plaintiffs by reason of Defendants' failure to comply with any requirement of this Consent Decree or applicable law, except that for any violation of the Act for which this Consent Decree provides for payment of a stipulated penalty, Defendants shall be allowed a credit for stipulated penalties paid against any statutory penalties also imposed for such violation.

XIV. FORCE MAJEURE

- and 86, a "Force Majeure Event" shall mean an event that has been or will be caused by circumstances beyond the control of Defendants or any entity controlled by Defendants that delays compliance with any provision of this Consent Decree or otherwise causes a violation of any provision of this Consent Decree despite Defendants' best efforts to fulfill the obligation. "Best efforts to fulfill the obligation" include using best efforts to anticipate any potential Force Majeure Event and to address the effects of any such event (a) as it is occurring and (b) after it has occurred, such that the delay or violation is minimized to the greatest extent possible.
- delay compliance with or otherwise cause a violation of any obligation under this Consent
 Decree, as to which Defendants intend to assert a claim of Force Majeure, Defendants shall
 notify the Plaintiffs in writing as soon as practicable, but in no event later than twenty-one (21)
 business days following the date Defendants first knew, or by the exercise of due diligence
 should have known, that the event caused or may cause such delay or violation. In this notice,
 Defendants shall reference this Paragraph of this Consent Decree and describe the anticipated
 length of time that the delay or violation may persist, the cause or causes of the delay or
 violation, all measures taken or to be taken by Defendants to prevent or minimize the delay or
 violation, the schedule by which Defendants propose to implement those measures, and
 Defendants' rationale for attributing a delay or violation to a Force Majeure Event. Defendants
 shall adopt all reasonable measures to avoid or minimize such delays or violations. Defendants
 shall be deemed to know of any circumstance which Defendants or any entity controlled by
 Defendants knew or should have known.

- 160. <u>Failure to Give Notice.</u> If Defendants materially fail to comply with the notice requirements of this Section, the Plaintiffs may void Defendants' claim for Force Majeure as to the specific event for which Defendants have failed to comply with such notice requirement.
- Defendants' claim of Force Majeure as soon as reasonably practicable. If the Plaintiffs agree that a delay in performance has been or will be caused by a Force Majeure Event, the Parties shall stipulate to an extension of deadline(s) for performance of the affected compliance requirement(s) by a period equal to the delay actually caused by the event, or the extent to which Defendants may be relieved of stipulated penalties or other remedies provided under the terms of this Consent Decree. Such agreement shall be reduced to writing, and signed by all Parties. If the agreement results in a material change to the terms of this Consent Decree, an appropriate modification shall be made pursuant to Section XXII (Modification). If such change is not material, no modification of this Consent Decree shall be required.
- 162. <u>Disagreement.</u> If Plaintiffs do not accept Defendants' claim of Force Majeure, or if the Plaintiffs and Defendants cannot agree on the length of the delay actually caused by the Force Majeure Event, or the extent of relief required to address the delay actually caused by the Force Majeure Event, the matter shall be resolved in accordance with Section XV (Dispute Resolution) of this Consent Decree.
- 163. <u>Burden of Proof.</u> In any dispute regarding Force Majeure, Defendants shall bear the burden of proving that any delay in performance or any other violation of any requirement of this Consent Decree was caused by or will be caused by a Force Majeure Event. Defendants shall also bear the burden of proving that Defendants gave the notice required by this Section and the burden of proving the anticipated duration and extent of any delay(s) attributable to a

Force Majeure Event. An extension of one compliance date based on a particular event may, but will not necessarily, result in an extension of a subsequent compliance date.

- 164. <u>Events Excluded</u>. Unanticipated or increased costs or expenses associated with the performance of Defendants' obligations under this Consent Decree shall not constitute a Force Majeure Event.
- 165. Potential Force Majeure Events. The Parties agree that, depending upon the circumstances related to an event and Defendants' response to such circumstances, the kinds of events listed below are among those that could qualify as Force Majeure Events within the meaning of this Section: construction, labor, or equipment delays; Malfunction of a Unit or emission control device; unanticipated coal supply or pollution control reagent delivery interruptions; acts of God; acts of war or terrorism; and orders by a government official, government agency, other regulatory authority, or a regional transmission organization, acting under and authorized by applicable law, that directs Defendants to operate an AEP Eastern System Unit in response to a local or system-wide (state-wide or regional) emergency (which could include unanticipated required operation to avoid loss of load or unserved load). Depending upon the circumstances and Defendants' response to such circumstances, failure of a permitting authority to issue a necessary permit in a timely fashion may constitute a Force Majeure Event where the failure of the permitting authority to act is beyond the control of Defendants and Defendants have taken all steps available to it to obtain the necessary permit, including, but not limited to: submitting a complete permit application; responding to requests for additional information by the permitting authority in a timely fashion; and accepting lawful permit terms and conditions after expeditiously exhausting any legal rights to appeal terms and conditions imposed by the permitting authority.

166. As part of the resolution of any matter submitted to this Court under Section XV (Dispute Resolution) of this Consent Decree regarding a claim of Force Majeure, the Plaintiffs and Defendants by agreement, or this Court by order, may in appropriate circumstances extend or modify the schedule for completion of work under this Consent Decree to account for the delay in the work that occurred as a result of any delay agreed to by the Plaintiffs or approved by the Court. Defendants shall be liable for stipulated penalties for their failure thereafter to complete the work in accordance with the extended or modified schedule (provided that Defendants shall not be precluded from making a further claim of Force Majeure with regard to meeting any such extended or modified schedule).

XV. DISPUTE RESOLUTION

- 167. The dispute resolution procedure provided by this Section shall be available to resolve all disputes arising under this Consent Decree, provided that the Party invoking such procedure has first made a good faith attempt to resolve the matter with the other Parties.
- 168. The dispute resolution procedure required herein shall be invoked by one Party giving written notice to the other Parties advising of a dispute pursuant to this Section. The notice shall describe the nature of the dispute and shall state the noticing Party's position with regard to such dispute. The Parties receiving such a notice shall acknowledge receipt of the notice, and the Parties in dispute shall expeditiously schedule a meeting to discuss the dispute informally not later than fourteen (14) days following receipt of such notice.
- 169. Disputes submitted to dispute resolution under this Section shall, in the first instance, be the subject of informal negotiations among the disputing Parties. Such period of informal negotiations shall not extend beyond thirty (30) days from the date of the first meeting among the disputing Parties' representatives unless they agree in writing to shorten or extend

this period. During the informal negotiations period, the disputing Parties may also submit their dispute to a mutually agreed upon alternative dispute resolution (ADR) forum if the Parties agree that the ADR activities can be completed within the 30-day informal negotiations period (or such longer period as the Parties may agree to in writing).

- 170. If the disputing Parties are unable to reach agreement during the informal negotiation period, the Plaintiffs shall provide Defendants with a written summary of their position regarding the dispute. The written position provided by Plaintiffs shall be considered binding unless, within forty-five (45) days thereafter, Defendants seek judicial resolution of the dispute by filing a petition with this Court. The Plaintiffs may respond to the petition within forty-five (45) days of filing. In their initial filings with the Court under this Paragraph, the disputing Parties shall state their respective positions as to the applicable standard of law for resolving the particular dispute.
- 171. The time periods set out in this Section may be shortened or lengthened upon motion to the Court of one of the Parties to the dispute, explaining the Party's basis for seeking such a scheduling modification.
- 172. This Court shall not draw any inferences nor establish any presumptions adverse to any disputing Party as a result of invocation of this Section or the disputing Parties' inability to reach agreement.
- 173. As part of the resolution of any dispute under this Section, in appropriate circumstances the disputing Parties may agree, or this Court may order, an extension or modification of the schedule for the completion of the activities required under this Consent Decree to account for the delay that occurred as a result of dispute resolution. Defendants shall be liable for stipulated penalties for their failure thereafter to complete the work in accordance

with the extended or modified schedule, provided that Defendants shall not be precluded from asserting that a Force Majeure Event has caused or may cause a delay in complying with the extended or modified schedule.

174. The Court shall decide all disputes pursuant to applicable principles of law for resolving such disputes. In their initial filings with the Court under Paragraph 170, the disputing Parties shall state their respective positions as to the applicable standard of law for resolving the particular dispute.

XVI. PERMITS

- 175. Unless expressly stated otherwise in this Consent Decree, in any instance where otherwise applicable law or this Consent Decree requires Defendants to secure a permit to authorize construction or operation of any device contemplated herein, including all preconstruction, construction, and operating permits required under state law, Defendants shall make such application in a timely manner. Defendants shall provide Notice to Plaintiffs under Section XVIII (Notices), for each Unit that Defendants submit an application for any permit described in this Paragraph 175.
- 176. Notwithstanding the previous Paragraph, nothing in this Consent Decree shall be construed to require Defendants to apply for or obtain a PSD or Nonattainment NSR permit for physical changes in, or changes in the method of operation of, any AEP Eastern System Unit that would give rise to claims resolved by Paragraph 132 and 133, subject to Paragraphs 134 through 138, or Paragraphs 139 and 141 of this Consent Decree.
- 177. When permits are required as described in Paragraph 175, Defendants shall complete and submit applications for such permits to the appropriate authorities to allow time for all legally required processing and review of the permit request, including requests for additional

information by the permitting authorities. Any failure by Defendants to submit a timely permit application for any Unit in the AEP Eastern System shall bar any use by Defendants of Section XIV (Force Majeure) of this Consent Decree, where a Force Majeure claim is based on permitting delays.

- 178. Notwithstanding the reference to Title V permits in this Consent Decree, the enforcement of such permits shall be in accordance with their own terms and the Act. The Title V permits shall not be enforceable under this Consent Decree, although any term or limit established by or under this Consent Decree shall be enforceable under this Consent Decree regardless of whether such term or limit has or will become part of a Title V permit, subject to the terms of Section XXVI (Conditional Termination of Enforcement Under Decree) of this Consent Decree.
- 179. Within three (3) years from the Date of Entry of this Consent Decree, and in accordance with federal and/or state requirements for modifying or renewing a Title V permit, Defendants shall amend any applicable Title V permit application, or apply for amendments to their Title V permits, to include a schedule for any Unit-specific performance, operational, maintenance, and control technology requirements established by this Consent Decree including, but not limited to, required emission rates or other limitations. For Units subject to a requirement to Retire, Retrofit, or Re-power, Defendants shall apply to modify, renew, or obtain any applicable Title V permit to include a schedule for any Unit-specific performance, operation, maintenance, and control technology requirements established by this Consent Decree including, but not limited to, required emission rates or other limitations, within (12) twelve months of making such election to Retire, Retrofit, or Re-power.

- 180. Within one (1) year from commencement of operation of each pollution control device to be installed, upgraded, and/or operated under this Consent Decree, Defendants shall apply to include the requirements and limitations enumerated in this Consent Decree into federally-enforceable non-Title V permits and/or site-specific amendments to the applicable state implementation plans to reflect all new requirements applicable to each Unit in the AEP Eastern System, the Plant-Wide Annual Rolling Average Tonnage Limitation for SO₂ at Clinch River, and the Plant-Wide Annual Tonnage Limitation for SO₂ at Kammer.
- 181. Defendants shall provide the United States with a copy of each application for a federally-enforceable non-Title V permit or amendment to a state implementation plan, as well as a copy of any permit proposed as a result of such application, to allow for timely participation in any public comment period.
- 182. Prior to termination of this Consent Decree, Defendants shall obtain enforceable provisions in their Title V permits for the AEP Eastern System that incorporate (a) any Unit-specific requirements and limitations of this Consent Decree, such as performance, operational, maintenance, and control technology requirements, (b) the Plant-Wide Annual Rolling Average Tonnage Limitation for SO₂ at Clinch River and the Plant-Wide Annual Tonnage Limitation for SO₂ at Kammer, and (c) the Eastern System-Wide Annual Tonnage Limitations for SO₂ and NO_x. If Defendants do not obtain enforceable provisions for the Eastern System-Wide Annual Tonnage Limitations for SO₂ and NO_x in such Title V permits, then the requirements in Paragraphs 86 and 67 shall remain enforceable under this Consent Decree and shall not be subject to termination.
- 183. If Defendants sell or transfer to an entity unrelated to Defendants ("Third-Party Purchaser") part or all of Defendants' Ownership Interest in a Unit in the AEP Eastern System,

Defendants shall comply with the requirements of Section XIX (Sales or Transfers of Operational or Ownership Interests) with regard to that Unit prior to any such sale or transfer unless, following any such sale or transfer, Defendants remain the holder of the Title V permit for such facility.

XVII. INFORMATION COLLECTION AND RETENTION

- 184. Any authorized representative of the United States, including attorneys, contractors, and consultants, upon presentation of credentials, shall have a right of entry upon the premises of any facility in the AEP Eastern System at any reasonable time for the purpose of:
 - a. monitoring the progress of activities required under this Consent Decree;
 - verifying any data or information submitted to the United States in accordance with the terms of this Consent Decree;
 - obtaining samples and, upon request, splits of any samples taken by
 Defendants or their representatives, contractors, or consultants; and
 - d. assessing Defendants' compliance with this Consent Decree.
- 185. Defendants shall retain, and instruct their contractors and agents to preserve, all non-identical copies of all records and documents (including records and documents in electronic form) now in their or their contractors' or agents' possession or control (with the exception of their contractors' copies of field drawings and specifications), and that directly relate to Defendants' performance of their obligations under this Consent Decree until six (6) years following completion of performance of such obligations. This record retention requirement shall apply regardless of any corporate document retention policy to the contrary.
- 186. All information and documents submitted by Defendants pursuant to this Consent Decree shall be subject to any requests under applicable law providing public disclosure of

documents unless (a) the information and documents are subject to legal privileges or protection or (b) Defendants claim and substantiate in accordance with 40 C.F.R. Part 2 that the information and documents contain confidential business information.

187. Nothing in this Consent Decree shall limit the authority of EPA to conduct tests and inspections at Defendants' facilities under Section 114 of the Act, 42 U.S.C. § 7414, or any other applicable federal or state laws, regulations, or permits.

XVIII. NOTICES

188. Unless otherwise provided herein, whenever notifications, submissions, or communications are required by this Consent Decree, they shall be made in writing and addressed as follows:

As to the United States:

Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice P.O. Box 7611, Ben Franklin Station Washington, DC 20044-7611 DJ# 90-5-2-1-06893

and

Director, Air Enforcement Division
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
Ariel Rios Building [Mail Code 2242A]
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

washington, DC 20400

and

Air Enforcement & Compliance Assurance Branch U.S. EPA Region V 77 W. Jackson St. Mail Code AE17J Chicago, IL 60604

and

Air Protection Division Director U.S. EPA Region III 1650 Arch Street Philadelphia, PA 19103

As to the State of Connecticut:

Office of the Attorney General Environmental Department P.O. Box 120 Hartford, Connecticut 06141-0120

As to the State of Maryland:

Frank Courtright
Program Manager
Air Quality Compliance Program
Maryland Department of the Environment
1800 Washington Blvd.
Baltimore, Maryland 21230
fcourtright@mde.state.md.us

As to the Commonwealth of Massachusetts:

Frederick D. Augenstern, Assistant Attorney General Office of the Attorney General 1 Ashburton Place, 18th floor Boston, Massachusetts 02108 fred.augenstern@state.ma.us

and

Douglas Shallcross, Esquire
Department of Environmental Protection
Office of General Counsel
1 Winter Street
Boston, Massachusetts 02108
Douglas.Shallcross@state.ma.us

As to the State of New Hampshire:

Director, Air Resources Division New Hampshire Department of Environmental Services 29 Hazen Dive Concord, New Hampshire 03302-0095

As to the State of New Jersey:

Kevin P. Auerbacher Section Chief Environmental Enforcement Section R.J. Hughes Justice Complex 25 Market Street P.O. Box 093 Trenton, New Jersey 08625-0093

As to the State of New York:

Robert Rosenthal Assistant Attorney General New York State Attorney General's Office The Capitol Albany, New York 12224

As to the State of Rhode Island:

Tricia K. Jedele Special Assistant Attorney General 150 South Main Street Providence, RI 02903 (401) 274-4400, Ext. 2400 tjedele@riag.ri.gov

As to the State of Vermont:

Environmental Division Office of the Attorney General 109 State Street Montpelier, Vermont 05609-1001

and

Director
Air Pollution Control Division
Department of Environmental Conservation
Agency of Natural Resources
Building 3 South
103 South Main Street
Waterbury, Vermont 05671-0402

As to the Citizen Plaintiffs:

Nancy S. Marks
Natural Resources Defense Council, Inc.
40 West 20th Street
New York, New York 10011
(212) 727-4414
nmarks@nrdc.org

and

Albert F. Ettinger Environmental Law and Policy Center 35 East Wacker Dr. Suite 1300 Chicago, Illinois 60601-2110 (312) 673-6500 aettinger@elpc.org

As to Defendants:

Vice President, Environmental Services American Electric Power Service Corporation 1 Riverside Plaza Columbus, OH 43215 jmmcmanus@aep.com

and

General Counsel American Electric Power 1 Riverside Plaza Columbus, OH 43215 jbkeane@aep.com

189. All notifications, communications, or submissions made pursuant to this Section shall be sent as follows: (a) by overnight mail or overnight delivery service to the United States;

and (b) by electronic mail to all Plaintiffs, if practicable, but if not practicable, then by overnight mail or overnight delivery service to the States and Citizen Plaintiffs. All notifications, communications, and transmissions sent by overnight delivery service shall be deemed submitted on the date they are delivered to the delivery service.

190. Any Party may change either the notice recipient or the address for providing notices to it by serving all other Parties with a notice setting forth such new notice recipient or address.

XIX. SALES OR TRANSFERS OF OPERATIONAL OR OWNERSHIP INTERESTS

- 191. If Defendants propose to sell or transfer an Operational or Ownership Interest to an entity unrelated to Defendants ("Third Party"), they shall advise the Third Party in writing of the existence of this Consent Decree prior to such sale or transfer, and shall send a copy of such written notification to the Plaintiffs pursuant to Section XVIII (Notices) of this Consent Decree at least sixty (60) days before such proposed sale or transfer.
- 192. No sale or transfer of an Operational or Ownership Interest shall take place before the Third Party and Plaintiffs have executed, and the Court has approved, a modification pursuant to Section XXII (Modification) of this Consent Decree making the Third Party a party to this Consent Decree and jointly and severally liable with Defendants for all the requirements of this Decree that may be applicable to the transferred or purchased Interests.
- 193. This Consent Decree shall not be construed to impede the transfer of any Interests between Defendants and any Third Party so long as the requirements of this Consent Decree are met. This Consent Decree shall not be construed to prohibit a contractual allocation as between Defendants and any Third Party of the burdens of compliance with this Decree,

provided that both Defendants and such Third Party shall remain jointly and severally liable for the obligations of the Consent Decree applicable to the transferred or purchased Interests.

- become a party to this Consent Decree pursuant to Paragraph 192, may execute a modification that relieves Defendants of liability under this Consent Decree for, and makes the Third Party liable for, all obligations and liabilities applicable to the purchased or transferred Interests.

 Notwithstanding the foregoing, however, Defendants may not assign, and may not be released from, any obligation under this Consent Decree that is not specific to the purchased or transferred Interests, including the obligations set forth in Section VIII (Environmental Mitigation Projects), Paragraphs 86 and 67, and Section IX (Civil Penalty). Defendants may propose and the Plaintiffs may agree to restrict the scope of the joint and several liability of any purchaser or transferree for any obligations of this Consent Decree that are not specific to the transferred or purchased Interests, to the extent such obligations may be adequately separated in an enforceable manner.
- 195. Defendants may propose and Plaintiffs may agree to restrict the scope of joint and several liability of any purchaser or transferee for any AEP Eastern System obligations to the extent such obligations may be adequately separated in an enforceable manner using the methods provided by or approved under Section XVI (Permits).
- 196. Paragraphs 191-195 of this Consent Decree do not apply if an Interest is sold or transferred solely as collateral security in order to consummate a financing arrangement (not including a sale-leaseback), so long as Defendants: (a) remain the operator (as that term is used and interpreted under the Clean Air Act) of the subject AEP Eastern System Unit(s); (b) remain

subject to and liable for all obligations and liabilities of this Consent Decree; and (c) supply Plaintiffs with the following certification within thirty (30) days of the sale or transfer:

"Certification of Change in Ownership Interest Solely for Purpose of Consummating Financing. We, the Chief Executive Officer and General Counsel of American Electric Power ("AEP"), hereby jointly certify under Title 18 U.S.C. Section 1001, on our own behalf and on behalf of AEP, that any change in AEP's Ownership Interest in any AEP Eastern System Unit that is caused by the sale or transfer as collateral security of such Ownership Interest in such Unit(s) pursuant to the financing agreement consummated on [insert applicable date] between AEP and [insert applicable entity]: a) is made solely for the purpose of providing collateral security in order to consummate a financing arrangement; b) does not impair AEP's ability, legally or otherwise, to comply timely with all terms and provisions of the Consent Decree entered in *United States*, et al. v. American Electric Power Service Corp., et al., Civil Action No. C2-99-1250 ("AEP I") and United States, et al. v. American Electric Power Service Corp., et al., Civil Action Nos. C2-04-1098 and C2-05-360 ("AEP II"); c) does not affect AEP's operational control of any Unit covered by that Consent Decree in a manner that is inconsistent with AEP's performance of its obligations under the Consent Decree; and d) in no way affects the status of AEP's obligations or liabilities under that Consent Decree."

XX. EFFECTIVE DATE

197. The effective date of this Consent Decree shall be the Date of Entry.

XXI. RETENTION OF JURISDICTION

198. The Court shall retain jurisdiction of this case after the Date of Entry of this Consent Decree to enforce compliance with the terms and conditions of this Consent Decree and to take any action necessary or appropriate for its interpretation, construction, execution, modification, or adjudication of disputes. During the term of this Consent Decree, any Party to this Consent Decree may apply to the Court for any relief necessary to construe or effectuate this Consent Decree.

XXII. MODIFICATION

199. The terms of this Consent Decree may be modified only by a subsequent written agreement signed by the Plaintiffs and Defendants. Where the modification constitutes a material change to any term of this Decree, it shall be effective only upon approval by the Court.

XXIII. GENERAL PROVISIONS

- 200. This Consent Decree is not a permit. Compliance with the terms of this Consent Decree does not guarantee compliance with all applicable federal, state, or local laws or regulations. The limitations and requirements set forth herein do not relieve Defendants from any obligation to comply with other state and federal requirements under the Clean Air Act at any Units covered by this Consent Decree, including the Defendants' obligation to satisfy any state modeling requirements set forth in a state implementation plan.
 - 201. This Consent Decree does not apply to any claim(s) of alleged criminal liability.
- 202. In any subsequent administrative or judicial action initiated by any of the Plaintiffs for injunctive relief or civil penalties relating to the facilities covered by this Consent Decree, Defendants shall not assert any defense or claim based upon principles of waiver, res judicata, collateral estoppel, issue preclusion, claim preclusion, or claim splitting, or any other defense based upon the contention that the claims raised by any of the Plaintiffs in the subsequent proceeding were brought, or should have been brought, in the instant case; provided, however, that nothing in this Paragraph affects the validity of Paragraphs Paragraph 132 and 133, subject to Paragraphs 134 through 138, or Paragraphs 139 and 141.
- 203. Except as specifically provided by this Consent Decree, nothing in this Consent Decree shall relieve Defendants of their obligation to comply with all applicable federal, state, and local laws and regulations. Subject to the provisions in Section X (Resolution of Civil

Claims Against Defendants), nothing contained in this Consent Decree shall be construed to prevent or limit the rights of the Plaintiffs to obtain penalties or injunctive relief under the Act or other federal, state, or local statutes, regulations, or permits.

- 204. At any time prior to termination of this Consent Decree, Defendants may request approval from Plaintiffs to implement other control technology for SO₂ or NO_x than what is required by this Consent Decree. In seeking such approval, Defendants must demonstrate that such alternative control technology is capable of achieving pollution reductions equivalent to an FGD (for SO₂) or SCR (for NO_x) at the Units in the AEP Eastern System at which Defendants seek approval to implement such other control technology for SO₂ or NO_x. Approval of such a request is solely at the discretion of the Plaintiffs.
- 205. Nothing in this Consent Decree is intended to, or shall, alter or waive any applicable law (including but not limited to any defenses, entitlements, challenges, or clarifications related to the Credible Evidence Rule, 62 Fed. Reg. 8314 (Feb. 24, 1997)) concerning the use of data for any purpose under the Act generated either by the reference methods specified herein or otherwise.
- 206. Each limit and/or other requirement established by or under this Consent Decree is a separate, independent requirement.
- 207. Performance standards, emissions limits, and other quantitative standards set by or under this Consent Decree must be met to the number of significant digits in which the standard or limit is expressed. For example, an Emission Rate of 0.100 is not met if the actual Emission Rate is 0.101. Defendants shall round the fourth significant digit to the nearest third significant digit, or the third significant digit to the nearest second significant digit, depending upon whether the limit is expressed to three or two significant digits. For example, if an actual

Emission Rate is 0.1004, that shall be reported as 0.100, and shall be in compliance with an Emission Rate of 0.100, and if an actual Emission Rate is 0.1005, that shall be reported as 0.101, and shall not be in compliance with an Emission Rate of 0.100. Defendants shall report data to the number of significant digits in which the standard or limit is expressed.

- 208. This Consent Decree does not limit, enlarge, or affect the rights of any Party to this Consent Decree as against any third parties.
- 209. This Consent Decree constitutes the final, complete, and exclusive agreement and understanding among the Parties with respect to the settlement embodied in this Consent Decree, and supersedes all prior agreements and understandings among the Parties related to the subject matter herein. No document, representation, inducement, agreement, understanding, or promise constitutes any part of this Consent Decree or the settlement it represents, nor shall they be used in construing the terms of this Consent Decree.
- 210. Except for Citizen Plaintiffs, each Party to this action shall bear its own costs and attorneys' fees. Defendants shall reimburse the Citizen Plaintiffs' attorneys' fees and costs, pursuant to 42 U.S.C. § 7604(d), and the agreement between counsel for Defendants and Citizen Plaintiffs within thirty (30) days of the Date of Entry of this Consent Decree.

XXIV. SIGNATORIES AND SERVICE

- 211. Each undersigned representative of the Parties certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind to this document the Party he or she represents.
- 212. This Consent Decree may be signed in counterparts, and such counterpart signature pages shall be given full force and effect.

213. Each Party hereby agrees to accept service of process by mail with respect to all matters arising under or relating to this Consent Decree and to waive the formal service requirements set forth in Rule 4 of the Federal Rules of Civil Procedure and any applicable Local Rules of this Court including, but not limited to, service of a summons.

XXV. PUBLIC COMMENT

214. The Parties agree and acknowledge that final approval by the United States and the entry of this Consent Decree is subject to the procedures of 28 C.F.R. § 50.7, which provides for notice of lodging of this Consent Decree in the Federal Register, an opportunity for public comment, and the right of the United States to withdraw or withhold consent if the comments disclose facts or considerations which indicate that the Consent Decree is inappropriate, improper, or inadequate. The Defendants shall not oppose entry of this Consent Decree by this Court or challenge any provision of this Consent Decree unless the United States has notified the Defendants, in writing, that the United States no longer supports entry of the Consent Decree.

XXVI. CONDITIONAL TERMINATION OF ENFORCEMENT UNDER DECREE

- 215. <u>Termination as to Completed Tasks.</u> As soon as Defendants complete a construction project or any other requirement of this Consent Decree that is not ongoing or recurring, Defendants may, by motion to this Court, seek termination of the provision or provisions of this Consent Decree that imposed the requirement.
- 216. <u>Conditional Termination of Enforcement Through the Consent Decree.</u> After Defendants:
 - a. have successfully completed construction, and have maintained
 Continuous Operation, of all pollution controls as required by this Consent
 Decree;

- b. have obtained final Title V permits (i) as required by the terms of this

 Consent Decree; (ii) that cover all Units in this Consent Decree; and (iii)

 that include as enforceable permit terms all of the Unit performance and
 other requirements specified in this Consent Decree; and
- c. certify that the date is later than December 31, 2022;

then Defendants may so certify these facts to the Plaintiffs and this Court. If the Plaintiffs do not object in writing with specific reasons within forty-five (45) days of receipt of Defendants' certification, then, for any Consent Decree violations that occur after the filing of notice, the Plaintiffs shall pursue enforcement of the requirements contained in the Title V permit through the applicable Title V permit and not through this Consent Decree.

217. Resort to Enforcement under this Consent Decree. Notwithstanding Paragraph 216, if enforcement of a provision in this Consent Decree cannot be pursued by a Party under the applicable Title V permit, or if a Consent Decree requirement was intended to be part of a Title V Permit and did not become or remain part of such permit, then such requirement may be enforced under the terms of this Consent Decree at any time.

XXVII. FINAL JUDGMENT

218.	Upon approval and entry of this Consent Decree by the Court, this Consent			
Decree shall	constitute a final	judgment among the	Parties.	
SO ORDERE	ED, THIS1	DAY OF	, 2007.	
			E EDMUND A. SARG ATES DISTRICT COU	*
		HONORABL	E GREGORY L. FROS	ST
		UNITED STA	ATES DISTRICT COU	RT JUDGE

APPENDIX A ENVIRONMENTAL MITIGATION PROJECTS

In compliance with and in addition to the requirements in Section VIII of this Consent Decree (Environmental Mitigation Projects), Defendants shall comply with the requirements of this Appendix to ensure that the benefits of the \$36 million in federally directed Environmental Mitigation Projects are achieved.

I. National Parks Mitigation

- A. Within 45 days from the Date of Entry, Defendants shall pay to the National Park Service the sum of \$2 million to be used in accordance with the Park System Resource Protection Act, 16 U.S.C. § 19jj, for the restoration of land, watersheds, vegetation, and forests using adaptive management techniques designed to improve ecosystem health and mitigate harmful effects from air pollution. This may include reforestation or restoration of native species and acquisition of equivalent resources and support for collaborative initiatives with state and local agencies and other stakeholders to develop plans to assure resource protection over the long-term. Projects will focus on one or more of the following Class I areas alleged in the underlying action to have been injured by emissions from Defendants facilities: Shenandoah National Park, Mammoth Cave National Park, and Great Smoky Mountains National Park.
- B. Payment of the amount specified in the preceding paragraph shall be made to the Natural Resource Damage and Assessment Fund managed by the United States Department of the Interior. Instructions for transferring funds will be provided to the Defendants by the National Park Service. Notwithstanding Section I.A of this Appendix, payment of funds by Defendants is not due until ten (10) days after receipt of payment instructions.
- C. Upon payment of the required funds into the Natural Resource Damage and Assessment Fund, Defendants shall have no further responsibilities regarding the implementation of any project selected by the National Park Service in connection with this provision of the Consent Decree.

II. Overall Environmental Mitigation Project Schedule and Budget

A. Within 120 days of the Date of Entry, as further described below, Defendants shall submit plans to EPA for review and approval for completing the remaining \$34 million in federally directed Environmental Mitigation Projects specified in this Appendix over a period of not more than five (5) years from the Date of Entry. EPA will consult with the Citizen Plaintiffs, through their counsel, prior to approving or commenting on any proposed plan. The Parties agree that Defendants are entitled to spread their payments for Environmental Mitigation Projects evenly over the five-year period commencing upon the Date of Entry. Defendants are not, however, precluded from accelerating payments to better effectuate a proposed mitigation plan, provided however, Defendants shall not be

entitled to any reduction in the nominal amount of the required payments by virtue of the early expenditures. EPA may, but is not required to, approve a proposed Project budget that results in a back-loading of some expenditures. EPA shall determine prior to approval that all Projects are consistent with federal law.

- B. Defendants may, at their election, consolidate the plans required by this Appendix into a single plan.
- C. In addition to the requirements set forth below, Defendants shall submit within 120 days of the Date of Entry, a summary-level budget and Project time-line that covers all of the Projects proposed.
- D. Beginning March 31, 2008, and continuing on March 31 of each year thereafter until completion of each Project (including any applicable periods of demonstration or testing), Defendants shall provide the United States and Citizen Plaintiffs with written reports detailing the progress of each Project, including Project Dollars.
- E. Within 60 days following the completion of each Project required under Appendix A, Defendants shall submit to the United States and Citizen Plaintiffs a report that documents the date that the Project was completed, the results of implementing the Project, including the emission reductions or other environmental benefits achieved, and the Project Dollars expended by Defendants in implementing the Project.
- F. Upon approval of the plans required by this Appendix by EPA, Defendants shall complete the Environmental Mitigation Projects according to the approved plans. Nothing in this Consent Decree shall be interpreted to prohibit Defendants from completing Environmental Mitigation Projects before the deadlines specified in the schedule of an approved plan.

III. Acquisition and Restoration of Ecologically Significant Areas in Indiana, Kentucky, North Carolina, Ohio, Pennsylvania, Virginia, and West Virginia

A. Within 120 days of the Date of Entry, and on each anniversary of the initial submission for the following four (4) years, Defendants shall submit a plan to EPA for review and approval, in consultation with the Citizen Plaintiffs, for acquisition and/or restoration of ecologically significant areas in Indiana, Kentucky, North Carolina, Ohio, Pennsylvania, Virginia, and West Virginia ("Land Acquisition and Restoration"). Defendants shall spend no less than a total of \$10 million in Project Dollars on Land Acquisition and Restoration over the five year period provided under this Appendix for completion of federally directed Environmental Mitigation Projects.

- B. Defendants' proposed plan shall:
 - 1. Describe the proposed Land Acquisition and Restoration projects in sufficient detail to allow the reader to ascertain how each proposed action meets the requirements set out below. For purposes of this Appendix and Section VIII (Environmental Mitigation Projects) of this Consent Decree, land acquisition means purchase of interests in land, including fee ownership, easements, or other restrictions that run with the land that provide for perpetual protection of the acquired land. Restoration may include, by way of illustration, direct reforestation (particularly of tree species that may be affected by acidic deposition) and soil enhancement. Any restoration action must also incorporate the acquisition of an interest in the restored lands sufficient to ensure perpetual protection of the restored land. Any proposal for acquisition of land must identify fully all owners of the interests in the land. Every proposal for acquisition of land must identify the ultimate holder of the interests to be acquired and provide a basis for concluding that the proposed holder of title is appropriate for long-term protection of the ecological or environmental benefits sought to be achieved through the acquisition.
 - 2. Describe generally the ecological significance of the area to be acquired or restored. In particular, identify the environmental/ecological benefits expected as a result of the proposed action. In proposing areas for acquisition and restoration, Defendants shall focus on those areas that are in most need of conservation action or that promise the greatest conservation return on investment.
 - 3. Describe the expected cost of the Land Acquisition and Restoration, including the fair market value of any areas to be acquired.
 - 4. Identify any person or entity other than Defendants that will be involved in the land acquisition or restoration action. Defendants shall describe the third-party's role in the action and the basis for asserting that such entity is able and suited to perform the intended role. For purposes of this Section of the Appendix, third-parties shall only include non-profits; federal, state, and local agencies; or universities. Any proposed third-party must be legally authorized to perform the proposed action or to receive Project Dollars.
 - 5. Include a schedule for completing and funding each portion of the project.
- C. Performance Upon approval of the plan by EPA, after consultation with the Citizen Plaintiffs, Defendants shall complete the Land Acquisition and Restoration project according to the approved plan and schedule.

IV. Nitrogen Impact Mitigation in the Chesapeake Bay

A. Within 120 days of Date of Entry, Defendants shall submit a plan to EPA for review and approval, in consultation with the Citizen Plaintiffs, for the mitigation of adverse impacts on the Chesapeake Bay associated with nitrogen ("Chesapeake Bay Mitigation Project"). Defendants shall spend no less than a total of \$3 million in Project Dollars on the Chesapeake Bay Mitigation Project.

B. Defendant's proposed plan shall:

- 1. Describe proposed Project(s) that reduce nitrogen loading in the Chesapeake Bay or otherwise mitigate the adverse effects of nitrogen in the Chesapeake Bay. Projects that may be approved include, by way of illustration, creation of forested stream buffers on agricultural land or other land cover to establish a "buffer zone" to keep livestock out of the adjoining waterway and to filter runoff before it enters the waterway.
- 2. Describe generally the expected environmental benefit of the proposed Chesapeake Bay Mitigation Project. The key criteria for selection of components of the Project are the magnitude of the expected ecological/environmental benefit(s) in relation to the cost and the relative permanence of the expected benefit(s). Expected loadings benefits should be quantified to the extent practicable.
- 3. Describe the expected cost of each element of the Chesapeake Bay Mitigation Project, including the fair market value of any interests in land to be acquired.
- 4. Identify any person or entity other than Defendants that will be involved in any aspect of the Chesapeake Bay Mitigation Project. Defendants shall describe the third-party's role in the action and the basis for asserting that such entity is able and suited to perform the intended role. For purposes of this Section of the Appendix, third-parties shall only include non-profits; federal, state, and local agencies; or universities. Any proposed third-party must be legally authorized to perform the proposed action or to receive Project Dollars.
- 5. Include a schedule for completing and funding each portion of the Project.
- C. Performance Upon approval of the plan for Chesapeake Bay Mitigation by EPA, Defendants shall complete the Project according to the approved plan and schedule.

V. Mobile Source Emission Reduction Projects

A. Within 120 days of the Date of Entry, Defendants shall submit a plan to EPA for review and approval, in consultation with the Citizen Plaintiffs, for the completion of Projects to reduce emissions from Defendants' fleet of barge tugboats on the Ohio River, diesel trains at or near power plants, Defendants' fleet of motor vehicles in certain eastern states, and/or truck stops in certain eastern states ("Mobile Source Projects"). Defendants shall spend no less than a total of \$21 million in Project Dollars on one or more of the three Mobile Source Projects specified in this Section, in accordance with the plans for such Projects approved by EPA, after consultation with the Citizen Plaintiffs. The key criteria for selection of components of the Mobile Source Projects are the magnitude of the expected environmental benefit(s) in relation to the cost.

B. Diesel Tug/Train Project

- 1. Defendants are among the leading barge operators in the country, with operations on the Ohio River, the Mississippi River, and the Gulf Coast. Barges are propelled by tugboats, which generally use a type of marine diesel fuel known as No. 2 distillate fuel oil. Tugboats that switch to ultra-low sulfur diesel fuel ("ULSD") reduce emissions of NO_X, PM, volatile organic compounds ("VOCs"), and other air pollutants. All marine diesel fuel must be ULSD by June 1, 2012, pursuant to EPA's Nonroad Diesel Rule (see "Control of Emissions of Air Pollution from Nonroad Diesel Engines and Fuels; Final Rule," 69 Fed. Reg. 38,958 (June 29, 2004)). Defendants also receive coal by diesel trains.
- 2. As part of the plan for Mobile Source Projects, Defendants may elect to achieve accelerated emission reductions from their tugboat fleet on the Ohio River ("Ohio River Tug Fleet") and/or their diesel powered trains used at or near their power plants, as one of the three possible mobile source Projects under this Consent Decree ("Diesel Tug/Train Project").
- 3. The Diesel Tug/Train Project shall require one or more of the following:
 - a. The accelerated retrofitting or re-powering of Tugs with engines that require the use of ULSD. Selection of this Project is expressly conditioned upon identification of satisfactory technology and an agreement between EPA and Defendants on how to credit Project Dollars towards this project.
 - b. The retrofitting or repowering of the marine engines in the Ohio River Tug Fleet with diesel oxidation catalysts ("DOCs"), diesel particulate filters ("DPFs"), or other equivalent advanced technologies that reduce emissions of PM and VOCs from marine engines in tugboats (collectively "DOC/DPFs"). Defendants shall only install DOCs/DPFs that have received applicable approvals or

verifications, if any, from the relevant regulatory agencies for reducing emissions from tugboat engines. Defendants must maintain any DOCs/DPFs installed as part of the Tug Project for the useful life of the equipment (as defined in the proposed Plan), even after the completion of the Tug Project. Project Dollars may be spent on DOCs/DPFs within 5 years of the Date of Entry, in accordance with the approved schedule for the mitigation projects in this Appendix.

- c. The accelerated use of ULSD for the Ohio River Tug Fleet, from the Date of Entry through January 1, 2012. Notwithstanding any other provision of this Consent Decree, including this Appendix, Defendants shall only receive credit for the incremental cost of ULSD as compared to the cost of the fuel Defendants would otherwise utilize.
- d. Emission reduction measures for diesel powered trains. Such measures may include retro-fitting with, or conversion to, Multiple Diesel Engine GenSets that are EPA Tier III Off-Road certified; Diesel Electric Hybrid; Anti-idling controls/strategies and Auto Shut-Off capabilities. Selection of this Project is expressly conditioned upon identification of satisfactory technology and an agreement between EPA and Defendants on how to credit Project Dollars towards this project.
- 4. The proposed plan for the Diesel Tug/Train Project shall:
 - a. Describe the expected cost of the project, including the costs for any equipment, material, labor costs, and the proposed method for accounting for the cost of each element of the Diesel Tug/Train Project, including the incremental cost of ULSD.
 - b. Describe generally the expected environmental benefit of the project, including any expected fuel efficiency improvements and quantify emission reductions expected.
 - c. Include a schedule for completing each portion of the Diesel Tug/Train Project.
- 5. Performance Upon approval of the Diesel Tug/Train Project plan by EPA, Defendants shall complete the project according to the approved plan and schedule.

C. Hybrid Vehicle Fleet Project

- 1. AEP has a fleet of approximately 11,000 motor vehicles in the eleven states where it operates, including vehicles in Indiana, Ohio, Michigan, Virginia, West Virginia, and Kentucky. These motor vehicles are generally powered by conventional diesel or gasoline engines and include vehicles such as diesel "bucket" trucks. The use of hybrid engine technologies in Defendants' motor vehicles, such as diesel-electric engines, will improve fuel efficiency and reduce emissions of NO_x, PM, VOCs, and other air pollutants.
- 2. As part of the plan for Mobile Source Projects, Defendants may elect to spend Project Dollars on the replacement of conventional motor vehicles in their fleet with newly manufactured Hybrid Vehicles ("Hybrid Vehicle Fleet Project").
- 3. The proposed plan for the Hybrid Vehicle Fleet Project shall:
 - a. Propose the replacement of conventional gasoline or diesel powered motor vehicles (such as bucket trucks) with Hybrid Vehicles. For purposes of this subsection of this Appendix, "Hybrid Vehicle" means a vehicle that can generate and utilize electric power to reduce the vehicle's consumption of fossil fuel. Any Hybrid Vehicle proposed for inclusion in the Hybrid Fleet Project shall meet all applicable engine standards, certifications, and/or verifications.
 - b. Provide for Hybrid Vehicles replacement in that portion of Defendants' fleet in Indiana, Ohio, Michigan, West Virginia, Virginia, and/or Kentucky. Notwithstanding any other provision of this Consent Decree, including this Appendix, Defendants shall only receive credit toward Project Dollars for the incremental cost of Hybrid Vehicles as compared to the cost of a newly manufactured, similar motor vehicle.
 - c. Prioritize the replacement of diesel-powered vehicles in Defendants' fleet.
 - d. Provide a method to account for the costs of the Hybrid Vehicles, including the incremental costs of such vehicles as compared to conventional gasoline or diesel motor vehicles.
 - e. Certify that Defendants will use the Hybrid Vehicles for their useful life (as defined in the proposed plan).
 - f. Include a schedule for completing each portion of the Project.

- g. Describe generally the expected environmental benefits of the Project, including any fuel efficiency improvements, and quantify emission reductions expected.
- 4. Performance Upon approval by EPA of the plan for the Hybrid Vehicle Fleet Project, after consultation with the Citizen Plaintiffs, Defendants shall complete the Project according to the approved plan.

D. Truck Stop Electrification

- 1. Long-haul truck drivers typically idle their engines at night at rest areas to supply heat or cooling in their sleeper cab compartments, and to maintain vehicle battery charge while electrical appliances such as televisions, computers, and microwaves are in use. Modifications to rest areas to provide parking spaces with electrical power, heat, and air conditioning will allow truck drivers to turn their engines off. Truck stop electrification reduces idling time and therefore reduces diesel fuel usage, and thus reduces emissions of PM, NO_x, and VOCs.
- 2. As part of the plan for Mobile Source Projects, Defendants may elect to achieve emission reductions by truck stop electrification, which shall include, where necessary, techniques and infrastructure needed to support such a program ("Truck Stop Electrification Project").
- 3. The proposed plan for the Truck Stop Electrification Project shall:
 - a. Identify truck stops in one or more of the following States for Electrification: Ohio, Indiana, Kentucky, North Carolina, Pennsylvania, West Virginia, and Virginia. EPA may give preference to electrification Projects that are co-located, if possible, along the same transportation corridor.
 - b. Describe the level of expected usage of the planned electrification facilities, air quality in the vicinity of the proposed Projects, proximity of the proposed Project to population centers, and whether the owner or some other entity is willing to pay for some portion of the work.
 - c. Provide for the construction of truck stop electrification stations with established technologies and equipment.
 - d. Account for hardware procurement and installation costs at the recipient truck stops.
 - e. Include a schedule for completing each portion of the Project.

- f. Describe generally the expected environmental benefits of the Project and quantify emission reductions expected.
- 4. Performance Upon approval of the plan for the Truck Stop Electrification Project by EPA, after consultation with the Citizen Plaintiffs, Defendants shall complete the Project according to the approved plan.

APPENDIX B

REPORTING REQUIREMENTS

I. Annual Reporting Requirements

In accordance with the dates specified below, for periods on and after the Date of Entry, Defendants shall submit annual reports to the United States, the States, and the Citizen Plaintiffs, electronically and in hard copy, as required by Paragraph 143 and certified as required by Paragraph 146. In such annual reports, Defendants shall include the following information:

A. Eastern System-Wide Annual Tonnage Limitations for SO₂ and NO_x

Beginning on March 31, 2010, for the Eastern System-Wide Annual Tonnage Limitations for NO_x, and March 31, 2011, for the Eastern System-Wide Annual Tonnage Limitations for SO₂, and annually thereafter, Defendants shall report the following information: (a) the total actual annual tons of the pollutant emitted from each Unit (or for Units vented to a common stack, from each combined stack) within the AEP Eastern System, as defined in Paragraph 7, during the prior calendar year; (b) the total actual annual tons of the pollutant emitted from the AEP Eastern System during the prior calendar year; (c) the difference, if any, between the applicable Eastern System-Wide Annual Tonnage Limitation for the pollutant in that calendar year and the amount reported in subparagraph (b); and (d) the annual average emission rate, expressed as a lb/mmBTU for NO_x, for each Unit within the AEP Eastern System and for the entire AEP Eastern System during the prior calendar year. Data reported pursuant to this subsection shall be based upon the CEMS data submitted to the Clean Air Markets Division.

B. Plant-Wide Annual Rolling Average Tonnage Limitation for SO_2 at Clinch River

Beginning on March 31, 2011, and continuing annually thereafter, Defendants shall report: (a) the actual tons of SO₂ emitted from all Units at the Clinch River plant on an annual rolling average basis as defined in Paragraphs 47 and 88 for the prior calendar year; and (b) the applicable Plant-Wide Annual Rolling Average Tonnage Limitation for SO₂ at the Clinch River plant for the prior calendar year. For calendar years other than 2010 and 2015, Defendants shall also report the 12-month rolling average emissions for each month.

C. Plant-Wide Tonnage Limitation for SO₂ at Kammer

Beginning on March 31, 2011, and continuing annually thereafter, Defendants shall report: (a) the actual tons of SO₂ emitted from all Units at the Kammer plant as specified in Paragraph 48 for the prior calendar year; and (b) the Plant-Wide Tonnage Limitation for SO₂ at the Kammer plant for that calendar year.

D. Reporting Requirements for Excess NO_x Allowances

1. Reporting Requirements for Unrestricted Excess NO_x Allowances

Beginning on March 31, 2010, and continuing annually through March 31, 2016, Defendants shall report the number of Unrestricted Excess NO_x Allowances available each year between 2009 through 2015, and how or whether such allowances were used so that Defendants account for each Unrestricted Excess NO_x Allowance for each year during 2009 through 2015. No later than March 31, 2016, Defendants shall report: (a) the cumulative number of unused Unrestricted Excess NO_x Allowances subject to surrender pursuant to Paragraph 75 and calculated pursuant to Paragraph 74, and (b) the total number of unused Unrestricted Excess NO_x Allowances that they surrendered.

2. Reporting Requirements for Restricted Excess NO_x Allowances

- a. Beginning on March 31, 2010, and continuing annually through March 31, 2016, Defendants shall report: (a) the number of Restricted Excess NOx Allowances available each year between 2009 through 2015; (b) the actual emissions from any New and Newly Permitted Unit during each year; (c) the actual NOx emissions from the five natural gas plants listed in Paragraph 76 during each year; (d) the amount, if any, of Restricted Excess NOx Allowances that are not subject to surrender each year because of Defendants' investment in renewable energy as defined in Paragraph 77 and the data supporting Defendants' calculation; and (e) the difference between the cumulative total of Restricted Excess NO_x Allowances available from each year and any prior year and the actual emissions reported under (b) and (c), above, for that year and any Restricted Excess NO_x Allowances not subject to surrender reported under (d), above. No later than March 31, 2016, Defendants shall report: (a) the cumulative number of unused Restricted Excess NO_x Allowances subject to surrender calculated pursuant to Paragraphs 76 and 77, and (b) the total number of unused Restricted Excess NO_x Allowances that they surrendered.
- b. No later than March 31, 2017, and continuing annually thereafter, Defendants shall report: (a) the number of Restricted Excess NO_x Allowances available in the prior year; (b) the actual emissions from any New and Newly Permitted Unit during such year; (c) the actual emissions from the five natural gas plants listed in Paragraph 76 during such year; (d) the amount, if any, of Restricted Excess NO_x Allowances that are not subject to surrender for such year because of Defendants' investment in renewable energy as defined in Paragraph 77 and the data supporting Defendants' calculation; (e) the number of Restricted Excess NO_x Allowances subject to surrender for such year calculated pursuant to Paragraphs 76 and 77; and (f) the total number of unused Restricted Excess NO_x Allowances that they surrendered for such year.

E. Reporting Requirements for Excess SO₂ Allowances

Beginning on March 31, 2011, and continuing annually thereafter, Defendants shall report: (a) the number of Excess SO₂ Allowances subject to surrender calculated pursuant to Paragraph 93, and (b) the total number of Excess SO₂ Allowances that they surrendered.

F. Continuous Operation of Pollution Controls required by Paragraphs 68, 69, 87, and 102

On March 31 of the year following Defendants' obligation pursuant to this Consent Decree to commence Continuous Operation of an SCR, FGD, ESP, or Additional NO_x Pollution Controls, Defendants shall report the date that they commenced Continuous Operation of each such pollution control as required by this Consent Decree. Beginning on March 31, 2008, and continuing annually thereafter, Defendants shall report, for any SCR, FGD, ESP, or Additional NO_x Pollution Controls required to Continuously Operate during that year, the duration of any period during which that pollution control did not Continuously Operate, including the specific dates and times that such pollution control did not operate, the reason why Defendants did not Continuously Operate such pollution control, and the measures taken to reduce emissions of the pollutant controlled by such pollution control.

G. Installation of SO₂ and NO_x Pollution Controls

Beginning on March 31, 2008, and continuing annually thereafter, Defendants shall report on the progress of construction of NO_x and SO_2 pollution controls required by this Consent Decree including: (1) if construction is not underway, any available information concerning the construction schedule, including the dates of any major contracts executed during the prior calendar year, and any major components delivered during the prior calendar year; (2) if construction is underway, the estimated percent of installation as of the end of the prior calendar year, the current estimated construction completion date, and a brief description of completion of significant milestones during the prior calendar year, including a narrative description of the current construction status (e.g. foundations completed, absorber installation proceeding all material on-site, new stack erection completed, etc.); and (3) once construction is complete, the dates the equipment was placed in service and any acceptance testing was performed during the prior calendar year.

H. Installation and Operation of PM CEMS

Beginning on March 31, 2013, for Cardinal Units 1 and 2 and a third Unit identified pursuant to Paragraph 110, and continuing annually thereafter for all periods of operation of PM CEMS as required by this Consent Decree, Defendants shall report the data recorded by the PM CEMS, expressed in lb/mmBTU on a 3-hour rolling average basis in electronic format for the prior calendar year, in accordance with Paragraph 107.

I. Other SO₂ Measures

Commencing in the first annual report Defendants submit pursuant to Paragraph 143, and continuing annually thereafter, Defendants shall submit all data necessary to determine Defendants' compliance with the annual average coal content specified in the table in Paragraph 90.

- J. 1-Hour Average NO_x Emission Rate and 30-Day Rolling Average Emission Rates for SO₂ and NO_x
- 1. Beginning on March 31 of the year following Defendants' obligation pursuant to this Consent Decree to first comply with an applicable 1-Hour Average NO_x Emission Rate and/or 30-Day Rolling Average Emission Rate for SO₂ and NO_x, and continuing annually thereafter, Defendants shall report all 1-Hour Average Emission Rate results and/or 30-Day Rolling Average Emission Rate results to determine compliance with such emission rate, as defined in Paragraph 4 or 5, as appropriate. Defendants shall also report: (a) the date and time that the Unit initially combusts any fuel after shutdown; (b) the date and time after startup that the Unit is synchronized with a utility electric distribution system; (c) the date and time that the fire is extinguished in a Unit; and (d) for the fifth and subsequent Cold Start Up Period that occurs within any 30-Day period, the earlier of the date and time that is either (i) eight hours after the unit is synchronized with a utility electric distribution system, or (ii) the flue gas has reached the SCR operational temperature range specified by the catalyst manufacturer.
- 2. Within the first report that identifies a 1-Hour Average NO_x Emission Rate or 30-Day Rolling Average Emission Rate for SO₂ or NO_x, Defendants shall include at least five (5) example calculations (including hourly CEMS data in electronic format for the calculation) used to determine the 1-Hour Average NO_x Emission Rate and the 30-Day Rolling Average Emission Rate for SO₂ or NO_x for five (5) randomly selected days. If at any time Defendants change the methodology used in determining the 1-Hour Average NO_x Emission Rate or the 30-Day Rolling Average Emission Rate for SO₂ or NO_x, Defendants shall explain the change and the reason for using the new methodology.

K. 30-Day Rolling Average Removal Efficiency for SO₂

- 1. Beginning on March 31 of the year following Defendants' obligation pursuant to this Consent Decree to first comply with a 30-Day Rolling Average Removal Efficiency, and continuing annually thereafter, Defendants shall report all 30-Day Rolling Average Removal Efficiency results to determine compliance with such removal efficiency as defined in Paragraph 6 or, for Conesville Units 5 and 6, as specified in Appendix C.
- 2. Within the first report that identifies a 30-Day Rolling Average Removal Efficiency for SO₂, Defendants shall include at least five (5) example calculations (including hourly CEMS data in electronic format for the calculation) used to determine the 30-Day Rolling Average Removal Efficiency for five (5) randomly selected days. If

at any time Defendants change the methodology used in determining the 30-Day Rolling Average Removal Efficiency, Defendants shall explain the change and the reason for using the new methodology.

L. PM Emission Rates

Beginning on March 31, 2010, for Cardinal Units 1 and 2, and beginning on March 31, 2013 for Muskingum River Unit 5, and continuing annually thereafter, Defendants shall report the PM Emission Rate as defined in Paragraph 51, for Cardinal Unit 1, Cardinal Unit 2, and Muskingum River Unit 5. For all such Units, Defendants shall attach a copy of the executive summary and results of any stack test performed during the calendar year covered by the annual report.

M. Environmental Mitigation Projects

1. Mitigation Projects to be Conducted by the States

Defendants shall report the disbursement of funds as required in Paragraph 127 of the Consent Decree in the next annual progress report that Defendants submit pursuant to Paragraph 143 following such disbursement of funds.

2. Appendix A Projects

Beginning March 31, 2008, and continuing on March 31 of each year thereafter until completion of each Project (including any applicable periods of demonstration or testing), Defendants shall provide the United States and Citizen Plaintiffs with written reports detailing the progress of each Project, including Project Dollars.

N. Other Unit becoming an Improved Unit

If Defendants decide to make an Other Unit an Improved Unit, Defendants shall so state in the next annual progress report they submit pursuant to Paragraph 143 after making such decision, and comply with the reporting requirements specified in Section I.G of this Appendix and any other reporting or notice requirements in accordance with the Consent Decree.

II. Deviation Reports

Beginning March 31, 2008, and continuing annually thereafter, Defendants shall report a summary of all deviations from the requirements of the Consent Decree that occurred during the prior calendar year, identifying the date and time that the deviation occurred, the date and time the deviation was corrected, the cause and any corrective actions taken for each deviation, if necessary, and the date that the deviation was initially reported under Paragraph 145. In addition to any express requirements in Section I, above, or in the Consent Decree, such deviations required to be reported include, but are not limited to, the following requirements: the 1-Hour Average NO_x Emission Rate, the

30-Day Rolling Average Emission Rates for SO₂ and NO_x, the 30-Day Rolling Average Removal Efficiency for SO₂, and the PM Emission Rate.

III. Submissions Pending Review

In each annual report Defendants submit pursuant to Paragraph 143, Defendants shall include a list of all plans or submissions made pursuant to this Consent Decree during the calendar year covered by the annual report, the date(s) such plans or submissions were submitted to one or more Plaintiffs for review and/or approval, and shall identify which, if any, are still pending review and approval by Plaintiffs upon the date of submission of the annual report.

IV. Other Information Necessary To Determine Compliance

To the extent that information not expressly identified above is necessary to determine Defendants' compliance with the requirements of this Consent Decree during a reporting period, and has not otherwise been submitted in accordance with the provisions of the Consent Decree, Defendants shall provide such information as part of the annual report required pursuant to Section XI of the Consent Decree.

APPENDIX C

MONITORING STRATEGY AND CALCULATION OF THE 30-DAY ROLLING AVERAGE REMOVAL EFFICIENCY FOR CONESVILLE UNITS 5 AND 6

I. Monitoring Strategy

- 1. The SO₂ monitoring system for Conesville Units 5 & 6 will consist of two separate FGD inlet monitors in each of the two FGD inlet ducts for each Unit, and one FGD outlet monitor in the combined flow from the outlets of the FGD modules for each Unit, prior to the common stack.
- 2. Due to space constraints and potential interferences, monitors are currently located in the inlet duct for one FGD module on each Unit and at the combined outlet from both FGD modules for each Unit prior to entering the stack using best engineering judgment.
- 3. On or before December 31, 2008, Defendants shall submit a monitoring plan to EPA for approval that will propose where to site and install an additional inlet monitor in each of the unmonitored FGD inlet ducts for each Unit, and include a requirement that Defendants submit a complete certification application for the Conesville Units 5 & 6 monitoring system to EPA and the state permitting authority.
- 4. The Monitoring Plan will incorporate the applicable procedures and quality assurance testing found in 40 C.F.R. Part 75, subject to the following:
 - a. The PS-2 siting criteria will not be applied to these monitoring systems; however, the majority of the procedures in Section 8.1.3.2 of PS-2 will be followed. Sampling of at least nine (9) sampling points selected in accordance with PS-1 will be performed prior to the initial RATA. If the resultant SO₂ emission rates for any single sampling point calculated in accordance with Equation 19.7 are all within 10% or 0.02 lb/mmBtu of the mean of all nine (9) sampling points, the alternative traverse point locations (0.4, 1.2, and 2.0 meters from the duct wall) will be representative and may be used for all subsequent RATAs.
 - b. The required relative accuracy test audit will be performed in accordance with the procedures of 40 C.F.R. Part 75, except that the calculations will be performed on an SO₂ emission rate basis (<u>i.e.</u>, lb/mmBtu).
 - c. The criteria for passing the relative accuracy test audit will be the same criteria that 40 C.F.R. Part 75 requires for relative accuracy or alternative performance specification as provided for NO_x emission rates.

- d. "Diluent capping" (i.e., 5% CO₂) will be applied to the SO₂ emission rate for any hours where the measured CO₂ concentration rounds to zero.
- e. Results of quality assurance testing, data gathered by the inlet and outlet monitoring systems, and the resultant 30-day Rolling Average Removal Efficiencies for these monitoring systems are not required to be reported in the quarterly reports submitted to EPA's Clean Air Markets Division for purposes of 40 C.F.R. Part 75. Results will be maintained at the facility and available for inspection, and the 30-day Rolling Average Removal Efficiency will be reported in accordance with the requirements of the Consent Decree and Appendix B. Equivalent data retention and reporting requirements will be incorporated into the applicable permits for these Units.
- f. Missing Data Substitution of 40 C.F.R Part 75 will not be implemented.
- g. Initial performance testing will be performed before the effective date of the 30-Day Rolling Average Removal Efficiency requirements, and the results will be reported to Plaintiffs as part of the annual report submitted in accordance with Appendix B.

II. Calculation of 30-Day Rolling Average Removal Efficiency

1. Removal efficiency shall be calculated by the equation:

[SO₂ emission rate Inlet – SO₂ emission rate Outlet] / SO₂ emission rate Inlet * 100

2. Inlet and outlet emission rates shall be calculated using the methodology specified in 40 C.F.R. Part 60 Appendix B – Method 19. Inlet emission rates will be based on the average of the valid recorded values calculated for each of the inlet FGD monitors at each Unit. Measurements are made on a wet basis, so Equation 19.7 will be utilized to determine the hourly SO₂ emission rate at each location. To make the conversion between the measured wet SO₂ and CO₂ concentrations and an emission rate in pounds per million BTU, an electronic Data System will perform Equation 19.7 using the SO₂ ppm conversion factor from Table 19-1 of Method 19 and the Fc factor for the applicable fuel (currently bituminous coal) in Table 19-2 of Method 19. The resulting equation will be:

Emission rate (lb $SO_2/mmBtu$) = 1.660 x $10^{-7} * SO_2$ (in ppm) * Fc * 100 / CO_2 (in %)

3. The electronic data system will calculate the hourly average SO₂ and CO₂ concentration in accordance with 40 C.F.R. Part 75 quality control/quality assurance requirements and will compute and retain these SO₂ emission rates for every operating hour meeting the minimum data capture requirements in accordance with 40 C.F.R. Part 75. Prior to the

calculation of the SO_2 emission rate, hourly SO_2 and CO_2 concentrations will be rounded to the nearest tenth (<u>i.e.</u>, 0.1 ppm or 0.1 % CO_2) and the resulting SO_2 emission rate will be rounded to the nearest thousandth (<u>i.e.</u>, 0.001 lb/mmBtu).

- 4. From these hourly SO₂ emission rates, SO₂ removal efficiencies will be calculated for each hour when the Unit is firing fossil fuel, and the hourly SO₂ and CO₂ monitors meet the QA/QC requirements of Part 75. Hourly SO₂ removal efficiencies will be computed by taking the hourly inlet SO₂ emission rate minus the outlet SO₂ emission rate, dividing the result by inlet SO₂ emission rate and multiplying by 100. The resulting removal efficiency will be rounded to the nearest tenth (<u>i.e.</u>, 95.1%). Daily SO₂ removal efficiencies will be calculated by taking the sum of Hourly SO₂ removal efficiencies and dividing by the number of valid monitored hours for each Operating Day. The resulting daily removal efficiencies will be rounded to the nearest tenth (i.e., 95.1%).
- 5. The 30-Day Rolling Average Removal Efficiency will be computed by taking the current Operating Day's daily SO₂ removal efficiency (as described in Paragraph 4 of this Appendix C) plus the previous 29 Operating Days' daily SO₂ removal efficiency, and dividing the sum by 30. In the event that a daily SO₂ removal efficiency is not available for an Operating Day, Defendants shall exclude that Operating Day from the calculation of the 30-Day Rolling Average Removal Efficiency. The resulting 30-day Rolling Average Removal Efficiency will be rounded to the nearest tenth of a percent (i.e., a value of 95.04% rounds down to 95.0%, and a value of 95.05% rounds up to 95.1%).

UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF OHIO

UNITED STATES OF AMERICA,)
Plaintiff,) CIVIL ACTION NO.
v.	\
AMERICAN MUNICIPAL POWER, INC.,) CONSENT DECREE
Defendant.))

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APPENDIX A – ENVIRONMENTAL MITIGATION PROJECT

WHEREAS, Plaintiff, the United States of America ("the United States"), on behalf of the United States Environmental Protection Agency ("EPA") is concurrently filing a complaint for injunctive relief and civil penalties pursuant to Sections 113(b) and 167 of the Clean Air Act (the "Act"), 42 U.S.C. §§ 7413(b) and 7477, alleging that Defendant, American Municipal Power, Inc. ("AMP"), an Ohio nonprofit corporation owned and controlled by its over 125 member municipal electric systems located in Kentucky, Michigan, Ohio, Pennsylvania, Virginia, and West Virginia ("AMP Members"), has undertaken construction projects at a major emitting facility in violation of the Prevention of Significant Deterioration ("PSD") provisions of Part C of Subchapter I of the Act, 42 U.S.C. §§ 7470-7492, the Nonattainment New Source Review ("NSR") provisions of Part D of Subchapter I of the Act, 42 U.S.C. §§ 7501-7515, the New Source Performance Standards ("NSPS"), 42 U.S.C. § 7411, requirements of Title V of the Act, 42 U.S.C. § 7661, and the federally approved and enforceable Ohio State Implementation Plan ("SIP");

WHEREAS, in its complaint, the United States alleges, *inter alia*, that AMP failed to obtain the necessary permits and install the controls necessary under the Act to reduce sulfur dioxide ("SO₂"), oxides of nitrogen ("NO_x"), and particulate matter ("PM"), and that AMP failed to obtain an operating permit under Title V of the Act that reflects applicable requirements imposed under Subchapter I of the Act for its R.H. Gorsuch Generating Station ("Gorsuch Station") located near Marietta, Ohio;

WHEREAS, the complaint alleges claims upon which relief can be granted against AMP under Sections 113 and 167 of the Act, 42 U.S.C. §§ 7413 and 7477;

WHEREAS, the United States provided AMP and the State of Ohio actual notice of

alleged violations in accordance with Section 113(a)(1) and (b) of the Act, 42 U.S.C. § 7413(a)(1) and (b);

WHEREAS, the United States and AMP (collectively, the "Parties") have agreed that settlement of this action is in the best interest of the Parties and in the public interest, and that entry of this Consent Decree without further litigation is the most appropriate means of resolving this matter;

WHEREAS, the Parties recognize, and the Court by entering this Consent Decree finds, that this Consent Decree has been negotiated in good faith and at arm's length and that this Consent Decree is fair, reasonable, consistent with the goals of the Act, and in the public interest;

WHEREAS, AMP has cooperated in the resolution of this matter;

WHEREAS, AMP denies the violations alleged in the complaint and associated notices of violation, maintains that it has been and remains in compliance with the Act and is not liable for civil penalties or injunctive relief, and states that it is agreeing to the obligations imposed by this Consent Decree solely to avoid the costs and uncertainties of litigation and to improve the environment, and nothing herein shall constitute an admission of liability;

WHEREAS, the Parties recognize that AMP generates and supplies steam and other utilities from the Gorsuch Station to neighboring businesses that rely on those utilities and that a source of replacement steam will need to be installed and operational before the Gorsuch Station shuts down to ensure an uninterrupted supply of steam and other utilities to those customers;

WHEREAS, the Parties anticipate that the requirements set forth in this Consent Decree, including the requirements to retire the Gorsuch Station and to perform an energy efficiency Environmental Mitigation Project, will achieve significant reductions in emissions and, thereby,

significantly improve air quality; and

WHEREAS, the Parties have consented to entry of this Consent Decree without trial of any issues;

NOW, THEREFORE, without any admission of fact or law, it is hereby ORDERED, ADJUDGED, AND DECREED as follows:

I. JURISDICTION AND VENUE

1. This Court has jurisdiction over this action, the subject matter herein, and the Parties consenting hereto, pursuant to 28 U.S.C. §§ 1331, 1345, 1355, and 1367, and pursuant to Sections 113 and 167 of the Act, 42 U.S.C. §§ 7413 and 7477. Venue is proper under Section 113(b) of the Act, 42 U.S.C. § 7413(b), and under 28 U.S.C. § 1391(b) and (c). Solely for the purposes of this Consent Decree and the underlying complaint, and for no other purpose, AMP waives all objections and defenses that it may have to the Court's jurisdiction over this action, to the Court's jurisdiction over AMP, and to venue in this district. AMP consents to and shall not challenge entry of this Consent Decree or this Court's jurisdiction to enter and enforce this Consent Decree. Except as expressly provided for herein, this Consent Decree shall not create any rights in or obligations of any party other than the Parties to this Consent Decree. Except as provided in Section XXVI (Public Comment) of this Consent Decree, the Parties consent to entry of this Consent Decree without further notice.

II. APPLICABILITY

2. Upon the Effective Date, the provisions of this Consent Decree shall apply to, be binding upon, and inure to the benefit of the Parties, their successors and assigns, and upon AMP's

trustees, officers, employees, servants and agents solely in their capacities as such.

3. AMP shall provide a copy of this Consent Decree to all vendors, suppliers, consultants, contractors, agents, and any other company or other organization retained to perform the work required by this Consent Decree; provided, however, that to the extent such work pertains to the energy efficiency project required by Appendix A of this Consent Decree, AMP shall only be required to provide a copy of this Consent Decree to the primary contractor retained to implement the energy efficiency project. Notwithstanding any retention of contractors, subcontractors, or agents to perform any work required under this Consent Decree, AMP shall be responsible for ensuring that all work is performed in accordance with the requirements of this Consent Decree. In any action to enforce this Consent Decree, AMP shall not assert as a defense the failure of its officers, trustees, employees, servants, agents, or contractors to take actions necessary to comply with this Consent Decree, unless it is determined to be a Force Majeure Event as governed by Section XV of this Consent Decree.

III. <u>DEFINITIONS</u>

- 4. Every term expressly defined by this Section shall have the meaning given that term herein. Every other term used in this Consent Decree that is also a term used under the Act or in a federal regulation implementing the Act shall mean in this Consent Decree what such term means under the Act or those regulations.
- 5. "AMP" means American Municipal Power, Inc.
- 6. "Ohio SIP" means the Ohio State Implementation Plan, and any amendments thereto, as approved by EPA pursuant to Section 110 of the Act, 42 U.S.C. § 7410.
- 7. "CAMD" means EPA's Office of Air and Radiation's Clean Air Markets Division.

- 8. "CEMS" or "Continuous Emission Monitoring System," means, for obligations involving the monitoring of NO_x and SO₂ emissions under this Consent Decree, the devices defined in 40 C.F.R. § 72.2, the inlet SO₂ lb/mmBtu monitors, and the computer system for recording, calculating, and storing data and equations required by this Consent Decree.
- 9. "Clean Air Act" or "Act" means the federal Clean Air Act, 42 U.S.C. §§ 7401-7671q, and its implementing regulations.
- 10. "Consent Decree" means this Consent Decree and the Appendix hereto, which is incorporated into the Consent Decree.
- 11. "Day" means calendar day unless otherwise specified in this Consent Decree.
- 12. "Effective Date" shall have the meaning set forth in Section XXI hereof.
- 13. "Electrostatic Precipitator" or "ESP" means a device for removing particulate matter from combustion gases by imparting an electric charge to the particles and then attracting them to a metal plate or screen of opposite charge before the combustion gases are exhausted to the atmosphere.
- 14. "Environmental Mitigation Project" or "Project" shall have the meaning set forth in Section IX hereof.
- 15. "EPA" means the United States Environmental Protection Agency.
- 16. "Gorsuch Station" means AMP's Gorsuch Generating Station, consisting of four identical pulverized coal-fired boilers capable of generating approximately 650,000 lbs of steam per hour and approximately 53 megawatts ("MW") of electricity each.
- 17. "Gorsuch Members" shall have the meaning set forth in paragraph 27 hereof.
- 18. "lb/mmBtu" means one pound of a pollutant per million British thermal units of heat

input.

- 19. "Netting" shall mean the process of determining whether a particular physical change or change in the method of operation of a major stationary source results in a net emissions increase, as that term is defined at 40 C.F.R. § 52.21(b)(3)(i) and at Ohio Administrative Code (OAC) 3745-31-01(TTT) of the Ohio SIP.
- 20. "NO_x" means oxides of nitrogen, measured in accordance with the provisions of this Consent Decree.
- 21. " NO_x Allowance" means an authorization to emit a specified amount of NO_x that is allocated or issued under an emissions trading or marketable permit program of any kind that has been established under the Clean Air Act or the Ohio SIP. NO_x Allowance does not include offsets.
- 22. "Ownership Interest" means part or all of AMP's legal or equitable ownership interest in the Gorsuch Station.
- 23. "PM" means total filterable particulate matter, measured in accordance with the provisions of this Consent Decree.
- 24. "Parties" means the United States of America on behalf of EPA and AMP. "Party" means one of the named "Parties."
- 25. "Plant-wide Tonnage" means the sum of the tons of pollutant in question emitted from the Gorsuch Station including, without limitation, all tons of that pollutant during periods of startup, shutdown, and malfunction, in the designated calendar year.
- 26. "Prevention of Significant Deterioration" or "PSD" means the prevention of significant deterioration air quality program under Part C of Subchapter I of the Clean Air Act, 42 U.S.C. §§

- 7470 7492, and 40 C.F.R. § 52.21. It also includes the prevention of significant deterioration of air quality program as approved into the Ohio SIP, OAC 3745-31-11 to 3745-31-20.
- 27. "Project Dollars" means expenditures and payments of AMP and AMP Members who were participants in the Gorsuch Station Project through Power Sales Contracts dated as of January 1, 1988 ("Gorsuch Members"), incurred or made in carrying out the Project identified in Section IX (Environmental Mitigation Project) of this Consent Decree to the extent that such expenditures or payments both: (a) comply with the requirements set forth in Section IX and Appendix A of this Consent Decree, and (b) constitute AMP's or the Gorsuch Members' direct payments for such projects, or AMP's or the Gorsuch Members' external costs for contractors, vendors, equipment, and the like.
- 28. "Retire" means that AMP shall: (a) permanently shut down and cease to operate the Gorsuch Station as a coal-fired steam and/or electric generation plant, rendering the Gorsuch Station physically incapable of combusting coal and operating as a coal-fired electric generation plant; and (b) comply with any state and/or federal requirements applicable to the Gorsuch Station, and (c) relinquish all Clean Air Act permits for the Gorsuch Station. AMP shall amend any affected permits so as to reflect the permanent shutdown status of the Gorsuch Station as a coal-fired steam and/or electric generation plant.
- 29. "SO₂" means sulfur dioxide, measured in accordance with the provisions of this Consent Decree.
- 30. "SO₂ Allowance" means an authorization or credit to emit a specified amount of SO₂ that is allocated or issued under an emissions trading or marketable permit program of any kind that has been established under the Clean Air Act or the Ohio SIP. SO₂ Allowance does not include

offsets.

- 31. "State" means the State of Ohio.
- 32. "Super-Compliant Allowance" means a NO_x or SO₂ Allowance attributable to reductions beyond the requirements of this Consent Decree including, but not limited to, emission reductions attributable to curtailments of fuel use or operating hours.
- 33. "Surrender" means, with regard to SO₂ or NO_x Allowances, permanently surrendering so that such Allowances can never be used to meet any compliance requirement under the Clean Air Act or the Ohio SIP.
- 34. "Title V Permit" means the permit required of AMP's Gorsuch Station under Subchapter V of the Act, 42 U.S.C. §§ 7661-7661e.
- 35. "Unit" means each approximately 650,000 lb/hour steam flow capacity, pulverized coal-fired, boiler at the Gorsuch Station.

IV. RETIRE GORSUCH STATION

36. No later than December 31, 2012, AMP shall Retire the Gorsuch Station.

V. INTERIM NO_x EMISSION LIMITATIONS

A. NO_x Emission Reductions and Controls

- 1. Plant-Wide Tonnage Limitation and Monitoring for NO_x
- 37. Beginning with calendar year 2010 and continuing each calendar year until the end of 2012, AMP shall not exceed the following Plant-wide Tonnage limitations at the Gorsuch Station for NO_x :

Calendar Year	NO _x Limit
2010	2,600 tons
2011	2,300 tons
2012	2,100 tons

38. For purposes of calculating the Plant-wide Tonnage for NO_x when a Unit operates, AMP shall use CEMS in accordance with the procedures specified in 40 C.F.R. Part 75.

2. Continuous Operation of NO_x Controls

39. AMP shall continuously operate at the Gorsuch Station the existing low NO_x burners and the existing rotating overfire air systems that are at Units 2 and 3 at all times that the Unit the control serves is in operation, consistent with the technological limitations, manufacturers' specifications, and good engineering and maintenance practices for minimizing emissions to the extent practicable.

B. NO_x Allowance Surrender

- 40. Except as provided in Paragraph 45, AMP shall not sell, trade, or transfer any NO_x Allowances allocated to the Gorsuch Station that would otherwise be available for sale, trade, or transfer as a result of the actions taken by AMP to comply with the requirements of this Consent Decree.
- 41. Beginning with calendar year 2010, and continuing each calendar year thereafter, AMP shall surrender to EPA, or transfer to a non-profit third party selected by AMP for purposes of surrender, all NO_x Allowances allocated to AMP's Gorsuch Station for that calendar year that AMP does not need in order to meet its own federal and/or State Clean Air Act regulatory

requirements at AMP's Gorsuch Station.

- 42. AMP shall make its surrender of NO_x Allowances annually, within forty-five (45) days of notice from EPA regarding the NO_x Allowances deducted for compliance for the previous calendar year. Any surrender need not include the specific NO_x Allowances that were allocated to the Gorsuch Station, so long as AMP surrenders NO_x Allowances that are from the same year and that are equal to the number required to be surrendered under this Subsection.
- 43. If any NO_x Allowances required to be surrendered under this Consent Decree are transferred to a non-profit third party, AMP shall include a description of such transfer in the next report submitted to EPA pursuant to Section XII (Periodic Reporting) of this Consent Decree. Such report shall: (a) provide the identity of the non-profit third party recipient(s) of the NO_x Allowances and a listing of the serial numbers of the transferred NO_x Allowances; and (b) include a certification by the third-party recipient(s) stating that the recipient(s) will not sell, trade, or otherwise exchange any of the allowances and will not use any of the NO_x Allowances to meet any obligation imposed by any environmental law. No later than the third periodic report due after the transfer of any NO_x Allowances, AMP shall include a statement that the third-party recipient(s) surrendered the NO_x Allowances for permanent surrender to EPA in accordance with the provisions of Paragraph 44 within one year after AMP transferred the Allowances to them. AMP shall not have complied with the NO_x Allowance surrender requirements of this Paragraph until all third-party recipient(s) of AMP's NO_x Allowances designated for surrender shall have actually surrendered the transferred NO_x Allowances to EPA.
- 44. For all NO_x Allowances required to be surrendered to EPA, AMP or the third-party recipient(s) (as the case may be) shall first submit a NO_x Allowance transfer request form to

CAMD directing the transfer of such NO_x Allowances to the EPA Enforcement Surrender Account or to any other EPA account that EPA may direct in writing. As part of submitting these transfer requests, AMP or the third-party recipient(s) shall irrevocably authorize the transfer of these NO_x Allowances and identify – by name of account and any applicable serial or other identification numbers or station names – the source and location of the NO_x Allowances being surrendered

C. General NO_x Provisions

- 45. Provided that AMP is in compliance with all NO_x emission limitations established in this Consent Decree, nothing in this Consent Decree shall preclude AMP from using, selling, or transferring Super-Compliant NO_x Allowances that may arise as a result of achieving and maintaining annual NO_x emissions at the Gorsuch Station below the Plant-wide Tonnage limits required in this Consent Decree, so long as AMP timely reports the generation of such Super-Compliant NO_x Allowances in accordance with Section XII (Periodic Reporting) of this Consent Decree.
- AMP shall not use NO_x Allowances to comply with any requirement of this Consent Decree, including by claiming compliance with any emission limitation required by this Consent Decree by using, tendering, or otherwise applying NO_x Allowances to offset any excess emissions (i.e., emissions above the limits specified in Paragraph 37).
- 47. Nothing in this Consent Decree shall prevent AMP from purchasing or otherwise obtaining, holding, carrying over from year to year, or selling or otherwise transferring NO_x Allowances allocated to a source other than the Gorsuch Station to the extent allowed by law.

48. The requirements in Paragraphs 40 through 44 of this Consent Decree pertaining to AMP's surrender of NO_x Allowances are permanent injunctions not subject to any termination provision of this Consent Decree.

VI. <u>INTERIM SO₂ EMISSION LIMITATIONS</u>

A. SO₂ Emission Reductions and Controls

1. SO₂ Tonnage Limitation and Monitoring

49. Beginning with calendar year 2010 and continuing until the end of 2012, AMP shall not exceed the following Plant-wide Tonnage limitations for SO₂:

Calendar Year	SO ₂ Limit
2010	26,000 tons
2011	23,000 tons
2012	21,000 tons

50. For purposes of calculating the Plant-wide Tonnage of SO₂ when a Unit operates, AMP shall use CEMS in accordance with the procedures specified in 40 C.F.R. Part 75.

2. Continuous Operation of SO₂ Controls

51. AMP shall continuously operate all existing SO₂ control measures, including coal blending procedures, to reduce SO₂ emissions at all times that the Gorsuch Station is in operation, consistent with the technological limitations, manufacturers' specifications, and good engineering and maintenance practices.

B. Surrender of SO₂ Allowances

- 52. Except as provided in Paragraph 57, AMP shall not sell, trade, or transfer any SO₂ Allowances allocated to the Gorsuch Station that would otherwise be available for sale, trade, or transfer as a result of the actions taken by AMP to comply with the requirements of this Consent Decree.
- 53. Beginning with calendar year 2010, and continuing each calendar year thereafter, AMP shall surrender to EPA, or transfer to a non-profit third party selected by AMP for purposes of surrender, all SO₂ Allowances allocated to AMP for the Gorsuch Station for that calendar year that AMP does not need in order to meet its own federal and/or State Clean Air Act regulatory requirements at the Gorsuch Station.
- 54. AMP shall make its surrender of SO₂ Allowances annually, within forty-five (45) days of its receipt from EPA of the Annual Deduction Reports for SO₂. Any surrender need not include the specific SO₂ Allowances that were allocated to the Gorsuch Station, so long as AMP surrenders SO₂ Allowances that are from the same year and that are equal to the number required to be surrendered under this Subsection.
- 55. If any SO₂ Allowances are transferred directly to a non-profit third party for surrender to EPA, AMP shall include a description of such transfer in the next report submitted to EPA pursuant to Section XII (Periodic Reporting) of this Consent Decree. Such report shall: (i) provide the identity of the non-profit third-party recipient(s) of the SO₂ Allowances and a listing of the serial numbers of the transferred SO₂ Allowances; and (ii) include a certification by the non-profit third-party recipient(s) stating that the recipient(s) will not sell, trade, or otherwise exchange any of the SO₂ Allowances and will not use any of the SO₂ Allowances to meet any

obligation imposed by any environmental law. No later than the third periodic report due after the transfer of any SO₂ Allowances, AMP shall include a statement that the non-profit third-party recipient(s) surrendered the SO₂ Allowances for permanent surrender to EPA in accordance with the provisions of Paragraph 55 within one (1) year after AMP transferred the SO₂ Allowances to them. AMP shall not have complied with the SO₂ Allowance surrender requirements of this Subsection until all non-profit third-party recipient(s) of AMP's SO₂ Allowances designated for surrender shall have actually surrendered the transferred SO₂ Allowances to EPA.

56. For all SO₂ Allowances surrendered to EPA, AMP or the non-profit third-party recipient(s) (as the case may be) shall first submit an SO₂ Allowance transfer request form to CAMD directing the transfer of such SO₂ Allowances to the EPA Enforcement Surrender Account or to any other EPA account that EPA may direct in writing. As part of submitting these transfer requests, AMP or the non-profit third-party recipient(s) shall irrevocably authorize the transfer of these SO₂ Allowances and identify – by name of account and any applicable serial or other identification numbers or station names – the source and location of the SO₂ Allowances being surrendered.

C. General SO₂ Provisions

57. Provided that AMP is in compliance with all SO₂ emission limitations established in this Consent Decree, nothing in this Consent Decree shall preclude AMP from using, selling, or transferring Super-Compliant SO₂ Allowances that may arise as a result of achieving and maintaining annual SO₂ emissions at the Gorsuch Station below the Plant-wide Tonnage limits required in this Consent Decree, so long as AMP timely reports the generation of such Super-Compliant SO₂ Allowances in accordance with Section XII (Periodic Reporting) of this Consent

Decree.

- 58. AMP shall not use SO₂ Allowances to comply with any requirement of this Consent Decree, including by claiming compliance with any emission limitation required by this Consent Decree by using, tendering, or otherwise applying SO₂ Allowances to offset any excess emissions (<u>i.e.</u>, emissions above the limits specified in Paragraph 49).
- 59. Nothing in this Consent Decree shall prevent AMP from purchasing or otherwise obtaining, holding, carrying over from year to year, selling or otherwise transferring SO₂
 Allowances allocated to a source other than the Gorsuch Station to the extent allowed by law.
- 60. The requirements in Paragraphs 52 through 56 of this Consent Decree pertaining to AMP's surrender of SO₂ Allowances are permanent injunctions not subject to any termination provision of this Consent Decree.

VII. PM EMISSION REDUCTIONS

61. Beginning thirty (30) days after the Effective Date, and continuing thereafter, AMP shall operate each ESP at the Gorsuch Station at all times when the Units the ESP serves are in operation to maximize PM emission reductions, provided that such operation of the ESP is consistent with the technological limitations, manufacturers' specifications and good engineering and maintenance practices for the ESP. AMP shall, at a minimum, to the extent reasonably practicable: (a) fully energize each section of the ESP for each unit, and repair any failed ESP section at the next planned or unplanned Unit outage; (b) operate automatic control systems on each ESP to maximize PM collection efficiency; (c) maximize power levels delivered to the ESP consistent with manufacturers' specifications, the operational design of the unit, and good

engineering practices; (d) inspect for and repair during the next planned or unplanned unit outage of sufficient length any openings in ESP casings, ductwork and expansion joints to minimize air leakage; (e) and optimize the plate-cleaning and discharge-electrode-cleaning systems for the ESP by varying the cycle time, cycle frequency, rapper-vibrator intensity, and number of strikes per cleaning event.

VIII. PROHIBITION ON NETTING CREDITS OR OFFSETS

- 62. Emissions reductions at the Gorsuch Station that result from actions to be taken by AMP after entry of this Consent Decree to comply with the requirements of this Consent Decree shall not be considered as a creditable contemporaneous emission decrease for the purpose of obtaining a netting credit or offset under the Clean Air Act's Nonattainment New Source Review and PSD Programs.
- 63. Notwithstanding Paragraph 62, AMP may rely on emission reductions resulting from Retiring the Gorsuch Station, solely as offsets for purposes of Nonattainment New Source Review permitting as described in this Paragraph. AMP may rely on such emission reductions solely for the purpose of applying for a Nonattainment New Source Review Permit for a new natural gas fired steam and/or electricity generating station of up to 175 MW combined electric generating capacity from all new units ("new gas unit"), and up to 1600 mmBTU/hour, at the Gorsuch Station. Emission reductions resulting from Retiring the Gorsuch Station beyond those needed for purposes of offsets for permitting such new gas unit(s) shall be subject to the prohibition in Paragraph 62. The following additional limitations shall apply to the use of

emission reductions resulting from Retiring the Gorsuch Station for purposes of obtaining offsets:

- a. Such emission reductions must be otherwise creditable under the Ohio SIP and AMP
 must satisfy all Clean Air Act and Ohio SIP criteria for generating offsets;
- b. Construction of the permitted new gas unit(s) shall commence no later than five years
 after the Effective Date of this Consent Decree; and
- c. Ohio EPA must determine that emissions from the new gas unit(s) at the Gorsuch Station will not interfere with "reasonable further progress" toward attainment of a National Ambient Air Quality Standard in accordance with Part D of the Clean Air Act.

Nothing in this Paragraph or this Consent Decree shall be construed as relieving AMP from its obligations to apply for appropriate New Source Review permits under the PSD and/or Nonattainment NSR programs for the construction and operation of the new gas unit(s) at the Gorsuch Station.

64. In addition to the limitations in Paragraph 63, AMP may not generate or use any offsets from the Retirement of the Gorsuch Station unless AMP certifies, pursuant to the requirements of Section XIII (Review and Approval of Submittals) that sufficient verified offsets are unavailable under Ohio's Emission Reduction Credit Banking Program, Ohio Admin. Code 3745-111. As part of such certification, AMP must determine the availability of Verified Emission Reduction Credits (Verified ERCs), as defined by OAC 3745-111-01(B), (I), and (J), as of the date it submits a construction permit application requiring offsets for any project otherwise allowed by Paragraph 63. If Verified ERCs are certified to be available, AMP must

purchase the available Verified ERCs before using any offsets generated at the Gorsuch Station that are available for use to permit the new gas unit(s) in accordance with Paragraph 63 herein. AMP shall include in its certification the number of Verified ERCs available, the number of Verified ERCs purchased, and the number of Gorsuch Station offsets to be used to permit the new gas unit(s).

one of this Consent Decree is intended to preclude the emission reductions generated under this Consent Decree from being considered by the State or EPA as credible contemporaneous emission decreases for the purpose of attainment demonstrations submitted pursuant to Section 110 of the Act, 42 U.S.C. § 7410, or in determining impacts on National Ambient Air Quality Standards, PSD increment, or air quality related values, including visibility, in a Class I area.

IX. ENVIRONMENTAL MITIGATION PROJECT

66. AMP shall implement the Environmental Mitigation Project promoting energy efficiency described in Appendix A to this Consent Decree ("Project") in compliance with the terms of this Consent Decree. Since the Project will be implemented as part of a broad public power energy efficiency program funded in part by other sources unrelated to the Consent Decree, the Project will be considered complete when AMP and the Gorsuch Members spend a total of \$15,000,000 in Project Dollars over the course of not more than four (4) calendar years, starting in 2010, unless EPA approves a fifth year for expenditures as set forth in Appendix A. AMP shall not include its internal personnel costs in overseeing the implementation of the Project as Project Dollars counting toward the \$15,000,000 total spend requirement.

- AMP shall maintain, and present to EPA upon request, all documents to substantiate the Project Dollars expended to implement the Project described in Appendix A, and shall provide these documents to EPA within thirty (30) days of a request for the documents.
- 68. All reports prepared by AMP pursuant to the requirements of this Section of the Consent Decree and required to be submitted to EPA shall be publicly available from AMP without charge, subject to the limitations in Paragraph 120.
- 69. AMP shall certify, as of the date AMP executes this Consent Decree, that AMP is not otherwise required by law to perform the Project described in Appendix A except for the force of local ordinances or resolutions of Gorsuch Members implementing the Project, that AMP is unaware of any other person who is required by law to perform the Project, and that AMP will not use the Project, or a portion thereof, to satisfy any obligations that it may have under other applicable requirements of law, including any applicable renewable or energy efficiency portfolio standards, except for the force of local ordinances or resolutions of Gorsuch Members implementing the Project.
- 70. AMP shall use good faith efforts to secure as much environmental benefit as possible for the Project Dollars expended, consistent with the applicable requirements and limits of this Consent Decree.
- 71. If AMP elects to undertake the Project described in Appendix A by contributing funds to another person or entity that will carry out the Project in lieu of AMP, but not including AMP's agents or contractors or the Gorsuch Members' agents or contractors, that person or instrumentality must, in writing: (a) identify its legal authority for accepting such funding; and (b) identify its legal authority to conduct the Project for which AMP contributes the funds.

Regardless of whether AMP elects to undertake the Project by itself or to do so by contributing funds to another person or instrumentality that will carry out the Project, AMP acknowledges that it will receive credit for the expenditure of such funds as Project Dollars only if AMP demonstrates that the funds have been actually spent by AMP, a Gorsuch Member, or by the person or instrumentality receiving them, and that such expenditures met all requirements of this Consent Decree.

- 72. AMP shall comply with the reporting requirements described in Appendix A.
- 73. In connection with initial communications to the Gorsuch Members regarding AMP's Project expenditures pursuant to this Consent Decree, AMP shall include prominently in the communication the information that the Project expenditures were required as part of a Clean Air Act consent decree.
- 74. Within one hundred eighty (180) calendar days following the completion of the Project portion of the energy efficiency program and the expenditure of all Project Dollars required under this Consent Decree, including any applicable periods of verification and benefit quantification from those expenditures, AMP shall submit to the United States in accordance with Paragraph 115 a report that documents the date that the Project was completed, AMP's results of implementing the Project, including the emission reductions or other environmental benefits achieved, and the Project Dollars expended by AMP in implementing the Project.

X. CIVIL PENALTY

75. Within thirty (30) calendar days after entry of this Consent Decree, AMP shall pay to the United States a civil penalty in the amount of \$850,000. The civil penalty shall be paid by Electronic Funds Transfer ("EFT") to the United States Department of Justice, in accordance

with current EFT procedures, referencing USAO File Number 2010A48252 and DOJ Case Number 90-5-2-1-09886 and the civil action case name and case number of this action. The costs of such EFT shall be AMP's responsibility. Payment shall be made in accordance with instructions provided to AMP by the Financial Litigation Unit of the U.S. Attorney's Office for the Southern District of Ohio. Any funds received after 2:00 p.m. EDT shall be credited on the next business day. At the time of payment, AMP shall provide notice of payment, referencing the USAO File Number, the DOJ Case Number, and the civil action case name and case number, to the Department of Justice and to EPA in accordance with Section XIX (Notices) of this Consent Decree.

- 76. Failure to timely pay the civil penalty shall subject AMP to interest accruing from the date payment is due until the date payment is made at the rate prescribed by 28 U.S.C. § 1961, and shall render AMP liable for all charges, costs, fees, and penalties established by law for the benefit of a creditor or of the United States in securing payment.
- 77. Payments made pursuant to this Section are penalties within the meaning of Section 162(f) of the Internal Revenue Code, 26 U.S.C. § 162(f), and are not tax-deductible expenditures for purposes of federal law.

XI. RESOLUTION OF PAST CIVIL CLAIMS

78. Entry of this Consent Decree shall resolve all civil claims of the United States arising under Part C of Subchapter I of the Clean Air Act, 42 U.S.C. §§ 7470 to 7492, under Part D of Subchapter I of the Act, 42 U.S.C. §§ 7501-7515, under Section 111 of the Act, 42 U.S.C. § 7411, and under Subchapter V of the Clean Air Act, §§ 7661 to 7661f, that arose from

modifications that commenced at the Gorsuch Station prior to the date of lodging of this Consent Decree. Entry of this Consent Decree shall also resolve the civil claims of the United States for the opacity violations alleged in the Complaint filed in this action, and any additional opacity violations committed by AMP at the Gorsuch Station through the date of lodging of the Decree.

XII. PERIODIC REPORTING

- 79. After entry of this Consent Decree, AMP shall submit to the United States a periodic report, within sixty (60) days after the end of each half of the calendar year (January through June and July through December) until such time as the Gorsuch Station is Retired and the Project is completed as applicable. The report shall include the following information:
 - a. all information necessary to determine compliance with the requirements of the following Sections of this Consent Decree: Section IV concerning retiring the Gorsuch Station; Section V concerning NO_x emissions and the surrender of NO_x Allowances; Section VI concerning SO₂ emissions and the surrender of SO₂ Allowances; and Section VII concerning PM emissions;
 - all information relating to Super-Compliant Allowances that AMP claims to have generated in accordance with Paragraphs 45 and 57 through emission reductions beyond the requirements of this Consent Decree;
 - c. information relating to the number of offsets generated by Retiring the Gorsuch Station; the number of offsets used to permit a natural gas unit pursuant to Paragraph 63; and the number of offsets purchased in order to permit the natural gas unit pursuant to Paragraph 64.

- d. for the Project, a summary of actions taken, funds expended during the reporting period, as well as cumulative expenditures, and energy efficiency and estimated environmental benefits achieved to date in satisfaction of the requirements of Section IX (Environmental Mitigation Project).
- 80. In any periodic report submitted pursuant to this Section, AMP may incorporate by reference information previously submitted under its Title V permitting requirements, provided that AMP attaches the Title V permit report (or the pertinent portions of such report) and provides a specific reference to the provisions of the Title V permit report that are responsive to the information required in the periodic report.
- 81. In addition to the reports required by Paragraph 79, if AMP violates or deviates from any provision of this Consent Decree, excluding late reports for which the report itself is sufficient notice of the deviation, AMP shall submit to the United States a report on the violation or deviation within ten (10) business days after AMP obtained knowledge of the event. In the report, AMP shall explain the cause or causes of the violation or deviation and any measures taken or to be taken by AMP to cure the reported violation or deviation or to prevent such violation or deviations in the future. If at any time, the provisions of this Consent Decree are included in Title V Permits, consistent with the requirements for such inclusion in this Consent Decree, then the deviation reports required under applicable Title V regulations may be submitted to the United States to satisfy all the requirements of this Paragraph.
- 82. Each AMP report shall be signed by AMP's Environmental Manager (or equivalent title), and shall contain the following certification: This information was prepared either by me or under my direction or supervision in accordance with a system designed to assure that qualified

personnel properly gather and evaluate the information submitted. Based on my evaluation, or the direction and my inquiry of the person(s) who manage the system, or the person(s) directly responsible for gathering the information, I hereby certify under penalty of law that, to the best of my knowledge and belief, this information is true, accurate, and complete. I understand that there are significant penalties for submitting false, inaccurate, or incomplete information to the United States.

83. If any NO_x or SO₂ Allowances are surrendered to any non-profit third party pursuant to Paragraphs 43 and 55, the non-profit third party's certification shall be signed by a managing officer of the non-profit third party and shall contain the following language: I certify under penalty of law that ______ [name of non-profit third party] will not sell, trade, or otherwise exchange any of the allowances and will not use any of the allowances to meet any obligation imposed by any environmental law. I understand that there are significant penalties for making misrepresentations to or misleading the United States.

XIII. REVIEW AND APPROVAL OF SUBMITTALS

84. AMP shall submit each report or other submission required by this Consent Decree to EPA whenever such a document is required to be submitted for review or approval pursuant to this Consent Decree. EPA may approve the submittal or decline to approve it and provide written comments explaining the bases for declining such approval as soon as reasonably practicable. Within sixty (60) days of receiving written comments from EPA, AMP shall either:

(a) revise the submittal consistent with the written comments and provide the revised submittal to EPA; or (b) submit the matter for dispute resolution, including the period of informal

negotiations, under Section XVI (Dispute Resolution) of this Consent Decree.

85. Upon receipt of EPA's final approval of the submittal, or upon completion of the submittal pursuant to dispute resolution, AMP shall implement the approved submittal in accordance with the schedule specified therein or another EPA-approved schedule.

XIV. STIPULATED PENALTIES

86. For any failure by AMP to comply with the terms of this Consent Decree, and subject to the provisions of Sections XV (Force Majeure) and XVI (Dispute Resolution), AMP shall pay, within thirty (30) days after receipt of written demand to AMP by the United States, the following stipulated penalties to the United States:

Consent Decree Violation	Stipulated Penalty
a. Failure to pay the civil penalty as specified in Section X (Civil Penalty) of this Consent Decree	\$10,000 per day
b. Failure to Retire the Gorsuch Station pursuant to Section IV	\$10,000 per day for first 30 days; \$37,500 per day for violations thereafter. Each day of violation shall also require the surrender of three SO ₂ allowances for each ton of SO ₂ emitted and three NO _x allowances for each ton of NO _x emitted.
c. Failure to meet the Plant-wide Tonnage NO _x limitation required by Paragraph 37 (Interim NO _x Emissions Limitations)	\$5,000 per ton for the first 100 tons over the limit; \$10,000 per ton for each ton over 100 tons, plus the surrender of NO_x allowances in an amount equal to two times the number of tons by which the tonnage limitation was exceeded.

d. Failure to meet the Plant-wide Tonnage SO ₂ limitation required by Paragraph 49 (Interim SO ₂ Emissions Limitations)	\$5,000 for the first 100 tons over the limit; \$10,000 per ton for each ton over100 tons, plus the surrender of SO ₂ allowances in an amount equal to two times the number of tons by which the tonnage limitation was exceeded.
e. Failure to surrender NO _x allowances pursuant to Paragraph 42.	(a) \$37,500 per day plus (b) \$1,000 per NO _x Allowance not surrendered
f. Failure to surrender SO ₂ allowances pursuant to Paragraph 54	(a) \$37,500 per day plus (b) \$1,000 per SO ₂ Allowance not surrendered
g. Failure to apply for any permit required by Section XVII (Permits)	\$1,000 per day per violation
h. Failure to timely submit, modify, or implement as approved, the reports or other submittals required by this Consent Decree	\$750 per day per violation during the first 10 days, \$1,000 per day per violation thereafter
i. Failure to demonstrate the third-party surrender of an NO _x Allowance pursuant to Paragraphs 43 and 44	\$2,500 per day per violation
j. Failure to demonstrate the third-party surrender of a SO ₂ Allowance pursuant to Paragraphs 55 and 56	\$2,500 per day per violation
k. Failure to undertake and complete the Environmental Mitigation Project in compliance with Section IX (Environmental Mitigation Project) of this Consent Decree and Appendix A	\$1,000 per day per violation during the first 30 days, \$5,000 per day per violation thereafter
l. Failure to operate the existing NO _x controls pursuant to Paragraph 39.	\$5,000 per day per violation
m. Failure to operate the existing SO ₂ control pursuant to Paragraph 51.	\$5,000 per day per violation
n. Failure to operate the existing PM controls pursuant to Paragraph 61.	\$5,000 per day per violation

o. Using, selling, or transferring NO _x Allowances, except as permitted by Paragraphs 41 through 47.	(a) four times the market value of the improperly used allowance, as measured at the time of the improper use, plus (b) the surrender, pursuant to the procedures set forth in Paragraphs 41 through 44 of this Decree, of NO _x Allowances in an amount equal to the NO _x Allowances used, sold, or transferred in violation of the Decree.
p. Using, selling, or transferring SO ₂ Allowances, except as permitted by Paragraphs 53 through 59.	(a) four times the market value of the improperly used allowance, as measured at the time of the improper use, plus (b) the surrender, pursuant to the procedures set forth in Paragraphs 53 through 57 of this Decree, of SO ₂ Allowances in an amount equal to the SO ₂ Allowances used, sold, or transferred in violation of the Decree.
q. Any other violation of this Consent Decree	\$1,000 per day per violation

- 87. All stipulated penalties shall begin to accrue on the day after the performance is due or on the day a violation occurs, whichever is applicable, and shall continue to accrue until performance is satisfactorily completed or until the violation ceases, whichever is applicable.

 Nothing in this Consent Decree shall prevent the simultaneous accrual of separate stipulated penalties for separate violations of this Consent Decree.
- 88. AMP shall pay all stipulated penalties to the United States within thirty (30) days of

receipt of written demand to AMP from the United States, and shall continue to make such payments every thirty (30) days thereafter until the violation(s) no longer continues, unless AMP elects within twenty (20) days of receipt of written demand to AMP from the United States to dispute the accrual of stipulated penalties in accordance with the provisions in Section XVI (Dispute Resolution) of this Consent Decree.

- 89. Stipulated penalties shall continue to accrue as provided in accordance with Paragraph 86 during any dispute, with interest on accrued stipulated penalties payable and calculated at the rate established by the Secretary of the Treasury, pursuant to 28 U.S.C. § 1961, but need not be paid until the following:
 - a. If the dispute is resolved by agreement, or by a decision of the United States pursuant to Section XVI (Dispute Resolution) of this Consent Decree that is not appealed to the Court, accrued stipulated penalties agreed or determined to be owing, together with accrued interest, shall be paid within thirty (30) days of the effective date of the agreement or of the receipt of the United States' decision;
 - b. If the dispute is appealed to the Court and the United States prevails in whole or in part, AMP shall, within thirty (30) days of receipt of the Court's decision or order, pay all accrued stipulated penalties determined by the Court to be owing, together with interest accrued on such penalties determined by the Court to be owing, except as provided in Subparagraph c, below;
 - c. If the Court's decision is appealed by either Party, AMP shall, within fifteen (15) days of receipt of the final appellate court decision, pay all accrued stipulated penalties, together with interest accrued on such stipulated penalties determined to

be owing by the appellate court. If the appellate court remands the action to the District Court for a re-calculation of the amount of stipulated penalties, AMP shall pay all accrued stipulated penalties, together with interest accrued on such stipulated penalties, within fifteen (15) days of entry of the District Court's order.

Notwithstanding any other provision of this Consent Decree, the accrued stipulated penalties agreed by the United States and AMP, or determined by the United States through Dispute Resolution, to be owing may be less than the stipulated penalty amounts set forth in Paragraph 86.

- 90. All stipulated penalties shall be paid in the manner set forth in Section X (Civil Penalty) of this Consent Decree.
- 91. Should AMP fail to pay stipulated penalties in compliance with the terms of this Consent Decree, the United States shall be entitled to collect interest on such penalties, as provided for in 28 U.S.C. § 1961.
- 92. The stipulated penalties provided for in this Consent Decree shall be in addition to any other rights, remedies, or sanctions available to the United States by reason of AMP's failure to comply with any requirement of this Consent Decree or applicable law, except that for any violation of the Act for which this Consent Decree provides for payment of a stipulated penalty, AMP shall be allowed a credit for stipulated penalties paid against any statutory penalties also imposed for such violation.

XV. FORCE MAJEURE

93. For purposes of this Consent Decree, a "Force Majeure Event" shall mean an event that, despite AMP's best efforts to fulfill the obligation, has been or will be caused by circumstances

beyond the control of AMP, its contractors, or any entity controlled by AMP that delays compliance with any provision of this Consent Decree or otherwise causes a violation of any provision of this Consent Decree. "Best efforts to fulfill the obligation" include using the best efforts to anticipate any potential Force Majeure Event and to address the effects of any such event (a) as it is occurring and (b) after it has occurred, such that any adverse environmental effects of the delay or violation is minimized to the greatest extent possible.

- 94. Notice of Force Majeure Events. If any event occurs or has occurred that may delay compliance with or otherwise cause a violation of any obligation under this Consent Decree, as to which AMP intends to assert a claim of Force Majeure, AMP shall notify the United States in writing as soon as practicable, but in no event later than twenty-one (21) calendar days following the date AMP first knew, or by the exercise of due diligence should have known, that the event caused or may cause such delay or violation. In this notice, AMP shall reference this Paragraph of this Consent Decree and describe the anticipated length of time that the delay or violation may persist, the cause or causes of the delay or violation, all measures taken or to be taken by AMP to prevent or minimize the delay or violation, the schedule by which AMP proposes to implement those measures, and AMP's rationale for attributing a delay or violation to a Force Majeure Event. AMP shall adopt all reasonable measures to avoid or minimize such delays or violations and any resulting adverse environmental effects. AMP shall be deemed to know of any circumstance which AMP, its contractors, or any entity controlled by AMP knew or should have known.
- 95. <u>Failure to Give Notice</u>. If AMP fails to comply with the notice requirements of this Section, the United States may void AMP's claim for Force Majeure as to the specific event for

which AMP has failed to comply with such notice requirement.

- 96. <u>United States' Response</u>. The United States shall notify AMP in writing regarding AMP's claim of Force Majeure within twenty (20) business days of receipt of the notice provided under Paragraph 94. If the United States agrees that a delay in performance has been or will be caused by a Force Majeure Event, the United States and AMP shall stipulate to an extension of deadline(s) for performance of the affected compliance requirement(s) by a period equal to the delay actually caused by the event. In such circumstances, an appropriate modification shall be made pursuant to Section XXIII (Modification) of this Consent Decree.
- 97. <u>Disagreement</u>. If the United States does not accept AMP's claim of Force Majeure, or if the United States and AMP cannot agree on the length of the delay actually caused by the Force Majeure Event, the matter shall be resolved in accordance with Section XVI (Dispute Resolution) of this Consent Decree.
- 98. <u>Burden of Proof.</u> In any dispute regarding Force Majeure, AMP shall bear the burden of proving that any delay in performance or any other violation of any requirement of this Consent Decree was caused by or will be caused by a Force Majeure Event. AMP shall also bear the burden of proving that AMP gave the notice required by this Section and the burden of proving the anticipated duration and extent of any delay(s) attributable to a Force Majeure Event. An extension of one compliance date based on a particular event may, but will not necessarily, result in an extension of a subsequent compliance date.
- 99. <u>Events Excluded</u>. Unanticipated or increased costs or expenses associated with the performance of AMP's obligations under this Consent Decree shall not constitute a Force Majeure Event.

- 100. Potential Force Majeure Events. The Parties agree that, depending upon the circumstances related to an event and AMP's response to such circumstances, the kinds of events listed below are among those that could qualify as Force Majeure Events within the meaning of this Section: acts of God; acts of war or terrorism; and orders by a government official, government agency, other regulatory authority, or a regional transmission organization, acting under and authorized by applicable law, that directs AMP to supply electricity in response to a system-wide (state-wide or regional) emergency. Depending upon the circumstances and AMP's response to such circumstances, failure of a permitting authority to issue a necessary permit in a timely fashion may constitute a Force Majeure Event where the failure of the permitting authority to act is beyond the control of AMP and AMP has taken all steps available to it to obtain the necessary permit, including, but not limited to: submitting a complete permit application; responding to requests for additional information by the permitting authority in a timely fashion; and accepting lawful permit terms and conditions after expeditiously exhausting any legal rights to appeal terms and conditions imposed by the permitting authority.
- 101. As part of the resolution of any matter submitted to this Court under Section XVI (Dispute Resolution) regarding a claim of Force Majeure, the United States and AMP by agreement, or this Court by order, may in appropriate circumstances extend or modify the schedule for completion of work under this Consent Decree to account for the delay in the work that occurred as a result of any delay agreed to by the United States or approved by the Court. AMP shall be liable for stipulated penalties for its failure thereafter to complete the work in accordance with the extended or modified schedule (provided that AMP shall not be precluded from making a further claim of Force Majeure with regard to meeting any such extended or

modified schedule).

XVI. <u>DISPUTE RESOLUTION</u>

- 102. The dispute resolution procedure provided by this Section shall be available to resolve all disputes arising under this Consent Decree, provided that the Party invoking such procedure has first made a good faith attempt to resolve the matter with the other Party.
- 103. The dispute resolution procedure required herein shall be invoked by one Party giving written notice to the other Party advising of a dispute pursuant to this Section. The notice shall describe the nature of the dispute and shall state the noticing Party's position with regard to such dispute. The Party receiving such a notice shall acknowledge receipt of the notice, and the Parties in dispute shall expeditiously schedule a meeting to discuss the dispute informally not later than fourteen (14) days following receipt of such notice.
- 104. Disputes submitted to dispute resolution under this Section shall, in the first instance, be the subject of informal negotiations between the Parties. Such period of informal negotiations shall not extend beyond thirty (30) calendar days from the date of the first meeting between the Parties' representatives unless they agree in writing to shorten or extend this period.
- 105. If the Parties are unable to reach agreement during the informal negotiation period, the United States shall provide AMP with a written summary of its position regarding the dispute. The written position provided by the United States shall be considered binding unless, within forty-five (45) calendar days thereafter, AMP seeks judicial resolution of the dispute by filing a petition with this Court. If AMP seeks judicial resolution, the United States' written summary shall be deemed its initial filing with this Court regarding the dispute. The United States may submit a response to the petition within forty-five (45) calendar days of filing.

- 106. The time periods set out in this Section may be shortened or lengthened upon motion to the Court of one of the Parties to the dispute, explaining the Party's basis for seeking such a scheduling modification.
- 107. This Court shall not draw any inferences nor establish any presumptions adverse to either Party as a result of invocation of this Section or the Parties' inability to reach agreement.
- 108. As part of the resolution of any dispute under this Section, in appropriate circumstances the Parties may agree, or this Court may order, an extension or modification of the schedule for the completion of the activities required under this Consent Decree to account for the delay that occurred as a result of dispute resolution. AMP shall be liable for stipulated penalties for its failure thereafter to complete the work in accordance with the extended or modified schedule, provided that AMP shall not be precluded from asserting that a Force Majeure Event has caused or may cause a delay in complying with the extended or modified schedule.
- 109. The Court shall decide all disputes pursuant to applicable principles of law for resolving such disputes. In their filings with the Court under Paragraph 105, the Parties shall state their respective positions as to the applicable standard of law for resolving the particular dispute.

XVII. PERMITS

110. Unless expressly stated otherwise in this Consent Decree, in any instance where otherwise applicable law or this Consent Decree requires AMP to secure a permit to authorize construction or operation of any device, including all preconstruction, construction, and operating permits required under State law, AMP shall make such application in a timely manner. The United States will use its best efforts to expeditiously fulfill its role in reviewing all

permit applications submitted by AMP in order to meet the requirements of this Consent Decree.

- 111. When permits are required, AMP shall complete and submit applications for such permits to Ohio EPA to allow sufficient time for all legally required processing and review of the permit request, including requests for additional information by Ohio EPA. Any failure by AMP to submit a timely permit application for the Gorsuch Station shall bar any use by AMP of Section XV (Force Majeure) of this Consent Decree, where a Force Majeure claim is based on permitting delays.
- 112. Notwithstanding the reference to AMP's Title V permit for the Gorsuch Station in this Consent Decree, the enforcement of that permit shall be in accordance with its own terms and the Act. AMP's Title V permit for the Gorsuch Station shall not be enforceable under this Consent Decree, although any term or limit established by or under this Consent Decree shall be enforceable under this Consent Decree regardless of whether such term has or will become part of a Title V permit, subject to the terms of Section XXVII (Conditional Termination of Enforcement Under Consent Decree) of this Consent Decree.
- 113. Within thirty (30) days after entry of this Consent Decree, AMP shall amend any applicable Title V permit application, or apply for amendments of its Title V permit, to include a schedule to (1) Retire the Gorsuch Station; and (2) achieve all specific performance, operational, maintenance, and control technology requirements established by this Consent Decree including, but not limited to, the Plant-wide Tonnage limitations for NO_x and SO₂, and the requirements pertaining to the surrender of NO_x and SO₂ Allowances.
- 114. Within sixty (60) days after entry of this Consent Decree, AMP shall either apply to permanently include the requirements and limitations enumerated in this Consent Decree into a

federally enforceable permit, which is not a Title V permit and which is issued independently of Ohio's authority to issue a Title V permit, or request a site-specific amendment to the Ohio SIP to include the requirements and limitations enumerated in this Consent Decree. The federally enforceable permit, or the SIP as amended, shall include all new requirements applicable to that plant, including but not limited to, any applicable emission limit or Allowance surrender requirement.

- 115. Upon issuance of the permit or SIP amendment required by Paragraph 114 by the appropriate permitting authority, or in conjunction with the issuance of such permit or SIP amendment, AMP shall file any applications necessary to incorporate the requirements of the permit or SIP amendment into the Title V operating permit for the Facility.
- 116. AMP shall provide the United States with a copy of each application for a federally enforceable permit or Ohio SIP amendment, as well as a copy of any permit proposed as a result of such application, to allow for timely participation in any public comment opportunity.
- 117. If AMP sells or transfers to an entity unrelated to AMP ("Third Party Purchaser") part or all of its Ownership Interest covered under this Consent Decree, AMP shall comply with the requirements of Section XX (Sales or Transfers of Ownership Interests) of this Consent Decree with regard to that Ownership Interest prior to any such sale or transfer unless, following any such sale or transfer, AMP remains the holder of the permit for such facility.

XVIII. INFORMATION COLLECTION AND RETENTION

118. Any authorized representative of the United States, including its attorneys, enforcement officers, contractors, and consultants, upon presentation of credentials, shall have a right of entry

upon the premises of the Gorsuch Station at any reasonable time for the purpose of:

- a. monitoring the progress of activities required under this Consent Decree;
- verifying any data or information submitted to the United States in accordance
 with the terms of this Consent Decree;
- c. obtaining samples and, upon request, splits of any samples taken by AMP or its representatives, contractors, or consultants; and
- d. assessing AMP's compliance with this Consent Decree.
- AMP shall retain, and instruct its contractors and agents to preserve, all non-identical copies of all records and documents (including records and documents in electronic form) now in its or its contractors' or agents' possession or control, and that directly relate to AMP's performance of its obligations under this Consent Decree for the following periods: (a) until December 31, 2020 for records concerning retirement of the Gorsuch Station, and (b) until December 31, 2017 for all other records. This record retention requirement shall apply regardless of any corporate document retention policy to the contrary.
- 120. All information and documents submitted by AMP pursuant to this Consent Decree shall be subject to any requests under applicable law providing public disclosure of documents unless (a) the information and documents are subject to legal privileges or protection or (b) AMP claims and substantiates in accordance with 40 C.F.R. Part 2 that the information and documents contain confidential business information.
- 121. Nothing in this Consent Decree shall limit the authority of the EPA to conduct tests and inspections at AMP's facilities under Section 114 of the Act, 42 U.S.C. § 7414, or any other applicable federal laws, regulations, or permits.

XIX. NOTICES

122. Unless otherwise provided herein, whenever notifications, submissions, or communications are required by this Consent Decree, they shall be made in writing and addressed as follows:

As to the United States of America:

Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice P.O. Box 7611, Ben Franklin Station Washington, DC 20044-7611 DJ# 90-5-2-1-09886

and

Director, Air Enforcement Division Office of Enforcement and Compliance Assurance U.S. Environmental Protection Agency Ariel Rios Building [2242A] 1200 Pennsylvania Avenue, N.W. Washington, DC 20460

and

Director, Air and Radiation Division U.S. EPA Region 5 (A-18J) 77 West Jackson Boulevard Chicago, IL 60604

As to AMP:

Randy Meyer, Director of Environmental Affairs American Municipal Power, Inc. 1111 Schrock Road Columbus, Ohio 43229 John W. Bentine, General Counsel American Municipal Power, Inc. Chester, Willcox & Saxbe LLP 65 E. State St., Suite 1000 Columbus, Ohio 43215

- 123. All notifications, communications, or submissions made pursuant to this Section shall be sent either by: (a) overnight mail or overnight delivery service with signature required for delivery, or (b) certified or registered mail, return receipt requested. All notifications, communications, and transmissions (a) sent by overnight, certified, or registered mail shall be deemed submitted on the date they are postmarked, or (b) sent by overnight delivery service shall be deemed submitted on the date they are delivered to the delivery service.
- 124. Either Party may change either the notice recipient or the address for providing notices to it by serving the other Party with a notice setting forth such new notice recipient or address.

XX. SALES OR TRANSFERS OF OWNERSHIP INTERESTS

- 125. If AMP proposes to sell or transfer an Ownership Interest to another entity (a "Third Party Purchaser"), AMP shall advise the Third Party Purchaser in writing of the existence of this Consent Decree prior to such sale or transfer, and shall send a copy of such written notification to the United States pursuant to Section XIX (Notices) of this Consent Decree at least sixty (60) days before such proposed sale or transfer.
- 126. No sale or transfer of an Ownership Interest shall take place before the Third Party Purchaser and the United States have executed, and the Court has approved, a modification pursuant to Section XXIII (Modification) of this Consent Decree making the Third Party

Purchaser a party to this Consent Decree and jointly and severally liable with AMP for all the requirements of this Consent Decree that may be applicable to the transferred or purchased Ownership Interests.

- 127. This Consent Decree shall not be construed to impede the transfer of any Ownership Interests between AMP and any Third Party Purchaser so long as the requirements of this Consent Decree are met. This Consent Decree shall not be construed to prohibit a contractual allocation as between AMP and any Third Party Purchaser of Ownership Interests of the burdens of compliance with this Consent Decree, provided that both AMP and such Third Party Purchaser shall remain jointly and severally liable to the United States for the obligations of this Consent Decree applicable to the transferred or purchased Ownership Interests.
- 128. If the United States agrees, the United States, AMP, and the Third Party Purchaser that has become a party to this Consent Decree pursuant to Paragraph 126, may execute a modification that relieves AMP of its liability under this Consent Decree for, and makes the Third Party Purchaser liable for, all obligations and liabilities applicable to the purchased or transferred Ownership Interests. Notwithstanding the foregoing, however, AMP may not assign, and may not be released from, any obligation under this Consent Decree that is not specific to the purchased or transferred Ownership Interests, including the obligations set forth in Sections IX (Environmental Mitigation Projects) and X (Civil Penalty). AMP may propose and the United States may agree to restrict the scope of the joint and several liability of any purchaser or transferee for any obligations of this Consent Decree that are not specific to the transferred or purchased Ownership Interests, to the extent such obligations may be adequately separated in an enforceable manner.

XXI. EFFECTIVE DATE

129. The "Effective Date" of this Consent Decree shall be the date upon which this Consent Decree having been approved and signed by the Judge of the District Court, is entered in the civil docket by the Clerk pursuant to Fed. R. Civ. P. 79(a) ("Date of Entry").

XXII. RETENTION OF JURISDICTION

130. The Court shall retain jurisdiction of this case after entry of this Consent Decree to enforce compliance with the terms and conditions of this Consent Decree and to take any action necessary or appropriate for its interpretation, construction, execution, modification, or adjudication of disputes. During the term of this Consent Decree, either Party to this Consent Decree may apply to the Court for any relief necessary to construe or effectuate this Consent Decree.

XXIII. MODIFICATION

131. The terms of this Consent Decree may be modified only by a subsequent written agreement signed by the United States and AMP. Where the modification constitutes a material change to any term of this Consent Decree, it shall be effective only upon approval by the Court.

XXIV. GENERAL PROVISIONS

132. This Consent Decree is not a permit. Compliance with the terms of this Consent Decree does not guarantee compliance with all applicable federal, state, or local laws or regulations. The

emission limitations set forth herein do not relieve AMP from any obligation to comply with other state and federal requirements under the Clean Air Act. The limitations and requirements set forth herein do not relieve AMP from any obligation to comply with other state and federal requirements under any applicable laws.

- 133. This Consent Decree does not apply to any claim(s) of alleged criminal liability.
- In any subsequent administrative or judicial action initiated by the United States for injunctive relief or civil penalties relating to the Gorsuch Station as covered by this Consent Decree, AMP shall not assert any defense or claim based upon principles of waiver, res judicata, collateral estoppel, issue preclusion, claim preclusion, or claim splitting, or any other defense based upon the contention that the claims raised by the United States in the subsequent proceeding were brought, or should have been brought, in the instant case; provided, however, that nothing in this Paragraph is intended to affect the validity of Section XI (Resolution of Past Civil Claims).
- 135. Except as specifically provided by this Consent Decree, nothing in this Consent Decree shall relieve AMP of its obligation to comply with all applicable federal, state, and local laws and regulations. Subject to the provisions in Section XI (Resolution of Past Civil Claims), nothing contained in this Consent Decree shall be construed to prevent or limit the rights of the United States to obtain penalties or injunctive relief under the Act or other federal, state, or local statutes, regulations, or permits.
- 136. Each limit and/or other requirement established by or under this Consent Decree is a separate, independent requirement.
- 137. Emissions limits set by or under this Consent Decree must be met in tons per year. Any

portion of a ton in excess of the Plant-wide Tonnage emissions limitations pursuant to Paragraphs 37 and 49 will be considered one (1) ton under this Consent Decree.

- 138. This Consent Decree does not limit, enlarge, or affect the rights of either Party to this Consent Decree as against any third parties.
- 139. This Consent Decree constitutes the final, complete and exclusive agreement and understanding between the Parties with respect to the settlement embodied in this Consent Decree, and supersedes all prior agreements and understandings between the Parties related to the subject matter herein. No document, representation, inducement, agreement, understanding, or promise constitutes any part of this Consent Decree or the settlement it represents, nor shall they be used in construing the terms of this Consent Decree.
- 140. Each Party to this action shall bear its own costs and attorneys' fees.

XXV. SIGNATORIES AND SERVICE

- 141. Each undersigned representative of the Parties certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind to this document the Party he or she represents.
- 142. This Consent Decree may be signed in counterparts, and such counterpart signature pages shall be given full force and effect.
- 143. Each Party hereby agrees to accept service of process by mail with respect to all matters arising under or relating to this Consent Decree and to waive the formal service requirements set forth in Rule 4 of the Federal Rules of Civil Procedure and any applicable Local Rules of this Court including, but not limited to, service of a summons.

XXVI. PUBLIC COMMENT

144. Both Parties agree and acknowledge that final approval by the United States and entry of this Consent Decree is subject to the procedures of 28 C.F.R. § 50.7, which provides for notice of the lodging of this Consent Decree in the Federal Register, an opportunity for public comment, and the right of the United States to withdraw or withhold consent if the comments disclose facts or considerations which indicate that this Consent Decree is inappropriate, improper, or inadequate. AMP shall not oppose entry of this Consent Decree by this Court or challenge any provision of this Consent Decree unless the United States has notified AMP, in writing, that the United States no longer supports entry of this Consent Decree.

XXVII. CONDITIONAL TERMINATION OF ENFORCEMENT UNDER CONSENT DECREE

- 145. <u>Termination as to completed tasks.</u> As soon as AMP completes the retirement of the Gorsuch Station or any other requirement of this Consent Decree that is not ongoing or recurring, AMP may, by motion to this Court, seek termination of the provision or provisions of this Consent Decree that imposed the requirement.
- 146. <u>Conditional termination of enforcement through this Consent Decree.</u> Subject to the provisions of Paragraph 147, after AMP:
 - a. has successfully completed all actions necessary to Retire the Gorsuch Station,
 - b. has obtained all the final permits required by Section XVII (Permits) of this
 Consent Decree covering the Gorsuch Station that include as federally

enforceable permit terms, all of the emissions limitations and other requirements specified in this Consent Decree;

then AMP may so certify these facts to the United States and this Court. If the United State does not object in writing with specific reasons within forty-five (45) days of receipt of AMP's certification, then, for any violations of this Consent Decree that occur after the filing of notice, the United States shall pursue enforcement of the requirements contained in the Title V permit through the applicable Title V permit and/or other enforcement authorities and not through this Consent Decree.

147. Resort to enforcement under this Consent Decree. Notwithstanding Paragraph 146, if enforcement of a provision in this Consent Decree cannot be pursued by the United States under the applicable Title V permit, or if a requirement of this Consent Decree was intended to be part of a Title V Permit and did not become or remain part of such permit, then such requirement may be enforced under the terms of this Consent Decree at any time.

XXVIII. FINAL JUDGMENT

148. Upon approval and entry of this Consent Decree by the Court, this Consent Decree shall constitute a final judgment between the United States and AMP.

SO ORDERED THIS	DAY OF	, 2010.	
	United	d States District Judge	

FOR THE UNITED STATES DEPARTMENT OF JUSTICE

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Assistant Attorney General

Environment and Natural Resources Division

U.S. Department of Justice

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FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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FOR AMERICAN MUNICIPAL POWER, INC.

By:

Marc S. Gerken, P.E.

President & CEO

American Municipal Power, Inc.

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Date:

4-20-2010

By:

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AMP General Counsel

By:

Douglas A. McWilliams

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4900 Key Tower

127 Public Square

Cleveland, Ohio 44114

APPENDIX A: ENVIRONMENTAL MITIGATION PROJECT

In compliance with and in addition to the requirements in Section IX of this Consent Decree (Environmental Mitigation Project), American Municipal Power, Inc. (AMP) shall comply with the requirements of this Appendix to ensure that the benefits of the \$15 million in Environmental Mitigation are achieved.

I. Energy Efficiency Mitigation

- A. Within forty-five (45) days from the Date of Entry, AMP shall submit to EPA for review and approval pursuant to Section XII of the Consent Decree (Review and Approval of Submittals), a proposed plan to spend a minimum of \$15 million to provide energy efficiency services to all the member municipalities of the Gorsuch Station and the customers of such member municipalities (EE Project). Such energy efficiency services shall include, among other things, a program that provides financial incentives for the design and installation of energy efficiency building systems, and the removal and replacement of inefficient appliances. The energy efficiency services shall be designed to achieve a minimum reduction of 70,000 megawatt hours (MWhrs) in the Gorsuch community as well as other AMP members that may also voluntarily participate in the EE Project over a five (5) year period from date of approval of the EE Project plan.
- B. The EE Project dollars will act as seed funding for the entire EE Project, which is expected to cost significantly more, which will enroll additional, non-Gorsuch, AMP member utilities and may extend the energy efficiency services for a period longer than required by this Appendix.
- C. The Parties agree that AMP must spend at least \$15 million in EE Project Dollars within the four (4)-year period commencing upon the date of approval of the EE Project plan, with a minimum of \$10 million spent or obligated within the first three (3) years of the four (4)-year period. Upon approval by EPA, and adequate justification based on unexpected conditions, AMP may extend the four (4)-year payment period to five (5) years. AMP is not precluded from accelerating payments to better effectuate a proposed EE Project plan for the EE Project.
- D. The proposed EE Project plan shall include the following:
 - (1) A plan for implementing the EE Project;
 - (2) A summary-level budget for the EE Project;
 - (3) A description of the roles of any third-parties involved in the EE Project;
 - (4) A time-line for implementation of the EE Project; and

(5) A description of the anticipated environmental benefits of the EE Project including an estimate of emission reductions (e.g., SO₂, NOx, PM, CO₂) expected to be realized.

E. The EE Project plan shall also:

- (1) Provide energy efficiency services for the member municipalities of the Gorsuch Station and for other members who voluntarily participate in the EE Project for five (5) years from the date of approval of the EE Project plan ("Performance Period"). AMP, however, is not precluded from providing energy efficiency services for other member municipalities or for the member municipalities of the Gorsuch Station for longer than the Performance Period. AMP is also not precluded from achieving the Minimum Performance Amount, as described in Paragraph (5) below, in a shorter time period than the Performance Period;
- (2) Involve all sectors including retail, residential, and new and existing commercial and industrial buildings;
- (3) Describe the energy efficiency services offered. AMP shall focus on services that are long-term in nature (for example, designing and constructing energy efficient HVAC systems in new buildings). AMP shall also specifically provide a variety of options for energy efficiency services that are designed to benefit lower income customers of member municipalities of the Gorsuch Station;
- (4) Provide an estimate of the total electricity savings (measured as MWhrs saved) during the Performance Period. AMP shall also provide the calculations and assumptions associated with such estimate;
- (5) Include mechanisms to ensure achievement of at least 70% of the estimated MWhrs stated in Paragraph I(A) above ("Minimum Performance Amount");
 - a. Include a mechanism for calculating "Alternative Mitigation Project Dollars" if AMP fails to achieve the 70 % Minimum Performance Amount described in Paragraph (5) above. The amount of such Alternative Mitigation Project Dollars shall be determined by subtracting the actual MWhrs savings achieved during the five-year Performance Period from the Minimum Performance Amount and multiplying the resulting value by the average cost per MWhr for the energy efficiency services during the five (5)-year Performance Period;
 - b. AMP shall direct all Alternative Mitigation Project Dollars to an Alternative Mitigation Project as described in Section II of this Appendix.

- (6) Provide for independent third-party auditing and verification of efficiency gains and electricity savings (measured as MWhrs saved); and
- (7) To the extent possible, describe the estimated anticipated change to the electric grid and dispatch order of generation resources in the region, as a result of estimated electricity savings from the EE Project.
- F. Upon approval of the plan for the EE Project required by this Appendix by EPA, AMP shall complete the approved EE Project according to the approved plan.
- G. Commencing with the first progress report due pursuant to Section XII (Periodic Reporting) of the Consent Decree, and continuing annually thereafter until completion of the EE Project, AMP will include in the progress report information describing the progress of the EE Project and the EE Project Dollars expended on the EE Project.
- H. In accordance with the requirements of Section IX (Environmental Mitigation Project) and Section XIII (Review and Approval of Submittals), within sixty-six (66) months from the date of approval of the EE Project plan, AMP shall submit to EPA for approval, a report that documents:
 - (1) The results of the first five (5) years of implementation of the EE Project, including the estimated emission reductions and associated environmental benefits achieved (including calculations and assumptions relevant to the estimates); and
 - (2) The EE Project Dollars incurred by AMP in implementing the EE Project during the five (5) year Performance Period.

II. Alternative Mitigation Project- Clean Diesel Retrofit Project

- A. Any and all Alternative Mitigation Project Dollars, as described in Section I(E)(5) of this Appendix, shall be directed to a clean diesel retrofit project ("Clean Diesel Project"). If AMP achieves the Minimum Performance Amount so that no Alternative Mitigation Project Dollars are generated, AMP is not required to meet any of the Alternative Mitigation Project obligations under this Section II.
- B. Within one hundred eighty (180) days of the end of the five (5)-year Performance Period (if required by Section II.A above), AMP shall submit to EPA for review and approval pursuant to Section XIII (Review and Approval of Submittals), a plan to retrofit inservice diesel engines with emission control equipment further described in this Section, designed to reduce emissions of particulates and/or ozone precursors and fund the operation and maintenance of the retrofit equipment for the time-period described below. Eligible vehicles, engines and equipment must be owned or operated by or on behalf of a public entity. Preference shall be given to school buses. This Clean Diesel Project shall include, where necessary, techniques, administration and infrastructure needed to support the Clean Diesel Project. AMP shall complete the retrofit projects required by this

paragraph within two years of the date of EPA approval of the Clean Diesel Project plan. The parties may, by agreement, extend the deadline to complete these projects by up to one (1) year.

- C. The plan shall also satisfy the following criteria:
 - 1. Involve vehicles based in, and equipment located, in AMP's members' service territories;
 - 2. Provide for the retrofit of diesel engines with EPA- verified emissions control technologies to achieve the greatest measurable mass reductions of particulates and/or ozone precursors for the fleet that participate(s) in this Clean Diesel Project. The retrofit diesel engines must achieve emission reductions of particulates and/or ozone precursors by 30%-90%, as measured from the pre-retrofit emissions for the particular diesel engine, depending upon the particular EPA verified emissions control technology selected;
 - 3. Describe the process AMP will use to determine the most appropriate emissions control technology for each diesel engine that will achieve the greatest mass reduction of particulates and/or ozone precursors. In making this determination, AMP must take into account the particular operating criteria required for the EPA verified emissions control technology to achieve the verified emissions reductions;
 - 4. Provide for the retrofit of diesel engines with either: (a) diesel particulate filters, (b) diesel oxidation catalysts and closed crankcase ventilation systems, or (c) EPA-verified idling reduction technologies; cleaner fuel use; EPA-verified aerodynamics technologies and low rolling resistance tires; and engine re-powering (i.e., replacing older engines with newer, cleaner engines);
 - 5. Describe the process AMP will use to notify fleet operators and owners that their fleet may be eligible to participate in the Clean Diesel Project and to solicit their interest in participating in the Clean Diesel Project.
 - 6. Describe the process and criteria AMP will use to select the particular fleet to participate in this Clean Diesel Project, consistent with the requirements of this Appendix;
 - 7. For each of the recipient fleet owners and operators, describe the amount of Clean Diesel Project dollars that will cover the costs associated with: (a) purchasing the verified emissions control technology; (b) installation of the verified emissions control technology (including data logging); and (c) training costs associated with repair and maintenance of the verified emissions control technology (including technology cleaning and proper disposal of waste generated from cleaning). This Clean Diesel Project shall not include costs for normal repair or operation of the retrofit diesel fleet:

- 8. Describe the process AMP will use for determining which diesel engines in a particular fleet will be included in the Clean Diesel Project with the verified emissions control technology, consistent with the criteria specified in Section II.C.2 above;
- 9. Ensure that recipient fleet owners and/or operators, or their funders, do not otherwise have a legal obligation to reduce emissions through the retrofit of diesel engines;
- 10. For any outside party with whom AMP might contract to carry out this Clean Diesel Project, establish minimum standards that include prior experience in a Clean Diesel Project and a record of prior ability to interest and organize fleets and community groups to join a clean diesel program;
- 11. Ensure that the recipient fleets comply with local, state, and federal requirements for the disposal of the waste generated from the verified emissions control technology; and
- 12. Include a schedule and budget for completing each portion of the Clean Diesel Project.
- D. In accordance with the requirements of Section XIII (Review and Approval of Submittals), within sixty (60) days of completion of the Clean Diesel Project, AMP shall submit a report to EPA that describes:
 - i. the fleet owner/operator; where it implemented this Clean Diesel Project;
 - ii. the particular types of verified emissions control technology (and the number of each type) that it installed pursuant to this Clean Diesel Project;
 - iii. the type, year, and horsepower of each retrofit; an estimate of the number of citizens affected (if applicable) by this Clean Diesel Project, and the basis for this estimate; and
 - iv. an estimate of the emission reductions for each Project or engine, as appropriate (using the manufacturer's estimated reductions for the particular verified emissions control technology), including particulates, hydrocarbons, carbon monoxide, and nitrogen oxides.
- E. Upon EPA's approval of the plan, AMP shall complete the Clean Diesel Project according to the approved plan and schedule.

IN THE UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF ILLINOIS

UNITED STATES OF AMERICA)
Plaintiff,)
and)
THE STATE OF ILLINOIS, AMERICAN BOTTOM CONSERVANCY, HEALTH AND ENVIRONMENTAL JUSTICE – ST. LOUIS, INC., ILLINOIS STEWARDSHIP ALLIANCE, and PRAIRIE RIVERS NETWORK))))))))
Plaintiff - Intervenors, v.)) Civil Action No. 99-833-MJR
ILLINOIS POWER COMPANY and DYNEGY MIDWEST GENERATION, INC.,)))
Defendants.)) _)

CONSENT DECREE

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Appendix A: Environmental Mitigation Projects	

WHEREAS, the United States of America ("the United States"), on behalf of the United States Environmental Protection Agency ("EPA") filed a Complaint against Illinois Power Company ("Illinois Power") on November 3, 1999, and Amended Complaints against Illinois Power Company and Dynegy Midwest Generation, Inc. ("DMG") on January 19, 2000, March 14, 2001, and March 7, 2003, pursuant to Sections 113(b) and 167 of the Clean Air Act (the "Act"), 42 U.S.C. §§ 7413(b) and 7477, for injunctive relief and the assessment of civil penalties for alleged violations at the Baldwin Generating Station of:

- (a) the Prevention of Significant Deterioration provisions in Part C of Subchapter I of the Act, 42 U.S.C. §§ 7470-92;
- (b) the federally enforceable State Implementation Plan developed by the State of Illinois (the "Illinois SIP"); and
- (c) the New Source Performance Standard provisions in Part A of Subchapter I of the Act, 42 U.S.C. § 7411.

WHEREAS, EPA issued Notices of Violation with respect to such allegations to Illinois Power on November 3, 1999 and November 26, 2000;

WHEREAS, EPA provided Illinois Power, DMG, and the State of Illinois actual notice of violations pertaining to its alleged violations, in accordance with Section 113(a)(1) and (b) of the Act, 42 U.S.C. § 7413(a)(1) and (b);

WHEREAS, Illinois Power was the owner and operator of the Baldwin Facility from 1970 to October 1999. On October 1, 1999, Illinois Power transferred the Baldwin Facility to Illinova Corporation. Illinova Corporation then contributed the Baldwin Facility to Illinova

Power Marketing, Inc., after which time Illinois Power no longer owned or operated the Baldwin Facility.

WHEREAS, beginning on October 1, 1999 and continuing through the date of lodging of this Consent Decree, Illinois Power has been neither the owner nor the operator of the Baldwin Facility or of any of the Units in the DMG System which are affected by this Consent Decree;

WHEREAS, in February 2000, Illinova Corporation merged with Dynegy Holdings Inc. and became a wholly owned subsidiary of Dynegy Inc. (referred to herein as "Dynegy").

Thereafter, Illinova Power Marketing, Inc., the owner of the Baldwin Facility, changed its name to Dynegy Midwest Generation, Inc. (referred to herein as "DMG"). On September 30, 2004, Dynegy, through Illinova, sold Illinois Power to Ameren Corporation.

WHEREAS, Ameren and Illinova Corporation, a subsidiary of Dynegy, have entered into an agreement which provides for the escrow of certain funds, the release of which funds is related to the resolution of certain contingent environmental liabilities that were alleged in the above-referenced Amended Complaints against Illinois Power and DMG.

WHEREAS, Plaintiff-Intervenors – the American Bottom Conservancy, Health and Environmental Justice - St. Louis, Inc., Illinois Stewardship Alliance, the Prairie Rivers Network, and the State of Illinois – moved to intervene on September 25, 2003 and filed Complaints in Intervention. The Court granted intervention to all movants on October 23, 2003.

WHEREAS, in their Complaints, Plaintiff United States and Plaintiff Intervenors (collectively "Plaintiffs") allege, *inter alia*, that Illinois Power and DMG failed to obtain the necessary permits and install the controls necessary under the Act to reduce sulfur dioxide,

nitrogen oxides, and/or particulate matter emissions, and that such emissions can damage human health and the environment;

WHEREAS, the Plaintiffs' Complaints state claims upon which relief can be granted against Illinois Power and DMG under Sections 113 and 167 of the Act, 42 U.S.C. §§ 7413 and 7477, and 28 U.S.C. § 1355;

WHEREAS, DMG and Illinois Power have denied and continue to deny the violations alleged in the Complaints, maintain that they have been and remain in compliance with the Act and are not liable for civil penalties or injunctive relief, and DMG is agreeing to the obligations imposed by this Consent Decree solely to avoid further costs and uncertainty;

WHEREAS, DMG has installed equipment for the control of nitrogen oxides emissions at the Baldwin Facility, including Overfire Air systems on Baldwin Units 1, 2, and 3, Low NO_X Burners on Baldwin Unit 3 and Selective Catalytic Reduction ("SCR") Systems on Baldwin Units 1 and 2, resulting in a reduction in emissions of nitrogen oxides from the Baldwin Plant of approximately 65% below 1999 levels from 55,026 tons in 1999 to 19,061 tons in 2003;

WHEREAS, DMG switched from use of high sulfur coal to low sulfur Powder River Basin coal at Baldwin Units 1, 2 and 3 in 1999 and 2000, resulting in a reduction in emissions of sulfur dioxide from the Baldwin Plant of approximately 90% below 1999 levels from 245,243 tons in 1999 to 26,311 tons in 2003;

WHEREAS, the Parties anticipate that the installation and operation of pollution control equipment pursuant to this Consent Decree will achieve significant additional reductions of SO_2 , NO_x , and PM emissions and thereby further improve air quality;

WHEREAS, in June of 2003, the liability stage of the litigation resulting from the United States' claims was tried to the Court and no decision has yet been rendered; and

WHEREAS, the Plaintiffs, DMG and Illinois Power have agreed, and the Court by entering this Consent Decree finds: that this Consent Decree has been negotiated in good faith and at arms length; that this settlement is fair, reasonable, in the best interest of the Parties and in the public interest, and consistent with the goals of the Act; and that entry of this Consent Decree without further litigation is the most appropriate means of resolving this matter;

NOW, THEREFORE, without any admission by the Defendants, and without adjudication of the violations alleged in the Complaints or the NOVs, it is hereby ORDERED, ADJUDGED, AND DECREED as follows:

I. JURISDICTION AND VENUE

1. This Court has jurisdiction over this action, the subject matter herein, and the Parties consenting hereto, pursuant to 28 U.S.C. §§ 1331, 1345, 1355, and 1367, Sections 113 and 167 of the Act, 42 U.S.C. §§ 7413 and 7477, and Section 42(e) of the Illinois Environmental Protection Act, 415 ILCS 5/42(e). Venue is proper under Section 113(b) of the Act, 42 U.S.C. § 7413(b), and under 28 U.S.C. § 1391(b) and (c). Solely for the purposes of this Consent Decree and the underlying Complaints, and for no other purpose, Defendants waive all objections and defenses that they may have to the Court's jurisdiction over this action, to the Court's jurisdiction over the Defendants, and to venue in this District. Defendants shall not challenge the terms of this Consent Decree or this Court's jurisdiction to enter and enforce this Consent Decree. Solely for purposes of the Complaints filed by the Plaintiffs in this matter and resolved by the Consent Decree, for purposes of entry and enforcement of this Consent Decree,

and for no other purpose, Defendants waive any defense or objection based on standing. Except as expressly provided for herein, this Consent Decree shall not create any rights in or obligations of any party other than the Plaintiffs and the Defendants. Except as provided in Section XXVI (Public Comment) of this Consent Decree, the Parties consent to entry of this Consent Decree without further notice.

II. APPLICABILITY

- 2. Upon entry, the provisions of the Consent Decree shall apply to and be binding upon and inure to the benefit of the Citizen Plaintiffs and DMG, and their respective successors and assigns, officers, employees and agents, solely in their capacities as such, and the State of Illinois and the United States. Illinois Power is a Party to this Consent Decree, is the beneficiary of Section X of this Consent Decree (Release and Covenant Not to Sue for Illinois Power Company), and is subject to Paragraph 171 and the other applicable provisions of the Consent Decree as specified in such Paragraph in the event it acquires an Ownership Interest in, or becomes an operator (as that term is used and interpreted under the Clean Air Act) of, any DMG System Unit, but otherwise has no other obligations under this Consent Decree except as expressly specified herein.
- 3. DMG shall be responsible for providing a copy of this Consent Decree to all vendors, suppliers, consultants, contractors, agents, and any other company or other organization retained to perform any of the work required by this Consent Decree. Notwithstanding any retention of contractors, subcontractors, or agents to perform any work required under this Consent Decree, DMG shall be responsible for ensuring that all work is performed in accordance with the requirements of this Consent Decree. In any action to enforce this Consent Decree,

DMG shall not assert as a defense the failure of its officers, directors, employees, servants, agents, or contractors to take actions necessary to comply with this Consent Decree, unless DMG establishes that such failure resulted from a Force Majeure Event, as defined in Paragraph 137 of this Consent Decree.

III. <u>DEFINITIONS</u>

- 4. A "30-Day Rolling Average Emission Rate" for a Unit shall be expressed as lb/mmBTU and calculated in accordance with the following procedure: first, sum the total pounds of the pollutant in question emitted from the Unit during an Operating Day and the previous twenty-nine (29) Operating Days; second, sum the total heat input to the Unit in mmBTU during the Operating Day and the previous twenty-nine (29) Operating Days; and third, divide the total number of pounds of the pollutant emitted during the thirty (30) Operating Days by the total heat input during the thirty (30) Operating Days. A new 30-Day Rolling Average Emission Rate shall be calculated for each new Operating Day. Each 30-Day Rolling Average Emission Rate shall include all emissions that occur during all periods of startup, shutdown and Malfunction within an Operating Day, except as follows:
 - Emissions and BTU inputs that occur during a period of Malfunction shall be
 excluded from the calculation of the 30-Day Rolling Average Emission Rate if
 DMG provides notice of the Malfunction to EPA and the State in accordance with
 Paragraph 138 in Section XV (Force Majeure) of this Consent Decree;
 - b. Emissions of NO_x and BTU inputs that occur during the fifth and subsequent Cold Start Up Period(s) that occur at a given Unit during any 30-day period shall be excluded from the calculation of the 30-Day Rolling Average Emission Rate if

Rolling Average Emission Rate and DMG has installed, operated and maintained the SCR in question in accordance with manufacturers' specifications and good engineering practices. A "Cold Start Up Period" occurs whenever there has been no fire in the boiler of a Unit (no combustion of any Fossil Fuel) for a period of six (6) hours or more. The NO_x emissions to be excluded during the fifth and subsequent Cold Start Up Period(s) shall be the lesser of (i) those NO_x emissions emitted during the eight (8) hour period commencing when the Unit is synchronized with a utility electric transmission system and concluding eight (8) hours later, or (ii) those NO_x emissions emitted prior to the time that the flue gas has achieved the minimum SCR operational temperature specified by the catalyst manufacturer; and

- c. For a Unit that has ceased firing Fossil Fuel, emissions of SO₂ and Btu inputs that occur during any period, not to exceed two (2) hours, from the restart of the Unit to the time the Unit is fired with any coal, shall be excluded from the calculation of the 30-Day Rolling Average Emission Rate.
- 5. "Baghouse" means a fullstream (fabric filter) particulate emission control device.
- 6. "Boiler Island" means a Unit's (A) fuel combustion system (including bunker, coal pulverizers, crusher, stoker, and fuel burners); (B) combustion air system; (C) steam generating system (firebox, boiler tubes, and walls); and (D) draft system (excluding the stack), all as further described in "Interpretation of Reconstruction," by John B. Rasnic U.S. EPA (November 25, 1986) and attachments thereto.

- 7. "Capital Expenditure" means all capital expenditures, as defined by Generally Accepted Accounting Principles ("GAAP"), as those principles exist at the date of entry of this Consent Decree, excluding the cost of installing or upgrading pollution control devices.
- 8. "CEMS" or "Continuous Emission Monitoring System" means, for obligations involving NO_x and SO_2 under this Consent Decree, the devices defined in 40 C.F.R. § 72.2 and installed and maintained as required by 40 C.F.R. Part 75.
- 9. "Citizen Plaintiffs" means, collectively, the American Bottom Conservancy,
 Health and Environmental Justice St. Louis, Inc., Illinois Stewardship Alliance, and the Prairie
 Rivers Network.
- 10. "Clean Air Act" or "Act" means the federal Clean Air Act, 42 U.S.C. §§7401-7671q, and its implementing regulations.
- 11. "Consent Decree" or "Decree" means this Consent Decree and the Appendix hereto, which is incorporated into this Consent Decree.
- "Defendants" means Dynegy Midwest Generation, Inc. and Illinois Power
 Company.
 - 13. "DMG" means Dynegy Midwest Generation, Inc.
- 14. "DMG System" means, solely for purposes of this Consent Decree, the following ten (10) listed coal-fired, electric steam generating Units (with the rated gross MW capacity of each Unit, reported to Mid-America Interconnected Network ("MAIN") in 2003, noted in parentheses), located at the following plants:
 - Baldwin Generating Station in Baldwin, Illinois: Unit 1 (624 MW), 2
 (629 MW), 3 (629 MW);

- Havana Generating Station in Havana, Illinois: Unit 6 (487 MW);
- Hennepin Generating Station in Hennepin, Illinois: Unit 1 (81 MW),
 Unit 2 (240 MW);
- Vermilion Generating Station in Oakwood, Illinois: Unit1 (84 MW),
 Unit 2 (113 MW);
- Wood River Generating Station in Alton, Illinois: Unit 4 (105 MW),
 Unit 5 (383 MW).
- 15. "Emission Rate" means the number of pounds of pollutant emitted per million BTU of heat input ("lb/mmBTU"), measured in accordance with this Consent Decree.
 - 16. "EPA" means the United States Environmental Protection Agency.
- 17. "ESP" means electrostatic precipitator, a pollution control device for the reduction of PM.
 - 18. "Existing Units" means those Units included in the DMG System.
- 19. "Flue Gas Desulfurization System," or "FGD," means a pollution control device with one or more absorber vessels that employs flue gas desulfurization technology for the reduction of sulfur dioxide.
- 20. "Fossil Fuel" means any hydrocarbon fuel, including coal, petroleum coke, petroleum oil, or natural gas.
- 21. "Illinois Environmental Protection Act" means the Illinois Environmental Protection Act, 415 ILCS 5/1 et. seq., and its implementing regulations.
 - 22. "Illinois Power" means the Illinois Power Company.

- 23. "Improved Unit" means, in the case of NO_x, a DMG System Unit equipped with or scheduled under this Consent Decree to be equipped with an SCR, or, in the case of SO₂, a DMG System Unit scheduled under this Consent Decree to be equipped with an FGD (or equivalent SO₂ control technology approved pursuant to Paragraph 68). A Unit may be an Improved Unit for one pollutant without being an Improved Unit for the other. Any Other Unit can become an Improved Unit if (a) in the case of NO_x, it is equipped with an SCR (or equivalent NOx control technology approved pursuant to Paragraph 64) and has become subject to a federally enforceable 0.100 lb/mmBTU NO_x 30-Day Rolling Average Emission Rate, or (b) in the case of SO₂, it is equipped with an FGD (or equivalent SO₂ control technology approved pursuant to Paragraph 68) and has become subject to a federally enforceable 0.100 lb/mmBTU SO₂ 30-Day Rolling Average Emission Rate, and (c) in the case of NO_x or SO₂, the requirement to achieve and maintain a 0.100 lb/mmBTU 30-Day Rolling Average Emission Rate is incorporated into the Title V Permit applicable to that Unit or, if no Title V Permit exists, a modification to this Consent Decree that is agreed to by the Plaintiffs and DMG and approved by this Court.
 - 24. "lb/mmBTU" means one pound per million British thermal units.
- 25. "Malfunction" means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not Malfunctions.
 - 26. "MW" means a megawatt or one million Watts.

- 27. "National Ambient Air Quality Standards" or "NAAQS" means national ambient air quality standards that are promulgated pursuant to Section 109 of the Act, 42 U.S.C. § 7409.
- 28. "Nonattainment NSR" means the nonattainment area New Source Review program within the meaning of Part D of Subchapter I of the Act, 42 U.S.C. §§ 7501-7515, 40 C.F.R. Part 51.
 - 29. "NO_x" means oxides of nitrogen.
- 30. " NO_x Allowance" means an authorization or credit to emit a specified amount of NO_x that is allocated or issued under an emissions trading or marketable permit program of any kind that has been established under the Clean Air Act or a State Implementation Plan.
- 31. "Operating Day" means any calendar day on which a Unit fires Fossil Fuel; provided, however, that exclusively for purposes of Paragraph 36, "Operating Day" means any calendar day on which both Baldwin Unit 1 and Baldwin Unit 2 fire Fossil Fuel.
- 32. "Other Unit" means any Unit of the DMG System that is not an Improved Unit for the pollutant in question.
- 33. "Ownership Interest" means part or all of DMG's legal or equitable ownership interest in any Unit in the DMG System.
- 34. "Parties" means the United States, the State of Illinois, the Citizen Plaintiffs, DMG, and Illinois Power.
- 35. "Plaintiffs" means the United States, the State of Illinois, and the Citizen Plaintiffs.
- 36. A "Plant-Wide 30-Day Rolling Average Emission Rate" shall be expressed as lb/mmBTU and calculated in accordance with the following procedure: first, sum the total

pounds of the pollutant in question emitted from all three Units at the Baldwin Plant during an Operating Day and the previous twenty-nine (29) Operating Days; second, sum the total heat input to all three Units at the Baldwin Plant in mmBTU during the Operating Day and the previous twenty-nine (29) Operating Days; and third, divide the total number of pounds of the pollutant emitted from all three Baldwin Units during the thirty (30) Operating Days by the total heat input to all three Baldwin Units during the thirty (30) Operating Days. A new Plant-Wide 30-Day Rolling Average Emission Rate shall be calculated for each new Operating Day. Each Plant-Wide 30-Day Rolling Average Emission Rate shall include all emissions that occur during all periods of startup, shutdown and Malfunction within an Operating Day. A Malfunction shall be excluded from this Emission Rate, however, if DMG satisfies the Force Majeure provisions of this Consent Decree.

- 37. A "Plant-Wide Annual Tonnage Emission Level" means, for the purposes of Section XI of this Decree, the number of tons of the pollutant in question that may be emitted from the plant at issue during the relevant calendar year (i.e., January 1 through December 31), and shall include all emissions of the pollutant emitted during periods of startup, shutdown, and Malfunction.
- 38. "Pollution Control Equipment Upgrade Analysis" means the technical study, analysis, review, and selection of control technology recommendations (including an emission rate or removal efficiency) required to be performed in connection with an application for a federal PSD permit, taking into account the characteristics of the existing facility. Except as otherwise provided in this Consent Decree, such study, analysis, review, and selection of recommendations shall be carried out in accordance with applicable federal and state regulations

and guidance describing the process and analysis for determining Best Available Control

Technology (BACT), as that term is defined in 40 C.F.R. §52.21(b)(12), including, without

limitation, the December 1, 1987 EPA Memorandum from J. Craig Potter, Assistant

Administrator for Air and Radiation, regarding Improving New Source Review (NSR)

Implementation. Nothing in this Decree shall be construed either to: (a) alter the force and effect of statements known as or characterized as "guidance" or (b) permit the process or result of a "Pollution Control Equipment Upgrade Analysis" to be considered BACT for any purpose under the Act.

- 39. "PM Control Device" means any device, including an ESP or a Baghouse, that reduces emissions of particulate matter (PM).
 - 40. "PM" means particulate matter.
- 41. "PM CEMS" or "PM Continuous Emission Monitoring System" means the equipment that samples, analyzes, measures, and provides, by readings taken at frequent intervals, an electronic or paper record of PM emissions.
- 42. "PM Emission Rate" means the number of pounds of PM emitted per million BTU of heat input (lb/mmBTU), as measured in annual stack tests in accordance with EPA Method 5, 40 C.F.R. Part 60, including Appendix A.
- 43. "Project Dollars" means DMG's expenditures and payments incurred or made in carrying out the Environmental Mitigation Projects identified in Section VIII (Environmental Mitigation Projects) of this Consent Decree to the extent that such expenditures or payments both: (a) comply with the requirements set forth in Section VIII (Environmental Mitigation Projects) and Appendix A of this Consent Decree, and (b) constitute DMG's direct payments for

such projects, DMG's external costs for contractors, vendors, and equipment, or DMG's internal costs consisting of employee time, travel, or out-of-pocket expenses specifically attributable to these particular projects and documented in accordance with GAAP.

- 44. "PSD" means Prevention of Significant Deterioration within the meaning of Part C of Subchapter I of the Clean Air Act, 42 U.S.C. §§ 7470 7492 and 40 C.F.R. Part 52.
- 45. "Selective Catalytic Reduction System" or "SCR" means a pollution control device that employs selective catalytic reduction technology for the reduction of NO_x emissions.
 - 46. "SO₂" means sulfur dioxide.
- 47. "SO₂ Allowance" means "allowance" as defined at 42 U.S.C. § 7651a(3): "an authorization, allocated to an affected unit by the Administrator of EPA under Subchapter IV of the Act, to emit, during or after a specified calendar year, one ton of sulfur dioxide."
- 48. "System-Wide Annual Tonnage Limitation" means the limitation on the number of tons of the pollutant in question that may be emitted from the DMG System during the relevant calendar year (i.e., January 1 through December 31), and shall include all emissions of the pollutant emitted during periods of startup, shutdown, and Malfunction.
- 49. "Title V Permit" means the permit required of DMG's major sources under Subchapter V of the Act, 42 U.S.C. §§ 7661-7661e.
- 50. "Unit" means collectively, the coal pulverizer, stationary equipment that feeds coal to the boiler, the boiler that produces steam for the steam turbine, the steam turbine, the generator, the equipment necessary to operate the generator, steam turbine and boiler, and all ancillary equipment, including pollution control equipment. An electric steam generating station may comprise one or more Units.

IV. NO, EMISSION REDUCTIONS AND CONTROLS

A. NO_x Emission Controls

- 51. Beginning 45 days after entry of this Consent Decree, and continuing thereafter, DMG shall commence operation of the SCRs installed at Baldwin Unit 1, Unit 2, and Havana Unit 6 so as to achieve and maintain a 30-Day Rolling Average Emission Rate from each such Unit of not greater than 0.100 lb/mmBTU NO_x.
- 52. Beginning 45 days after entry of this Consent Decree, and continuing thereafter, DMG shall achieve and maintain a Plant-Wide 30-Day Rolling Average Emission Rate of not greater than 0.100 lb/mmBTU NO_x at the Baldwin Plant.
- 53. Beginning 45 days after entry of this Consent Decree, and continuing thereafter, subject to paragraph 54 below, DMG shall achieve and maintain a 30-Day Rolling Average Emission Rate of not greater than 0.120 lb/mmBTU NO_x at Baldwin Unit 3.
- 54. Beginning on December 31, 2012, and continuing thereafter, DMG shall maintain a 30-Day Rolling Average Emission Rate of not greater than 0.100 lb/mmBTU NO_x at Baldwin Unit 3.
- 55. Beginning 30 days after entry of this Consent Decree, and continuing thereafter, DMG shall operate each SCR in the DMG System at all times when the Unit it serves is in operation, provided that such operation of the SCR is consistent with the technological limitations, manufacturers' specifications, and good engineering and maintenance practices for the SCR. During any such period in which the SCR is not operational, DMG will minimize emissions to the extent reasonably practicable.

56. Beginning 45 days from entry of this Consent Decree, DMG shall operate low NO_x burners ("LNB") and/or Overfire Air Technology ("OFA") on the DMG System Units listed in the table below at all times that the Units are in operation, consistent with the technological limitations, manufacturers' specifications, and good engineering and maintenance practices for the LNB and/or the Overfire Air Technology, so as to minimize emissions to the extent reasonably practicable.

DMG System Unit	NOx Control Technology
Baldwin Unit 1	OFA
Baldwin Unit 2	OFA
Baldwin Unit 3	LNB, OFA
Havana Unit 6	LNB, OFA
Hennepin Unit 1	LNB, OFA
Hennepin Unit 2	LNB, OFA
Vermilion Unit 2	LNB, OFA
Wood River Unit 4	LNB, OFA
Wood River Unit 5	LNB, OFA

- B. System-Wide Annual Tonnage Limitations for NO_x
- 57. During each calendar year specified in the Table below, all Units in the DMG System, collectively, shall not emit NO_x in excess of the following System-Wide Annual Tonnage Limitations:

Applicable Calendar Year	System-Wide Annual Tonnage Limitations for NO _x
2005	15,000 tons
2006	14,000 tons
2007 and each year thereafter	13,800 tons

C. <u>Use of NO_x Allowances</u>

- 58. Except as provided in this Consent Decree, DMG shall not sell or trade any NO_x Allowances allocated to the DMG System that would otherwise be available for sale or trade as a result of the actions taken by DMG to comply with the requirements of this Consent Decree.
- 59. Except as may be necessary to comply with Section XIV (Stipulated Penalties), DMG may not use NO_x Allowances to comply with any requirement of this Consent Decree, including by claiming compliance with any emission limitation required by this Decree by using, tendering, or otherwise applying NO_x Allowances to offset any excess emissions (i.e., emissions above the limits specified in Paragraph 57).
- 60. NO_x Allowances allocated to the DMG System may be used by DMG only to meet its own federal and/or state Clean Air Act regulatory requirements, except as provided in Paragraph 61.
- 61. Provided that DMG is in compliance with the System-Wide Annual Tonnage Limitations for NO_x set forth in this Consent Decree, nothing in this Consent Decree shall preclude DMG from selling or transferring NO_x Allowances allocated to the DMG System that become available for sale or trade solely as a result of:
 - a. activities that reduced NO_x emissions at any Unit within the DMG System prior to the date of entry of this Consent Decree;

- b. the installation and operation of any NO_x pollution control technology or technique that is not otherwise required by this Consent Decree; or
- c. achievement and maintenance of NO_x emission rates below a 30-Day Rolling Average Emission Rate of 0.100 lb/mmBTU at Baldwin Units 1, 2 or 3, or at Havana Unit 6,

so long as DMG timely reports the generation of such surplus NO_x Allowances in accordance with Section XII (Periodic Reporting) of this Consent Decree. DMG shall be allowed to sell or transfer NO_x Allowances equal to the NO_x emissions reductions achieved for any given year by any of the actions specified in Subparagraphs 61.b or 61.c. only to the extent that, and in the amount that, the total NO_x emissions from all Units within the DMG System are below the System-Wide Annual Tonnage Limitation specified in Paragraph 57 for that year.

- 62. Nothing in this Consent Decree shall prevent DMG from purchasing or otherwise obtaining NO_x Allowances from another source for purposes of complying with state or federal Clean Air Act requirements to the extent otherwise allowed by law.
 - D. NO_x Provisions Improving Other Units
- 63. Any Other Unit can become an Improved Unit for NO_x if (a) it is equipped with an SCR (or equivalent NOx control technology approved pursuant to Paragraph 64), and (b) has become subject to a federally enforceable 0.100 lb/mmBTU NO_x 30-Day Rolling Average Emission Rate.
- 64. With prior written notice to the Plaintiffs and written approval from EPA (after consultation with the State of Illinois and the Citizen Plaintiffs), an Other Unit in the DMG System may be considered an Improved Unit under this Consent Decree if DMG installs and

operates NO_x control technology, other than an SCR, that has been demonstrated to be capable of achieving and maintaining a 30-Day Rolling Average Emission Rate not greater than 0.100 lb/mmBTU NO_x and if such unit has become subject to a federally enforceable 0.100 lb/mmBTU NO_x 30-Day Rolling Average Emission Rate.

E. General NO_x Provisions

65. In determining Emission Rates for NO_x, DMG shall use CEMS in accordance with the reference methods specified in 40 C.F.R. Part 75.

V. SO₂ EMISSION REDUCTIONS AND CONTROLS

A. SO₂ Emission Limitations and Control Requirements

66. No later than the dates set forth in the Table below for each of the three Units at Baldwin and Havana Unit 6, and continuing thereafter, DMG shall not operate the specified Unit unless and until it has installed and commenced operation of, on a year-round basis, an FGD (or equivalent SO₂ control technology approved pursuant to Paragraph 68) on each such Unit, so as to achieve and maintain a 30-Day Rolling Average Emission Rate of not greater than 0.100 lb/mmBTU SO₂.

<u>UNIT</u>	<u>DATE</u>
First Baldwin Unit (i.e., any of the Baldwin Units 1, 2 or 3)	December 31, 2010
Second Baldwin Unit (i.e., either of the 2 remaining Baldwin Units)	December 31, 2011
Third Baldwin Unit (i.e., the remaining Baldwin Unit)	December 31, 2012
Havana Unit 6	December 31, 2012

- 67. Any FGD required to be installed under this Consent Decree may be a wet FGD or a dry FGD at DMG's option.
- 68. With prior written notice to the Plaintiffs and written approval from EPA (after consultation by EPA with the State of Illinois and the Citizen Plaintiffs), DMG may, in lieu of installing and operating an FGD at any of the Units specified in Paragraph 66, install and operate equivalent SO₂ control technology so long as such equivalent SO₂ control technology has been demonstrated to be capable of achieving and maintaining a 30-Day Rolling Average Emission Rate of not greater than 0.100 lb/mmBTU SO₂.
- 69. Beginning on the later of the date specified in Paragraph 66 or the first Operating Day of each Unit thereafter, and continuing thereafter, DMG shall operate each FGD (or equivalent SO₂ control technology approved pursuant to Paragraph 68) required by this Consent Decree at all times that the Unit it serves is in operation, provided that such operation of the FGD or equivalent technology is consistent with the technological limitations, manufacturers' specifications, and good engineering and maintenance practices for the FGD or equivalent technology. During any such period in which the FGD or equivalent technology is not operational, DMG will minimize emissions to the extent reasonably practicable.
- 70. No later than 30 Operating Days after entry of this Consent Decree, and continuing thereafter, DMG shall operate Hennepin Units 1 and 2 and Wood River Units 4 and 5 so as to achieve and maintain a 30-Day Rolling Average Emission Rate from each of the stacks serving such Units of not greater than 1.200 lb/mmBtu SO₂.

- 71. DMG shall operate Vermilion Units 1 and 2 so that no later than 30 Operating Days after January 1, 2007, DMG shall achieve and maintain a 30-Day Rolling Average Emission Rate from the stack serving such Units of not greater than 1.200 lb/mmBtu SO₂.
- 72. No later than 30 Operating Days after entry of this Consent Decree and continuing until December 31, 2012, DMG shall operate Havana Unit 6 so as to achieve and maintain a 30-Day Rolling Average Emission Rate from the stack serving such Unit of not greater than 1.200 lb/mmBtu SO₂.
 - B. System-Wide Annual Tonnage Limitations for SO₂
- 73. During each calendar year specified in the Table below, all Units in the DMG System, collectively, shall not emit SO₂ in excess of the following System-Wide Annual Tonnage Limitations:

Applicable Calendar Year	System-Wide Annual Tonnage Limitations for SO ₂
2005	66,300 tons
2006	66,300 tons
2007	65,000 tons
2008	62,000 tons
2009	62,000 tons
2010	62,000 tons
2011	57,000 tons
2012	49,500 tons
2013 and each year thereafter	29,000 tons

74. Except as may be necessary to comply with Section XIV (Stipulated Penalties), DMG may not use SO₂ Allowances to comply with any requirement of this Consent Decree,

including by claiming compliance with any emission limitation required by this Decree by using, tendering, or otherwise applying SO₂ Allowances to offset any excess emissions (i.e., emissions above the limits specified in Paragraph 73).

C. <u>Surrender of SO₂ Allowances</u>

75. For each year specified below, DMG shall surrender to EPA, or transfer to a non-profit third party selected by DMG for surrender, SO₂ Allowances that have been allocated to DMG for the specified calendar year by the Administrator of EPA under the Act or by any State under its State Implementation Plan, in the amounts specified below, subject to Paragraph 76:

<u>Calendar Year</u>	<u>Amount</u>
2008	12,000 Allowances
2009	18,000 Allowances
2010	24,000 Allowances
2011, and each year thereafter	30,000 Allowances

DMG shall make the surrender of SO₂ Allowances required by this Paragraph by December 31 of each specified calendar year.

76. If the surrender of SO₂ allowances required by Paragraph 75 would result in an insufficient number of allowances being available from those allocated to the Units comprising the DMG System to meet the requirements of any Federal and/or State requirements for any DMG System unit, DMG must provide notice to the Plaintiffs of such insufficiency, including documentation of the number of SO₂ allowances so required and the Federal and/or State requirement involved. Unless EPA objects, in writing, to the amounts surrendered or to be

surrendered, the basis of the amounts surrendered or to be surrendered, or the adequacy of the documentation, DMG may reduce the number of SO₂ allowances to be surrendered under Paragraph 75 to the extent necessary to allow such DMG System Unit to satisfy the specified Federal and/or State requirement(s). If DMG has sold or traded SO₂ allowances allocated by the Administrator of EPA or a State for the year in which the surrender of allowances under Paragraph 75 would result in an insufficient number of allowances, all sold or traded allowances must be restored to DMG's account through DMG's purchase or transfer of allowances before DMG may reduce the surrender requirements of Paragraph 75 as described above.

- 77. Nothing in this Consent Decree is intended to preclude DMG from using SO₂
 Allowances allocated to the DMG System by the Administrator of EPA under the Act, or by any
 State under its State Implementation Plan, to meet its own Federal and/or State Clean Air Act
 regulatory requirements for any Unit in the DMG System.
- 78. For purposes of this Subsection, the "surrender of allowances" means permanently surrendering allowances from the accounts administered by EPA for all Units in the DMG System, so that such allowances can never be used thereafter to meet any compliance requirement under the Clean Air Act, the Illinois State Implementation Plan, or this Consent Decree.
- 79. If any allowances required to be surrendered under this Consent Decree are transferred directly to a non-profit third party, DMG shall include a description of such transfer in the next report submitted to EPA pursuant to Section XII (Periodic Reporting) of this Consent Decree. Such report shall: (i) identify the non-profit third-party recipient(s) of the SO₂ Allowances and list the serial numbers of the transferred SO₂ Allowances; and (ii) include a

certification by the third-party recipient(s) stating that the recipient(s) will not sell, trade, or otherwise exchange any of the allowances and will not use any of the SO₂ Allowances to meet any obligation imposed by any environmental law. No later than the third periodic report due after the transfer of any SO₂ Allowances, DMG shall include a statement that the third-party recipient(s) surrendered the SO₂ Allowances for permanent surrender to EPA in accordance with the provisions of Paragraph 80 within one (1) year after DMG transferred the SO₂ Allowances to them. DMG shall not have complied with the SO₂ Allowance surrender requirements of this Paragraph until all third-party recipient(s) shall have actually surrendered the transferred SO₂ Allowances to EPA.

- 80. For all SO₂ Allowances surrendered to EPA, DMG or the third-party recipient(s) (as the case may be) shall first submit an SO₂ Allowance transfer request form to EPA's Office of Air and Radiation's Clean Air Markets Division directing the transfer of such SO₂ Allowances to the EPA Enforcement Surrender Account or to any other EPA account that EPA may direct in writing. As part of submitting these transfer requests, DMG or the third-party recipient(s) shall irrevocably authorize the transfer of these SO₂ Allowances and identify by name of account and any applicable serial or other identification numbers or station names the source and location of the SO₂ Allowances being surrendered.
- 81. The requirements in Paragraphs 75 and 76 of this Decree pertaining to DMG's surrender of SO₂ Allowances are permanent injunctions not subject to any termination provision of this Decree.

E. General SO₂ Provisions

82. In determining Emission Rates for SO₂, DMG shall use CEMS in accordance with those reference methods specified in 40 C.F.R. Part 75.

VI. PM EMISSION REDUCTIONS AND CONTROLS

A. Optimization of PM Emission Controls

83. Beginning ninety (90) days after entry of this Consent Decree, and continuing thereafter, DMG shall operate each PM Control Device on each Unit within the DMG System to maximize PM emission reductions at all times when the Unit is in operation, provided that such operation of the PM Control Device is consistent with the technological limitations, manufacturer's specifications and good engineering and maintenance practices for the PM Control Device. During any periods when any section or compartment of the PM control device is not operational, DMG will minimize emissions to the extent reasonably practicable. Specifically, DMG shall, at a minimum, to the extent reasonably practicable: (a) energize each section of the ESP for each unit, where applicable, operate each compartment of the Baghouse for each unit, where applicable (regardless of whether those actions are needed to comply with opacity limits), and repair any failed ESP section or Baghouse compartment at the next planned Unit outage (or unplanned outage of sufficient length); (b) operate automatic control systems on each ESP to maximize PM collection efficiency, where applicable; (c) maintain and replace bags on each Baghouse as needed to maximize collection efficiency, where applicable; and (d) inspect for and repair during the next planned Unit outage (or unplanned outage of sufficient length) any openings in ESP casings, ductwork and expansion joints to minimize air leakage.

84. Within two hundred seventy (270) days after entry of this Consent Decree, for each DMG System Unit served by an ESP or Baghouse, DMG shall complete a PM emission control optimization study which shall recommend: the best available maintenance, repair, and operating practices and a schedule for implementation of such to optimize ESP or Baghouse availability and performance in accordance with manufacturers' specifications, the operational design of the Unit, and good engineering practices. DMG shall retain a qualified contractor to assist in the performance and completion of each study and shall implement the study's recommendations in accordance with the schedule provided for in the study, but in no event later than the next planned Unit outage or 180 days of completion of the optimization study, whichever is later. Thereafter, DMG shall maintain each ESP and Baghouse as required by the study's recommendations or other alternative actions as approved by EPA. These requirements of this Paragraph shall also apply, and these activities shall be repeated, whenever DMG makes a major change to a Unit's ESP, installs a new PM Control Device, or changes the fuel used by a Unit.

B. <u>Installation of New PM Emission Controls</u>

85. No later than the dates set forth in the Table below for Baldwin Units 1, 2 and 3 and Havana Unit 6, and continuing thereafter, DMG shall not operate the specified Unit unless and until it has installed and commenced operation of a Baghouse on each such Unit so as to achieve and maintain a PM emissions rate of not greater than 0.015 lb/mmBTU.

Unit	Date
First Baldwin Unit (i.e., any of Baldwin Units 1, 2 or 3)	December 31, 2010
Second Baldwin Unit (i.e., either of the 2 remaining Baldwin Units)	December 31, 2011
Third Baldwin Unit (i.e., the remaining Baldwin Unit)	December 31, 2012
Havana Unit 6	December 31, 2012

C. <u>Upgrade of Existing PM Emission Controls</u>

86. At each Unit listed below, no later than the dates specified, and continuing thereafter, DMG shall operate ESPs or alternative PM control equipment at the following Units to achieve and maintain a PM emissions rate of not greater than 0.030 lb/mmBTU:

Unit	Date
Havana Unit 6	December 31, 2005
1 st Wood River Unit (i.e., either of Wood River Units 4 or 5)	December 31, 2005
1 st Hennepin Unit (i.e., either of Hennepin Units 1 or 2)	December 31, 2006
2 nd Wood River Unit (i.e., the remaining Wood River Unit)	December 31, 2007
2 nd Hennepin Unit (i.e., the remaining Hennepin Unit)	December 31, 2010
1 st Vermilion Unit (i.e., either of Vermilion Units 1 or 2)	December 31, 2010
2 nd Vermilion Unit (i.e., the remaining Vermilion Unit)	December 31, 2010

In the alternative and in lieu of demonstrating compliance with the PM emission rate applicable under this Paragraph, DMG may elect to undertake an upgrade of the existing PM emissions control equipment for any such Unit based on a Pollution Control Equipment Upgrade Analysis for that Unit. The preparation, submission, and implementation of such Pollution Control Equipment Upgrade Analysis shall be undertaken and completed in accordance with the compliance schedules and procedures as specified in Paragraph 88.

- 87. DMG shall operate each ESP (on Units without a Baghouse) and each Baghouse in the DMG System at all times when the Unit it serves is in operation, provided that such operation of the ESP or Baghouse is consistent with the technological limitations, manufacturers' specifications, and good engineering and maintenance practices for the ESP or Baghouse. During any such period in which the ESP or Baghouse is not operational, DMG will minimize emissions to the extent reasonably practicable. Notwithstanding the foregoing sentence, DMG shall not be required to operate an ESP on any Unit on which a Baghouse is installed and operating, unless DMG operated the ESP during the immediately preceding stack test required by Paragraph 89.
- 88. For each Unit in the DMG System for which DMG does not elect to meet a PM Emission Rate of 0.030 lb/mmBTU as required by Paragraph 86, DMG shall prepare, submit, and implement a Pollution Control Equipment Upgrade Analysis in accordance with this Paragraph. Such Pollution Control Equipment Upgrade Analysis shall include proposed upgrades to the Unit's existing PM Control Devices and a proposed alternate PM Emission Rate that the Unit shall meet upon completion of such upgrade. DMG shall deliver such Pollution Control Equipment Upgrade Analysis to EPA and the State of Illinois for approval pursuant to

Section XIII (Review and Approval of Submittals) of this Consent Decree at least 24 months prior to the deadlines set forth in Paragraph 86 for each such Unit, unless those deadlines are less than 24 months after the date of entry of this Decree. In those cases only, (a) the Analysis shall be delivered within 180 days of entry of this Decree, and (b) so long as DMG timely submits the Analysis, any deadline for implementing a PM Emission Control Equipment Upgrade may be extended in accordance with the provisions of subparagraph (c) below.

- a. In conducting the Pollution Control Equipment Upgrade Analysis for any Unit,
 DMG shall consider all commercially available control technologies, except that
 DMG need not consider any of the following PM control measures:
 - the complete replacement of the existing ESP with a new ESP, FGD, or Baghouse, or
 - 2. the upgrade of the existing ESP controls through the installation of any supplemental PM pollution control device if the costs of such upgrade are equal to or greater than the costs of a replacement ESP, FGD, or Baghouse (on a total dollar-per-ton-of-pollutant-removed basis).
- b. With each Pollution Control Equipment Upgrade Analysis delivered to EPA and the State of Illinois, DMG shall simultaneously deliver all documents that were considered in preparing such Pollution Control Equipment Upgrade Analysis.
 DMG shall retain a qualified contractor to assist in the performance and completion of each Pollution Control Equipment Upgrade Analysis.
- c. Beginning one (1) year after EPA and the State of Illinois approve the recommendation(s) made in a Pollution Control Equipment Upgrade Analysis for

a Unit, DMG shall not operate that Unit unless all equipment called for in the recommendation(s) of the Pollution Control Equipment Upgrade Analysis has been installed. An installation period longer than one year may be allowed if DMG makes such a request in the Pollution Control Equipment Upgrade Analysis and EPA and the State of Illinois determine such additional time is necessary due to factors including but not limited to the magnitude of the PM control project or the need to address reliability concerns that could result from multiple Unit outages within the DMG System. Upon installation of all equipment recommended under an approved Pollution Control Equipment Upgrade Analysis, DMG shall operate such equipment in compliance with the recommendation(s) of the approved Pollution Control Equipment Upgrade Analysis, including compliance with the PM Emission Rate specified by the recommendation(s).

D. PM Emissions Monitoring

- 1. PM Stack Tests.
- 89. Beginning in calendar year 2005, and continuing in each calendar year thereafter, DMG shall conduct a PM performance test on each DMG System Unit. The annual stack test requirement imposed on each DMG System Unit by this Paragraph may be satisfied by stack tests conducted by DMG as required by its permits from the State of Illinois for any year that such stack tests are required under the permits. DMG may perform testing every other year, rather than every year, provided that two of the most recently completed test results from tests conducted in accordance with the methods and procedures specified in Paragraph 90 demonstrate that the particulate matter emissions are equal to or less than 0.015 lb/mmBTU. DMG shall

perform testing every year, rather than every other year, beginning in the year immediately following any test result demonstrating that the particulate matter emissions are greater than 0.015 lb/mmBTU.

90. The reference methods and procedures for determining compliance with PM Emission Rates shall be those specified in 40 C.F.R. Part 60, Appendix A, Method 5, or an alternative method that is promulgated by EPA, requested for use herein by DMG, and approved for use herein by EPA and the State of Illinois. Use of any particular method shall conform to the EPA requirements specified in 40 C.F.R. Part 60, Appendix A and 40 C.F.R. § 60.48a (b) and (e), or any federally approved method contained in the Illinois State Implementation Plan. DMG shall calculate the PM Emission Rates from the stack test results in accordance with 40 C.F.R. § 60.8(f). The results of each PM stack test shall be submitted to EPA and the State of Illinois within 45 days of completion of each test.

2. PM CEMS

- 91. DMG shall install and operate PM CEMS in accordance with Paragraphs 92 through 96. Each PM CEMS shall comprise a continuous particle mass monitor measuring particulate matter concentration, directly or indirectly, on an hourly average basis and a diluent monitor used to convert the concentration to units of lb/mmBTU. DMG shall maintain, in an electronic database, the hourly average emission values produced by all PM CEMS in lb/mmBTU. DMG shall use reasonable efforts to keep each PM CEMS running and producing data whenever any Unit served by the PM CEMS is operating.
- 92. Within nine (9) months after entry of this Consent Decree, but in any case no later than June 30, 2006, DMG shall submit to EPA and the State of Illinois for review and

approval pursuant to Section XIII (Review and Approval of Submittals) of this Consent Decree (a) a plan for the installation and certification of each PM CEMS; and (b) a proposed Quality Assurance/Quality Control ("QA/QC") protocol that shall be followed in calibrating such PM CEMS. In developing both the plan for installation and certification of the PM CEMS and the QA/QC protocol, DMG shall use the criteria set forth in EPA's Amendments to Standards of Performance for New Stationary Sources: Monitoring Requirements, 69 Fed. Reg. 1786 (January 12, 2004) ("P.S. 11"). EPA and the State of Illinois shall expeditiously review such submissions. Following approval by EPA and the State of Illinois of the protocol, DMG shall thereafter operate each PM CEMS in accordance with the approved protocol.

93. No later than the dates specified below, DMG shall install, certify, and operate PM CEMS on four (4) Units, stacks or common stacks in accordance with the following schedule:

STACK	DATE TO COMMENCE OPERATION OF PM CEMS
1 st CEM on any DMG System Unit not scheduled to receive an FGD	December 31, 2006
2 nd CEM on any DMG System Unit not scheduled to receive an FGD	December 31, 2007
3 rd CEM on any DMG System Unit scheduled to receive an FGD	December 31, 2011
4 th CEM on any DMG System Unit scheduled to receive an FGD	December 31, 2012

- 94. No later than ninety (90) days after DMG begins operation of the PM CEMS, DMG shall conduct tests of each PM CEMS to demonstrate compliance with the PM CEMS installation and certification plan submitted to and approved by EPA and the State of Illinois in accordance with Paragraph 92.
- 95. DMG shall operate the PM CEMS for at least two (2) years on each of the Units specified in Paragraph 93. After two (2) years of operation, DMG shall not be required to continue operating the PM CEMS on any such Units if EPA determines that operation of the PM CEMS is no longer feasible. Operation of a PM CEMS shall be considered no longer feasible if (a) the PM CEMS cannot be kept in proper condition for sufficient periods of time to produce reliable, adequate, or useful data consistent with the QA/QC protocol; or (b) DMG demonstrates that recurring, chronic, or unusual equipment adjustment or servicing needs in relation to other types of continuous emission monitors cannot be resolved through reasonable expenditures of resources. If EPA determines that DMG has demonstrated pursuant to this Paragraph that operation is no longer feasible, DMG shall be entitled to discontinue operation of and remove the PM CEMS.

3. PM Reporting

96. Following the installation of each PM CEMS, DMG shall begin and continue to report to EPA, the State of Illinois, and the Citizen Plaintiffs, pursuant to Section XII (Periodic Reporting), the data recorded by the PM CEMS, expressed in lb/mmBTU on a 3-hour rolling average basis in electronic format, as required by Paragraph 91.

E. General PM Provisions

97. Nothing in this Consent Decree is intended to, or shall, alter or waive any applicable law (including any defenses, entitlements, challenges, or clarifications related to the Credible Evidence Rule, 62 Fed. Reg. 8315 (Feb. 27, 1997)) concerning the use of data for any purpose under the Act.

VII. <u>PROHIBITION ON NETTING CREDITS OR</u> OFFSETS FROM REQUIRED CONTROLS

- 98. Emission reductions that result from actions to be taken by DMG after entry of this Consent Decree to comply with the requirements of this Consent Decree shall not be considered as a creditable contemporaneous emission decrease for the purpose of obtaining a netting credit under the Clean Air Act's Nonattainment NSR and PSD programs.
- 99. The limitations on the generation and use of netting credits or offsets set forth in the previous Paragraph 98 do not apply to emission reductions achieved by DMG System Units that are greater than those required under this Consent Decree. For purposes of this Paragraph, emission reductions from a DMG System Unit are greater than those required under this Consent Decree if, for example, they result from DMG compliance with federally enforceable emission limits that are more stringent than those limits imposed on DMG System Units under this Consent Decree and under applicable provisions of the Clean Air Act or the Illinois State Implementation Plan.
- 100. Nothing in this Consent Decree is intended to preclude the emission reductions generated under this Consent Decree from being considered by the State of Illinois or EPA as creditable contemporaneous emission decreases for the purpose of attainment demonstrations

submitted pursuant to § 110 of the Act, 42 U.S.C. § 7410, or in determining impacts on NAAQS, PSD increment, or air quality related values, including visibility, in a Class I area.

VIII. ENVIRONMENTAL MITIGATION PROJECTS

- described in Appendix A to this Decree in compliance with the approved plans and schedules for such Projects and other terms of this Consent Decree. DMG shall submit plans for the Projects to the Plaintiffs for review and approval pursuant to Section XIII (Review and Approval of Submittals) of this Consent Decree in accordance with the schedules set forth in Appendix A. In implementing the Projects, DMG shall spend no less than \$15 million in Project Dollars on or before December 31, 2007. DMG shall maintain, and present to the Plaintiffs upon request, all documents to substantiate the Project Dollars expended and shall provide these documents to the Plaintiffs within thirty (30) days of a request by any of the Plaintiffs for the documents.
- 102. All plans and reports prepared by DMG pursuant to the requirements of this Section of the Consent Decree and required to be submitted to EPA shall be publicly available from DMG without charge.
- 103. DMG shall certify, as part of each plan submitted to the Plaintiffs for any Project, that DMG is not otherwise required by law to perform the Project described in the plan, that DMG is unaware of any other person who is required by law to perform the Project, and that DMG will not use any Project, or portion thereof, to satisfy any obligations that it may have under other applicable requirements of law, including any applicable renewable portfolio standards.

- 104. DMG shall use good faith efforts to secure as much benefit as possible for the Project Dollars expended, consistent with the applicable requirements and limits of this Consent Decree.
- 105. If DMG elects (where such an election is allowed) to undertake a Project by contributing funds to another person or entity that will carry out the Project in lieu of DMG, but not including DMG's agents or contractors, that person or instrumentality must, in writing: (a) identify its legal authority for accepting such funding; and (b) identify its legal authority to conduct the Project for which DMG contributes the funds. Regardless of whether DMG elected (where such election is allowed) to undertake a Project by itself or to do so by contributing funds to another person or instrumentality that will carry out the Project, DMG acknowledges that it will receive credit for the expenditure of such funds as Project Dollars only if DMG demonstrates that the funds have been actually spent by either DMG or by the person or instrumentality receiving them (or, in the case of internal costs, have actually been incurred by DMG), and that such expenditures met all requirements of this Consent Decree.
- 106. Beginning six (6) months after entry of this Consent Decree, and continuing until completion of each Project (including any applicable periods of demonstration or testing), DMG shall provide the Plaintiffs with semi-annual updates concerning the progress of each Project.
- 107. Within sixty (60) days following the completion of each Project required under this Consent Decree (including any applicable periods of demonstration or testing), DMG shall submit to the Plaintiffs a report that documents the date that the Project was completed, DMG's results of implementing the Project, including the emission reductions or other environmental benefits achieved, and the Project Dollars expended by DMG in implementing the Project.

IX. <u>CIVIL PENALTY</u>

- 108. Within thirty (30) calendar days after entry of this Consent Decree, DMG shall pay to the United States a civil penalty in the amount of \$9,000,000. The civil penalty shall be paid by Electronic Funds Transfer ("EFT") to the United States Department of Justice, in accordance with current EFT procedures, referencing USAO File Number 1999V00379 and DOJ Case Number 90-5-2-1-06837 and the civil action case name and case number of this action. The costs of such EFT shall be DMG's responsibility. Payment shall be made in accordance with instructions provided to DMG by the Financial Litigation Unit of the U.S. Attorney's Office for the Southern District of Illinois. Any funds received after 2:00 p.m. EDT shall be credited on the next business day. At the time of payment, DMG shall provide notice of payment, referencing the USAO File Number, the DOJ Case Number, and the civil action case name and case number, to the Department of Justice and to EPA in accordance with Section XIX (Notices) of this Consent Decree.
- 109. Failure to timely pay the civil penalty shall subject DMG to interest accruing from the date payment is due until the date payment is made at the rate prescribed by 28 U.S.C. § 1961, and shall render DMG liable for all charges, costs, fees, and penalties established by law for the benefit of a creditor or of the United States in securing payment.
- 110. Payments made pursuant to this Section are penalties within the meaning of Section 162(f) of the Internal Revenue Code, 26 U.S.C. § 162(f), and are not tax-deductible expenditures for purposes of federal law.

X. RELEASE AND COVENANT NOT TO SUE FOR ILLINOIS POWER COMPANY

- 111. Upon entry of this Decree, each of the Plaintiffs hereby forever releases Illinois Power Company from, and covenants not to sue Illinois Power Company for, any and all civil claims, causes of action, and liability under the Clean Air Act and/or the Illinois Environmental Protection Act that such Plaintiffs could assert (whether such claims, causes of action, and liability are, were, or ever will be characterized as known or unknown, asserted or unasserted, liquidated or contingent, accrued or unaccrued), where such claims, causes of action, and liability are based on any modification, within the meaning of the Clean Air Act and/or the Illinois Environmental Protection Act, undertaken at any time before lodging of this Decree at any DMG System Unit, including and without limitation all such claims, causes of action, and liability asserted, or that could have been asserted, against Illinois Power Company by the United States, the State of Illinois and/or the Citizen Plaintiffs in the lawsuit styled United States of America, et al. v. Illinois Power Company and Dynegy Midwest Generation, Inc., Civil Action No. 99-833-MJR and all such civil claims, causes of action, and liability asserted or that could have been or could be asserted under any or all of the following statutory and/or regulatory provisions:
 - a. Parts C or D of Subchapter I of the Clean Air Act,
 - b. Section 111 of the Clean Air Act and 40 C.F.R. Section 60.14,
 - c. The federally approved and enforceable Illinois State Implementation Plan, but only insofar as such claims were alleged in the third amended complaint filed in the lawsuit so styled,

- d. Sections 502(a) and 504(a) of the Clean Air Act, but only to the extent that such claims are based on Illinois Power's failure to obtain an operating permit that reflects applicable requirements imposed under Parts C or D of Subchapter I, or Section 111, of the Clean Air Act,
- e. Sections 9 and 9.1 of the Illinois Environmental Protection Act, 415 ILCS 5/9 and 9.1, all applicable regulations promulgated thereunder, and all relevant prior versions of such statute and regulations, and
- f. Section 39.5 of the Illinois Environmental Protection Act, 415 ILCS 5/39.5, and all applicable regulations promulgated thereunder, and all relevant prior versions of such statutes and regulations, but only to the extent that such claims are based on Illinois Power's failure to obtain an operating permit that reflects applicable requirements imposed under Sections 9 and 9.1 of the Illinois Environmental Protection Act, 415 ILCS 5/9 and 9.1,

where such claims, causes of actions and liability are based on any modification, within the meaning of the Clean Air Act and/or the Illinois Environmental Protection Act, undertaken at any time before lodging of this Decree at any DMG System Unit. As to Illinois Power Company, such resolved claims shall not be subject to the Bases for Pursuing Resolved Claims set forth in Section XI, Subsection B, of this Consent Decree.

112. In accordance with Paragraph 171 of this Decree, in the event that Illinois Power acquires an Ownership Interest in, or becomes an operator (as that term is used and interpreted under the Clean Air Act) of, any DMG System Unit, this release shall become void with respect

to the Unit(s) to which the Ownership Interest applies when and to the extent specified in Paragraph 171.

XI. RESOLUTION OF PLAINTIFFS' CIVIL CLAIMS AGAINST DMG

- A. <u>RESOLUTION OF PLAINTIFFS' CIVIL CLAIMS</u>
- 113. <u>Claims Based on Modifications Occurring Before the Lodging of Decree</u>.

 Entry of this Decree shall resolve all civil claims of the Plaintiffs against DMG under any or all of:
 - a. Parts C or D of Subchapter I of the Clean Air Act,
 - b. Section 111 of the Clean Air Act and 40 C.F.R. Section 60.14,
 - c. The federally approved and enforceable Illinois State Implementation Plan, but only insofar as such claims were alleged in the third amended complaint filed in the lawsuit styled <u>United States of America</u>, et al. v. Illinois Power Company and <u>Dynegy Midwest Generation</u>, Inc., Civil Action No. 99-833-MJR,
 - d. Sections 502(a) and 504(a) of the Clean Air Act, but only to the extent that such claims are based on DMG's or Illinois Power's failure to obtain an operating permit that reflects applicable requirements imposed under Parts C or D of Subchapter I, or Section 111, of the Clean Air Act,
 - e. Sections 9 and 9.1 of the Illinois Environmental Protection Act, 415 ILCS 5/9 and 9.1, all applicable regulations promulgated thereunder, and all relevant prior versions of such statute and regulations, and
 - f. Section 39.5 of the Illinois Environmental Protection Act, 415 ILCS 5/39.5, and all applicable regulations promulgated thereunder, and all relevant prior versions

of such statutes and regulations, but only to the extent that such claims are based on Illinois Power's failure to obtain an operating permit that reflects applicable requirements imposed under Sections 9 and 9.1 of the Illinois Environmental Protection Act, 415 ILCS 5/9 and 9.1,

that arose from any modifications commenced at any DMG System Unit prior to the date of lodging of this Decree, including but not limited to those modifications alleged in the Complaints filed in this civil action.

114. <u>Claims Based on Modifications After the Lodging of Decree</u>.

As to DMG, entry of this Decree also shall resolve all civil claims of the Plaintiffs against DMG for pollutants regulated under Parts C or D of Subchapter I of the Clean Air Act, and under regulations promulgated thereunder as of the date of lodging of this Decree, where such claims are based on a modification completed before December 31, 2015 and:

- a. commenced at any DMG System unit after lodging of this Decree; or
- b. that this Consent Decree expressly directs DMG to undertake.

The term "modification" as used in this Paragraph 114 shall have the meaning that term is given under the Clean Air Act and under the regulations promulgated thereunder as of July 31, 2003.

115. <u>Reopeners</u>. The Resolution of the Plaintiffs' Civil Claims against DMG, as provided by this Subsection A, is subject to the provisions of Subsection B of this Section.

B. PURSUIT OF PLAINTIFFS' CIVIL CLAIMS OTHERWISE RESOLVED

116. <u>Bases for Pursuing Resolved Claims Across DMG System</u>. If DMG violates System-Wide Annual Tonnage Limitations for NO_x required pursuant to Paragraph 57, the System-Wide Annual Tonnage Limitations for SO₂ required pursuant to Paragraph 73, or

operates a Unit more than ninety days past an installation date without completing the required installation or upgrade and commencing operation of any emission control device required pursuant to Paragraphs 51, 54, 66, or 85, then the Plaintiffs may pursue any claim at any DMG System Unit that is otherwise resolved under Subsection A (Resolution of Plaintiffs' Civil Claims), subject to (a) and (b) below.

- a. For any claims based on modifications undertaken at an Other Unit (i.e., any Unit of the DMG System that is not an Improved Unit for the pollutant in question), claims may be pursued only where the modification(s) on which such claim is based was commenced within the five (5) years preceding the violation or failure specified in this Paragraph.
- b. For any claims based on modifications undertaken at an Improved Unit, claims may be pursued only where the modification(s) on which such claim is based was commenced (1) after lodging of the Consent Decree and (2) within the five years preceding the violation or failure specified in this Paragraph.
- Unit. Solely with respect to Improved Units, the Plaintiffs may also pursue claims arising from a modification (or collection of modifications) at an Improved Unit that have otherwise been resolved under Subsection A (Resolution of Plaintiffs' Civil Claims), if the modification (or collection of modifications) at the Improved Unit on which such claims are based (a) was commenced after lodging of this Consent Decree, and (b) individually (or collectively) increased the maximum hourly emission rate of that Unit for NO_x or SO₂ (as measured by 40 C.F.R. § 60.14 (b) and (h)) by more than ten percent (10%).

Unit. a. Solely with respect to Other Units, the Plaintiffs may also pursue claims arising from a modification (or collection of modifications) at an Other Unit that have otherwise been resolved under Subsection A (Resolution of Plaintiffs' Civil Claims), if the modification (or collection of modifications) at the Other Unit on

Additional Bases for Pursuing Resolved Claims for Modifications at an Other

118.

- which the claim is based was commenced within the five (5) years preceding any of the following events:
 - 1. a modification (or collection of modifications) at such Other Unit commenced after lodging of this Consent Decree increases the maximum hourly emission rate for such Other Unit for the relevant pollutant (NO_x or SO_2) (as measured by 40 C.F.R. § 60.14(b) and (h));
 - 2. the aggregate of all Capital Expenditures made at such Other Unit (a) exceed \$150/KW on the Unit's Boiler Island (based on the generating capacities identified in Paragraph 14) during the period from the date of lodging of this Decree through December 31, 2010, provided that Capital Expenditures made solely for the conversion of Vermilion Units 1 and 2 to low sulfur coal through the earlier of entry of this Consent Decree or September 30, 2005, shall be excluded; or (b) exceed \$125/KW on the Unit's Boiler Island (based on the generating capacities identified in Paragraph 14) during the period from January 1, 2011 through December 31, 2015. (Capital Expenditures shall be measured in calendar year 2004)

constant dollars, as adjusted by the McGraw-Hill Engineering News-Record Construction Cost Index); or

- 3. a modification (or collection of modifications) at such Other Unit commenced after lodging of this Consent Decree results in an emissions increase of NO_x and/or SO₂ at such Other Unit, and such increase:
 - (i) presents, by itself, or in combination with other emissions or sources, "an imminent and substantial endangerment" within the meaning of Section 303 of the Act, 42 U.S.C. §7603;
 - (ii) causes or contributes to violation of a NAAQS in any Air Quality Control Area that is in attainment with that NAAQS;
 - (iii) causes or contributes to violation of a PSD increment; or
 - (iv) causes or contributes to any adverse impact on any formally-recognized air quality and related values in any Class I area.
- 4. The introduction of any new or changed NAAQS shall not, standing alone, provide the showing needed under Paragraph 113, Subparagraphs (3)(ii) or (3)(iii), to pursue any claim for a modification at an Other Unit resolved under Subsection B of this Section.
- b. Solely with respect to Other Units at the plants listed below, the Plaintiffs may also pursue claims arising from a modification (or collection of modifications) at such Other Unit commenced after lodging of this Consent Decree if such modification (or collection of modifications) results in an emissions increase of

 NO_x and/or SO_2 at such Other Unit, and such increase causes the emissions at the Plant at issue to exceed the Plant-Wide Annual Tonnage Emission Levels listed below:

<u>Unit</u>	SO ₂ Tons Limit	NO _x Tons Limit
Hennepin	9,050	2,650
Vermillion	17,370 (in 2005) 5,650 (in 2006 and thereafter)	3,360
Wood River	13,700	3,100

XII. PERIODIC REPORTING

- Decree for DMG to achieve and maintain a certain PM Emission Rate at any DMG System Unit, DMG shall conduct a performance test for PM that demonstrates compliance with the Emission Rate required by this Consent Decree. Within forty-five (45) days of each such performance test, DMG shall submit the results of the performance test to EPA, the State of Illinois, and the Citizen Plaintiffs at the addresses specified in Section XIX (Notices) of this Consent Decree.
- 120. Beginning thirty (30) days after the end of the second full calendar quarter following the entry of this Consent Decree, and continuing on a semi-annual basis until December 31, 2015, and in addition to any other express reporting requirement in this Consent Decree, DMG shall submit to EPA, the State of Illinois, and the Citizen Plaintiffs a progress report.
 - 121. The progress report shall contain the following information:

- a. all information necessary to determine compliance with the requirements of the following Paragraphs of this Consent Decree: Paragraphs 51, 52, 53, 54, and 57 concerning NO_x emissions; Paragraphs 66, 70, 71, 72 and 73 concerning SO₂ emissions; Paragraphs 83, 84, 85, 86, 88 (if applicable), 89, 91, 93, and 94 concerning PM emissions;
- b. documentation of any Capital Expenditures made, during the period covered by the progress report, solely for the conversion of Vermilion Units 1 and 2 to low sulfur coal, but excluded from the aggregate of Capital Expenditures pursuant to Paragraph 118(a)(2);
- c. all information relating to emission allowances and credits that DMG claims to have generated in accordance with Paragraph 61 through compliance beyond the requirements of this Consent Decree; and
- d. all information indicating that the installation and commencement of operation for a pollution control device may be delayed, including the nature and cause of the delay, and any steps taken by DMG to mitigate such delay.
- 122. In any periodic progress report submitted pursuant to this Section, DMG may incorporate by reference information previously submitted under its Title V permitting requirements, provided that DMG attaches the Title V permit report, or the relevant portion thereof, and provides a specific reference to the provisions of the Title V permit report that are responsive to the information required in the periodic progress report.
- 123. In addition to the progress reports required pursuant to this Section, DMG shall provide a written report to EPA, the State of Illinois, and the Citizen Plaintiffs of any violation of

the requirements of this Consent Decree within fifteen (15) calendar days of when DMG knew or should have known of any such violation. In this report, DMG shall explain the cause or causes of the violation and all measures taken or to be taken by DMG to prevent such violations in the future.

124. Each DMG report shall be signed by DMG's Vice President of Environmental Services or his or her equivalent or designee of at least the rank of Vice President, and shall contain the following certification:

This information was prepared either by me or under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my evaluation, or the direction and my inquiry of the person(s) who manage the system, or the person(s) directly responsible for gathering the information, I hereby certify under penalty of law that, to the best of my knowledge and belief, this information is true, accurate, and complete. I understand that there are significant penalties for submitting false, inaccurate, or incomplete information to the United States.

125. If any SO₂ Allowances are surrendered to any third party pursuant to this Consent Decree, the third party's certification pursuant to Paragraph 79 shall be signed by a managing officer of the third party and shall contain the following language:

I certify under penalty of law that,_____ [name of third party] will not sell, trade, or otherwise exchange any of the allowances and will not use any of the allowances to meet any obligation imposed by any environmental law. I understand that there are significant penalties for submitting false, inaccurate, or incomplete information to the United States.

XIII. REVIEW AND APPROVAL OF SUBMITTALS

126. DMG shall submit each plan, report, or other submission required by this Decree to the Plaintiff(s) specified whenever such a document is required to be submitted for review or approval pursuant to this Consent Decree. The Plaintiff(s) to whom the report is submitted, as required, may approve the submittal or decline to approve it and provide written comments

explaining the bases for declining such approval. Such Plaintiff(s) will endeavor to coordinate their comments into one document when explaining their bases for declining such approval. Within sixty (60) days of receiving written comments from any of the Plaintiffs, DMG shall either: (a) revise the submittal consistent with the written comments and provide the revised submittal to the Plaintiffs; or (b) submit the matter for dispute resolution, including the period of informal negotiations, under Section XVI (Dispute Resolution) of this Consent Decree.

127. Upon receipt of EPA's final approval of the submittal, or upon completion of the submittal pursuant to dispute resolution, DMG shall implement the approved submittal in accordance with the schedule specified therein or another EPA-approved schedule.

XIV. STIPULATED PENALTIES

128. For any failure by DMG to comply with the terms of this Consent Decree, and subject to the provisions of Sections XV (Force Majeure) and XVI (Dispute Resolution), DMG shall pay, within thirty (30) days after receipt of written demand to DMG by the United States, the following stipulated penalties to the United States:

Consent Decree Violation	Stipulated Penalty	
a. Failure to pay the civil penalty as specified in Section IX (Civil Penalty) of this Consent Decree	\$10,000 per day	
b. Failure to comply with any applicable 30-Day Rolling Average Emission Rate for NO _x or SO ₂ or Emission Rate for PM, where the violation is less than 5% in excess of the limits set forth in this Consent Decree	\$2,500 per day per violation	
c. Failure to comply with any applicable 30-Day Rolling Average Emission Rate for NO _x or SO ₂ or Emission Rate for PM, where the violation is equal to or greater than 5% but less than 10% in excess of the limits set forth in this Consent Decree	\$5,000 per day per violation	

d. Failure to comply with any applicable 30-Day Rolling Average Emission Rate for NO_x or SO_2 or Emission Rate for PM, where the violation is equal to or greater than 10% in excess of the limits set forth in this Consent Decree	\$10,000 per day per violation
e. Failure to comply with the System-Wide Annual Tonnage Limits for SO_2 , where the violation is less than 100 tons in excess of the limits set forth in this Consent Decree	\$60,000 per calendar year, plus the surrender, pursuant to the procedures set forth in Paragraphs 79 and 80 of this Consent Decree, of SO ₂ Allowances in an amount equal to two times the number of tons by which the limitation was exceeded
f. Failure to comply with the System-Wide Annual Tonnage Limits for SO ₂ , where the violation is equal to or greater than 100 tons in excess of the limits set forth in this Consent Decree	\$120,000 per calendar year, plus the surrender, pursuant to the procedures set forth in Paragraphs 79 and 80 of this Consent Decree, of SO ₂ Allowances in an amount equal to two times the number of tons by which the limitation was exceeded
g. Failure to comply with the System-Wide Annual Tonnage Limits for NO _x , where the violation is less than 100 tons in excess of the limits set forth in this Consent Decree	\$60,000 per calendar year, plus the surrender of NO _x Allowances in an amount equal to two times the number of tons by which the limitation was exceeded
h. Failure to comply with the System-Wide Annual Tonnage Limits for NO _x , where the violation is equal to or greater than 100 tons in excess of the limits set forth in this Consent Decree	\$120,000 per calendar year, plus the surrender of NO _x Allowances in an amount equal to two times the number of tons by which the limitation was exceeded
i. Operation of a Unit required under this Consent Decree to be equipped with any NO _x , SO ₂ , or PM control device without the operation of such device, as required under this Consent Decree	\$10,000 per day per violation during the first 30 days, \$27,500 per day per violation thereafter
j. Failure to install or operate CEMS as required in this Consent Decree	\$1,000 per day per violation

k. Failure to conduct performance tests of PM emissions, as required in this Consent Decree	\$1,000 per day per violation		
1. Failure to apply for any permit required by Section XVII	\$1,000 per day per violation		
m. Failure to timely submit, modify, or implement, as approved, the reports, plans, studies, analyses, protocols, or other submittals required by this Consent Decree	\$750 per day per violation during the first ten days, \$1,000 per day per violation thereafter		
n. Using, selling or transferring NO _x Allowances except as permitted by Paragraphs 60 and 61	the surrender of NO _x Allowances in an amount equal to four times the number of NO _x Allowances used, sold, or transferred in violation of this Consent Decree		
o. Failure to surrender SO ₂ Allowances as required by Paragraph 75	(a) \$27,500 per day plus (b) \$1,000 per SO ₂ Allowance not surrendered		
p. Failure to demonstrate the third-party surrender of an SO ₂ Allowance in accordance with Paragraph 79 and 80	\$2,500 per day per violation		
q. Failure to undertake and complete any of the Environmental Mitigation Projects in compliance with Section VIII (Environmental Mitigation Projects) of this Consent Decree	\$1,000 per day per violation during the first 30 days, \$5,000 per day per violation thereafter		
r. Any other violation of this Consent Decree	\$1,000 per day per violation		

- 129. Violation of an Emission Rate that is based on a 30-Day Rolling Average is a violation on every day on which the average is based. Where a violation of a 30-Day Rolling Average Emission Rate (for the same pollutant and from the same source) recurs within periods of less than thirty (30) days, DMG shall not pay a daily stipulated penalty for any day of the recurrence for which a stipulated penalty has already been paid.
- 130. In any case in which the payment of a stipulated penalty includes the surrender of SO₂ Allowances, the provisions of Paragraph 76 shall not apply.

- 131. All stipulated penalties shall begin to accrue on the day after the performance is due or on the day a violation occurs, whichever is applicable, and shall continue to accrue until performance is satisfactorily completed or until the violation ceases, whichever is applicable.

 Nothing in this Consent Decree shall prevent the simultaneous accrual of separate stipulated penalties for separate violations of this Consent Decree.
- 132. DMG shall pay all stipulated penalties to the United States within thirty (30) days of receipt of written demand to DMG from the United States, and shall continue to make such payments every thirty (30) days thereafter until the violation(s) no longer continues, unless DMG elects within 20 days of receipt of written demand to DMG from the United States to dispute the accrual of stipulated penalties in accordance with the provisions in Section XVI (Dispute Resolution) of this Consent Decree.
- 133. Stipulated penalties shall continue to accrue as provided in accordance with Paragraph 128 during any dispute, with interest on accrued stipulated penalties payable and calculated at the rate established by the Secretary of the Treasury, pursuant to 28 U.S.C. § 1961, but need not be paid until the following:
 - a. If the dispute is resolved by agreement, or by a decision of Plaintiffs pursuant to Section XVI (Dispute Resolution) of this Consent Decree that is not appealed to the Court, accrued stipulated penalties agreed or determined to be owing, together with accrued interest, shall be paid within thirty (30) days of the effective date of the agreement or of the receipt of Plaintiffs' decision;
 - b. If the dispute is appealed to the Court and Plaintiffs prevail in whole or in part,
 DMG shall, within sixty (60) days of receipt of the Court's decision or order, pay

- all accrued stipulated penalties determined by the Court to be owing, together with interest accrued on such penalties determined by the Court to be owing, except as provided in Subparagraph c, below;
- c. If the Court's decision is appealed by any Party, DMG shall, within fifteen (15) days of receipt of the final appellate court decision, pay all accrued stipulated penalties determined to be owing, together with interest accrued on such stipulated penalties determined to be owing by the appellate court.

Notwithstanding any other provision of this Consent Decree, the accrued stipulated penalties agreed by the Plaintiffs and DMG, or determined by the Plaintiffs through Dispute Resolution, to be owing may be less than the stipulated penalty amounts set forth in Paragraph 128.

- 134. All stipulated penalties shall be paid in the manner set forth in Section IX (Civil Penalty) of this Consent Decree.
- 135. Should DMG fail to pay stipulated penalties in compliance with the terms of this Consent Decree, the United States shall be entitled to collect interest on such penalties, as provided for in 28 U.S.C. § 1961.
- 136. The stipulated penalties provided for in this Consent Decree shall be in addition to any other rights, remedies, or sanctions available to the United States by reason of DMG's failure to comply with any requirement of this Consent Decree or applicable law, except that for any violation of the Act for which this Consent Decree provides for payment of a stipulated penalty, DMG shall be allowed a credit for stipulated penalties paid against any statutory penalties also imposed for such violation.

XV. FORCE MAJEURE

- event that has been or will be caused by circumstances beyond the control of DMG, its contractors, or any entity controlled by DMG that delays compliance with any provision of this Consent Decree or otherwise causes a violation of any provision of this Consent Decree despite DMG's best efforts to fulfill the obligation. "Best efforts to fulfill the obligation" include using best efforts to anticipate any potential Force Majeure Event and to address the effects of any such event (a) as it is occurring and (b) after it has occurred, such that the delay or violation is minimized to the greatest extent possible.
- delay compliance with or otherwise cause a violation of any obligation under this Consent Decree, as to which DMG intends to assert a claim of Force Majeure, DMG shall notify the Plaintiffs in writing as soon as practicable, but in no event later than fourteen (14) business days following the date DMG first knew, or by the exercise of due diligence should have known, that the event caused or may cause such delay or violation. In this notice, DMG shall reference this Paragraph of this Consent Decree and describe the anticipated length of time that the delay or violation may persist, the cause or causes of the delay or violation, all measures taken or to be taken by DMG to prevent or minimize the delay or violation, the schedule by which DMG proposes to implement those measures, and DMG's rationale for attributing a delay or violation to a Force Majeure Event. DMG shall adopt all reasonable measures to avoid or minimize such delays or violations. DMG shall be deemed to know of any circumstance which DMG, its contractors, or any entity controlled by DMG knew or should have known.

- 139. <u>Failure to Give Notice</u>. If DMG fails to comply with the notice requirements of this Section, EPA (after consultation with the State of Illinois and the Citizen Plaintiffs) may void DMG's claim for Force Majeure as to the specific event for which DMG has failed to comply with such notice requirement.
- 140. <u>Plaintiffs' Response</u>. EPA shall notify DMG in writing regarding DMG's claim of Force Majeure within twenty (20) business days of receipt of the notice provided under Paragraph 138. If EPA (after consultation with the State of Illinois and the Citizen Plaintiffs) agrees that a delay in performance has been or will be caused by a Force Majeure Event, EPA and DMG shall stipulate to an extension of deadline(s) for performance of the affected compliance requirement(s) by a period equal to the delay actually caused by the event. In such circumstances, an appropriate modification shall be made pursuant to Section XXIII (Modification) of this Consent Decree.
- 141. <u>Disagreement</u>. If EPA (after consultation with the State of Illinois and the Citizen Plaintiffs) does not accept DMG's claim of Force Majeure, or if EPA and DMG cannot agree on the length of the delay actually caused by the Force Majeure Event, the matter shall be resolved in accordance with Section XVI (Dispute Resolution) of this Consent Decree.
- 142. <u>Burden of Proof.</u> In any dispute regarding Force Majeure, DMG shall bear the burden of proving that any delay in performance or any other violation of any requirement of this Consent Decree was caused by or will be caused by a Force Majeure Event. DMG shall also bear the burden of proving that DMG gave the notice required by this Section and the burden of proving the anticipated duration and extent of any delay(s) attributable to a Force Majeure Event.

An extension of one compliance date based on a particular event may, but will not necessarily, result in an extension of a subsequent compliance date.

- 143. <u>Events Excluded</u>. Unanticipated or increased costs or expenses associated with the performance of DMG's obligations under this Consent Decree shall not constitute a Force Majeure Event.
- 144. Potential Force Majeure Events. The Parties agree that, depending upon the circumstances related to an event and DMG's response to such circumstances, the kinds of events listed below are among those that could qualify as Force Majeure Events within the meaning of this Section: construction, labor, or equipment delays; Malfunction of a Unit or emission control device; acts of God; acts of war or terrorism; and orders by a government official, government agency, other regulatory authority, or a regional transmission organization, acting under and authorized by applicable law, that directs DMG to supply electricity in response to a system-wide (state-wide or regional) emergency. Depending upon the circumstances and DMG's response to such circumstances, failure of a permitting authority to issue a necessary permit in a timely fashion may constitute a Force Majeure Event where the failure of the permitting authority to act is beyond the control of DMG and DMG has taken all steps available to it to obtain the necessary permit, including, but not limited to: submitting a complete permit application; responding to requests for additional information by the permitting authority in a timely fashion; and accepting lawful permit terms and conditions after expeditiously exhausting any legal rights to appeal terms and conditions imposed by the permitting authority.
- 145. As part of the resolution of any matter submitted to this Court under Section XVI (Dispute Resolution) of this Consent Decree regarding a claim of Force Majeure, the Plaintiffs

and DMG by agreement, or this Court by order, may in appropriate circumstances extend or modify the schedule for completion of work under this Consent Decree to account for the delay in the work that occurred as a result of any delay agreed to by the United States and the States or approved by the Court. DMG shall be liable for stipulated penalties for its failure thereafter to complete the work in accordance with the extended or modified schedule (provided that DMG shall not be precluded from making a further claim of Force Majeure with regard to meeting any such extended or modified schedule).

XVI. DISPUTE RESOLUTION

- 146. The dispute resolution procedure provided by this Section shall be available to resolve all disputes arising under this Consent Decree, provided that the Party invoking such procedure has first made a good faith attempt to resolve the matter with the other Party.
- 147. The dispute resolution procedure required herein shall be invoked by one Party giving written notice to the other Party advising of a dispute pursuant to this Section. The notice shall describe the nature of the dispute and shall state the noticing Party's position with regard to such dispute. The Party receiving such a notice shall acknowledge receipt of the notice, and the Parties in dispute shall expeditiously schedule a meeting to discuss the dispute informally not later than fourteen (14) days following receipt of such notice.
- 148. Disputes submitted to dispute resolution under this Section shall, in the first instance, be the subject of informal negotiations among the disputing Parties. Such period of informal negotiations shall not extend beyond thirty (30) calendar days from the date of the first meeting among the disputing Parties' representatives unless they agree in writing to shorten or extend this period. During the informal negotiations period, the disputing Parties may also

submit their dispute to a mutually agreed upon alternative dispute resolution (ADR) forum if the Parties agree that the ADR activities can be completed within the 30-day informal negotiations period (or such longer period as the Parties may agree to in writing).

- 149. If the disputing Parties are unable to reach agreement during the informal negotiation period, the Plaintiffs shall provide DMG with a written summary of their position regarding the dispute. The written position provided by Plaintiffs shall be considered binding unless, within forty-five (45) calendar days thereafter, DMG seeks judicial resolution of the dispute by filing a petition with this Court. The Plaintiffs may respond to the petition within forty-five (45) calendar days of filing. In their initial filings with the Court under this Paragraph, the disputing Parties shall state their respective positions as to the applicable standard of law for resolving the particular dispute.
- 150. The time periods set out in this Section may be shortened or lengthened upon motion to the Court of one of the Parties to the dispute, explaining the party's basis for seeking such a scheduling modification.
- 151. This Court shall not draw any inferences nor establish any presumptions adverse to any disputing Party as a result of invocation of this Section or the disputing Parties' inability to reach agreement.
- 152. As part of the resolution of any dispute under this Section, in appropriate circumstances the disputing Parties may agree, or this Court may order, an extension or modification of the schedule for the completion of the activities required under this Consent Decree to account for the delay that occurred as a result of dispute resolution. DMG shall be liable for stipulated penalties for its failure thereafter to complete the work in accordance with

that a Force Majeure Event has caused or may cause a delay in complying with the extended or modified schedule.

153. The Court shall decide all disputes pursuant to applicable principles of law for resolving such disputes. In their initial filings with the Court under Paragraph 149, the disputing Parties shall state their respective positions as to the applicable standard of law for resolving the particular dispute.

XVII. PERMITS

- 154. Unless expressly stated otherwise in this Consent Decree, in any instance where otherwise applicable law or this Consent Decree requires DMG to secure a permit to authorize construction or operation of any device contemplated herein, including all preconstruction, construction, and operating permits required under state law, DMG shall make such application in a timely manner. EPA and the State of Illinois shall use their best efforts to review expeditiously all permit applications submitted by DMG to meet the requirements of this Consent Decree.
- 155. Notwithstanding the previous Paragraph, nothing in this Consent Decree shall be construed to require DMG to apply for or obtain a PSD or Nonattainment NSR permit for physical changes in, or changes in the method of operation of, any DMG System Unit that would give rise to claims resolved by Section XI. A. (Resolution of Plaintiffs' Civil Claims) of this Consent Decree.
- 156. When permits are required as described in Paragraph 154, DMG shall complete and submit applications for such permits to the appropriate authorities to allow time for all

legally required processing and review of the permit request, including requests for additional information by the permitting authorities. Any failure by DMG to submit a timely permit application for any Unit in the DMG System shall bar any use by DMG of Section XV (Force Majeure) of this Consent Decree, where a Force Majeure claim is based on permitting delays.

- 157. Notwithstanding the reference to Title V permits in this Consent Decree, the enforcement of such permits shall be in accordance with their own terms and the Act. The Title V permits shall not be enforceable under this Consent Decree, although any term or limit established by or under this Consent Decree shall be enforceable under this Consent Decree regardless of whether such term has or will become part of a Title V permit, subject to the terms of Section XXVII (Conditional Termination of Enforcement Under Decree) of this Consent Decree.
- shall amend any applicable Title V permit application, or apply for amendments of its Title V permits, to include a schedule for all Unit-specific performance, operational, maintenance, and control technology requirements established by this Consent Decree including, but not limited to, required emission rates and the requirement in Paragraph 75 pertaining to the surrender of SO₂ Allowances.
- 159. Within one (1) year from the commencement of operation of each pollution control device to be installed, upgraded, or operated under this Consent Decree, DMG shall apply to amend its Title V permit for the generating plant where such device is installed to reflect all new requirements applicable to that plant, including, but not limited to, any applicable 30-Day Rolling Average Emission Rate.

- 160. Prior to January 1, 2015, DMG shall either: (a) apply to amend the Title V permit for each plant in the DMG System to include a provision, which shall be identical for each Title V permit, that contains the allowance surrender requirements and the System-Wide Annual Tonnage Limitations set forth in this Consent Decree; or (b) apply for amendments to the Illinois State Implementation Plan to include such requirements and limitations therein.
- 161. DMG shall provide the Plaintiffs with a copy of each application to amend its

 Title V permit for a plant within the DMG System, as well as a copy of any permit proposed as a result of such application, to allow for timely participation in any public comment opportunity.
- 162. If DMG sells or transfers to an entity unrelated to DMG ("Third Party Purchaser") part or all of its Ownership Interest in a Unit in the DMG System, DMG shall comply with the requirements of Section XX (Sales or Transfers of Ownership Interests) with regard to that Unit prior to any such sale or transfer unless, following any such sale or transfer, DMG remains the holder of the Title V permit for such facility.

XVIII. INFORMATION COLLECTION AND RETENTION

- 163. Any authorized representative of the United States or the State of Illinois, including their attorneys, contractors, and consultants, upon presentation of credentials, shall have a right of entry upon the premises of any facility in the DMG System at any reasonable time for the purpose of:
 - a. monitoring the progress of activities required under this Consent Decree;
 - verifying any data or information submitted to the United States in accordance
 with the terms of this Consent Decree;

- c. obtaining samples and, upon request, splits of any samples taken by DMG or its representatives, contractors, or consultants; and
- d. assessing DMG's compliance with this Consent Decree.
- DMG shall retain, and instruct its contractors and agents to preserve, all non-identical copies of all records and documents (including records and documents in electronic form) now in its or its contractors' or agents' possession or control, and that directly relate to DMG's performance of its obligations under this Consent Decree for the following periods: (a) until December 31, 2020 for records concerning physical or operational changes undertaken in accordance with Paragraph 114; and (b) until December 31, 2017 for all other records. This record retention requirement shall apply regardless of any corporate document retention policy to the contrary.
- 165. All information and documents submitted by DMG pursuant to this Consent Decree shall be subject to any requests under applicable law providing public disclosure of documents unless (a) the information and documents are subject to legal privileges or protection or (b) DMG claims and substantiates in accordance with 40 C.F.R. Part 2 that the information and documents contain confidential business information.
- 166. Nothing in this Consent Decree shall limit the authority of the EPA or the State of Illinois to conduct tests and inspections at DMG's facilities under Section 114 of the Act, 42 U.S.C. § 7414, or any other applicable federal or state laws, regulations or permits.

XIX. NOTICES

167. Unless otherwise provided herein, whenever notifications, submissions, or communications are required by this Consent Decree, they shall be made in writing and addressed as follows:

As to the United States of America:

Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice P.O. Box 7611, Ben Franklin Station Washington, D.C. 20044-7611 DJ# 90-5-2-1-06837

and

Director, Air Enforcement Division
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
Ariel Rios Building [2242A]
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

and

Regional Administrator U.S. EPA- Region 5 77 W. Jackson St. Chicago, IL 60604

and

George Czerniak, Chief, AECAB U.S. EPA- Region 5 77 W. Jackson St. - AE-17J Chicago, IL 60604

As to the State of Illinois:

Bureau Chief Bureau of Air Illinois Environmental Protection Agency 1021 North Grand Avenue East, P.O. Box 19276 Springfield, Illinois 62794-9276

and

Bureau Chief Environmental Bureau Illinois Attorney General's Office 500 South Second Street Springfield, Illinois 62706

As to the Citizen Plaintiffs:

Executive Director Environmental Law and Policy Center of the Midwest 35 East Wacker Dr. Suite 1300 Chicago, Illinois 60601-2110

As to DMG:

Vice President, Environmental Health & Safety Dynegy Midwest Generation, Inc. 2828 North Monroe Street Decatur, Illinois 62526

and

Executive Vice President and General Counsel Dynegy Inc. 1000 Louisiana Street, Suite 5800 Houston, Texas 77002

As to Illinois Power Company:

Senior Vice President, General Counsel, and Secretary Illinois Power Company One Ameren Plaza 1901 Chouteau Avenue St. Louis, Missouri 63166

- 168. All notifications, communications or submissions made pursuant to this Section shall be sent either by: (a) overnight mail or overnight delivery service, or (b) certified or registered mail, return receipt requested. All notifications, communications and transmissions (a) sent by overnight, certified or registered mail shall be deemed submitted on the date they are postmarked, or (b) sent by overnight delivery service shall be deemed submitted on the date they are delivered to the delivery service.
- 169. Any Party may change either the notice recipient or the address for providing notices to it by serving all other Parties with a notice setting forth such new notice recipient or address.

XX. SALES OR TRANSFERS OF OWNERSHIP INTERESTS

- 170. If DMG proposes to sell or transfer an Ownership Interest to an entity unrelated to DMG ("Third Party Purchaser"), it shall advise the Third Party Purchaser in writing of the existence of this Consent Decree prior to such sale or transfer, and shall send a copy of such written notification to the Plaintiffs pursuant to Section XIX (Notices) of this Consent Decree at least sixty (60) days before such proposed sale or transfer.
- 171. No sale or transfer of an Ownership Interest shall take place before the Third Party Purchaser and EPA have executed, and the Court has approved, a modification pursuant to Section XXIII (Modification) of this Consent Decree making the Third Party Purchaser a party to this Consent Decree and jointly and severally liable with DMG for all the requirements of this Decree that may be applicable to the transferred or purchased Ownership Interests. Should Illinois Power (or any successor thereof) become a Third Party Purchaser or an operator (as the term "operator" is used and interpreted under the Clean Air Act) of any DMG System Unit, then

the provisions in Section X of this Consent Decree (Release and Covenant Not to Sue for Illinois Power Company) that apply to Illinois Power shall no longer apply as to the DMG System Unit(s) associated with the transfer, and instead, the Resolution of Plaintiffs' Civil Claims provisions in Section XI that apply to DMG shall apply to Illinois Power with respect to such transferred Unit(s), and such changes shall be reflected in the modification to the Decree reflecting the sale or transfer of an Ownership Interest contemplated by this Paragraph.

- Ownership Interests between DMG and any Third Party Purchaser so long as the requirements of this Consent Decree are met. This Consent Decree shall not be construed to prohibit a contractual allocation as between DMG and any Third Party Purchaser of Ownership Interests of the burdens of compliance with this Decree, provided that both DMG and such Third Party Purchaser shall remain jointly and severally liable to EPA for the obligations of the Decree applicable to the transferred or purchased Ownership Interests.
- 173. If EPA agrees, EPA, DMG, and the Third Party Purchaser that has become a party to this Consent Decree pursuant to Paragraph 171, may execute a modification that relieves DMG of its liability under this Consent Decree for, and makes the Third Party Purchaser liable for, all obligations and liabilities applicable to the purchased or transferred Ownership Interests. Notwithstanding the foregoing, however, DMG may not assign, and may not be released from, any obligation under this Consent Decree that is not specific to the purchased or transferred Ownership Interests, including the obligations set forth in Sections VIII (Environmental Mitigation Projects) and IX (Civil Penalty). DMG may propose and the EPA may agree to restrict the scope of the joint and several liability of any purchaser or transferree for any

obligations of this Consent Decree that are not specific to the transferred or purchased Ownership Interests, to the extent such obligations may be adequately separated in an enforceable manner.

174. Paragraphs 170 and 171 of this Consent Decree do not apply if an Ownership Interest is sold or transferred solely as collateral security in order to consummate a financing arrangement (not including a sale-leaseback), so long as DMG: a) remains the operator (as that term is used and interpreted under the Clean Air Act) of the subject DMG System Unit(s); b) remains subject to and liable for all obligations and liabilities of this Consent Decree; and c) supplies Plaintiffs with the following certification within 30 days of the sale or transfer:

"Certification of Change in Ownership Interest Solely for Purpose of Consummating Financing. We, the Chief Executive Officer and General Counsel of Dynegy Midwest Generation, hereby jointly certify under Title 18 U.S.C. Section 1001, on our own behalf and on behalf of Dynegy Midwest Generation ("DMG"), that any change in DMG's Ownership Interest in any Unit that is caused by the sale or transfer as collateral security of such Ownership Interest in such Unit(s) pursuant to the financing agreement consummated on [insert applicable date] between DMG and [insert applicable entity]: a) is made solely for the purpose of providing collateral security in order to consummate a financing arrangement; b) does not impair DMG's ability, legally or otherwise, to comply timely with all terms and provisions of the Consent Decree entered in *United States of America, et al. v. Illinois Power Company and Dynegy Midwest Generation, Inc.*, Civil Action No. 99-833-MJR; c) does not affect DMG's operational control of any Unit covered by that Consent Decree in a manner that is inconsistent with DMG's performance of its obligations under the Consent Decree; and d) in no way affects the status of DMG's obligations or liabilities under that Consent Decree."

XXI. EFFECTIVE DATE

175. The effective date of this Consent Decree shall be the date upon which this Consent Decree is entered by the Court.

XXII. <u>RETENTION OF JURISDICTION</u>

176. The Court shall retain jurisdiction of this case after entry of this Consent Decree to enforce compliance with the terms and conditions of this Consent Decree and to take any action necessary or appropriate for its interpretation, construction, execution, modification, or adjudication of disputes. During the term of this Consent Decree, any Party to this Consent Decree may apply to the Court for any relief necessary to construe or effectuate this Consent Decree.

XXIII. MODIFICATION

177. The terms of this Consent Decree may be modified only by a subsequent written agreement signed by the Plaintiffs and DMG. Where the modification constitutes a material change to any term of this Decree, it shall be effective only upon approval by the Court.

XXIV. GENERAL PROVISIONS

- 178. This Consent Decree is not a permit. Compliance with the terms of this Consent Decree does not guarantee compliance with all applicable federal, state, or local laws or regulations. The emission rates set forth herein do not relieve the Defendants from any obligation to comply with other state and federal requirements under the Clean Air Act, including the Defendants' obligation to satisfy any state modeling requirements set forth in the Illinois State Implementation Plan.
 - 179. This Consent Decree does not apply to any claim(s) of alleged criminal liability.
- 180. In any subsequent administrative or judicial action initiated by any of the Plaintiffs for injunctive relief or civil penalties relating to the facilities covered by this Consent

Decree, the Defendants shall not assert any defense or claim based upon principles of waiver, <u>res</u> <u>judicata</u>, collateral estoppel, issue preclusion, claim preclusion, or claim splitting, or any other defense based upon the contention that the claims raised by any of the Plaintiffs in the subsequent proceeding were brought, or should have been brought, in the instant case; provided, however, that nothing in this Paragraph is intended to affect the validity of Sections X (Release and Covenant Not to Sue for Illinois Power Company) and XI (Resolution of Plaintiffs' Civil Claims Against DMG).

- Decree shall relieve the Defendants of their obligation to comply with all applicable federal, state, and local laws and regulations. Subject to the provisions in Sections X (Release and Covenant Not to Sue for Illinois Power Company) and XI (Resolution of Plaintiffs' Civil Claims Against DMG), nothing contained in this Consent Decree shall be construed to prevent or limit the rights of the Plaintiffs to obtain penalties or injunctive relief under the Act or other federal, state, or local statutes, regulations, or permits.
- 182. Every term expressly defined by this Consent Decree shall have the meaning given to that term by this Consent Decree and, except as otherwise provided in this Decree, every other term used in this Decree that is also a term under the Act or the regulations implementing the Act shall mean in this Decree what such term means under the Act or those implementing regulations.
- 183. Nothing in this Consent Decree is intended to, or shall, alter or waive any applicable law (including but not limited to any defenses, entitlements, challenges, or

clarifications related to the Credible Evidence Rule, 62 Fed. Reg. 8314 (Feb. 24, 1997)) concerning the use of data for any purpose under the Act.

- 184. Each limit and/or other requirement established by or under this Decree is a separate, independent requirement.
- or under this Consent Decree must be met to the number of significant digits in which the standard or limit is expressed. For example, an Emission Rate of 0.100 is not met if the actual Emission Rate is 0.101. DMG shall round the fourth significant digit to the nearest third significant digit, or the third significant digit to the nearest second significant digit, depending upon whether the limit is expressed to three or two significant digits. For example, if an actual Emission Rate is 0.1004, that shall be reported as 0.100, and shall be in compliance with an Emission Rate of 0.100, and if an actual Emission Rate is 0.1005, that shall be reported as 0.101, and shall not be in compliance with an Emission Rate of 0.100. DMG shall report data to the number of significant digits in which the standard or limit is expressed.
- 186. This Consent Decree does not limit, enlarge or affect the rights of any Party to this Consent Decree as against any third parties.
- 187. This Consent Decree constitutes the final, complete and exclusive agreement and understanding among the Parties with respect to the settlement embodied in this Consent Decree, and supercedes all prior agreements and understandings among the Parties related to the subject matter herein. No document, representation, inducement, agreement, understanding, or promise constitutes any part of this Decree or the settlement it represents, nor shall they be used in construing the terms of this Consent Decree.

188. Each Party to this action shall bear its own costs and attorneys' fees.

XXV. SIGNATORIES AND SERVICE

- 189. Each undersigned representative of the Parties certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind to this document the Party he or she represents.
- 190. This Consent Decree may be signed in counterparts, and such counterpart signature pages shall be given full force and effect.
- 191. Each Party hereby agrees to accept service of process by mail with respect to all matters arising under or relating to this Consent Decree and to waive the formal service requirements set forth in Rule 4 of the Federal Rules of Civil Procedure and any applicable Local Rules of this Court including, but not limited to, service of a summons.

XXVI. PUBLIC COMMENT

192. The Parties agree and acknowledge that final approval by the United States and entry of this Consent Decree is subject to the procedures of 28 C.F.R. § 50.7, which provides for notice of the lodging of this Consent Decree in the Federal Register, an opportunity for public comment, and the right of the United States to withdraw or withhold consent if the comments disclose facts or considerations which indicate that the Consent Decree is inappropriate, improper or inadequate. The Defendants shall not oppose entry of this Consent Decree by this Court or challenge any provision of this Consent Decree unless the United States has notified the Defendants, in writing, that the United States no longer supports entry of the Consent Decree.

XXVII. CONDITIONAL TERMINATION OF ENFORCEMENT UNDER DECREE

- 193. <u>Termination as to Completed Tasks.</u> As soon as DMG completes a construction project or any other requirement of this Consent Decree that is not ongoing or recurring, DMG may, by motion to this Court, seek termination of the provision or provisions of this Consent Decree that imposed the requirement.
- 194. <u>Conditional Termination of Enforcement Through the Consent Decree.</u> After DMG:
 - has successfully completed construction, and has maintained operation, of
 all pollution controls as required by this Consent Decree;
 - b. has obtained final Title V permits (i) as required by the terms of this

 Consent Decree; (ii) that cover all units in this Consent Decree; and (iii)

 that include as enforceable permit terms all of the Unit performance and
 other requirements specified in Section XVII (Permits) of this Consent

 Decree; and
 - c. certifies that the date is later than December 31, 2015; then DMG may so certify these facts to the Plaintiffs and this Court. If the Plaintiffs do not object in writing with specific reasons within forty-five (45) days of receipt of DMG's certification, then, for any Consent Decree violations that occur after the filing of notice, the Plaintiffs shall pursue enforcement of the requirements contained in the Title V permit through the applicable Title V permit and not through this Consent Decree.
- 195. Resort to Enforcement under this Consent Decree. Notwithstanding Paragraph 194, if enforcement of a provision in this Decree cannot be pursued by a party under the

applicable Title V permit, or if a Decree requirement was intended to be part of a Title V Permit and did not become or remain part of such permit, then such requirement may be enforced under the terms of this Decree at any time.

XXVIII. <u>FINAL JUDGMENT</u>

196.	Upon appro	val and entry of this	s Consent Decree	by the Court, this	Consent
Decree shall o	constitute a fi	nal judgment among	g the Plaintiffs, D	MG, and Illinois F	ower.
SO ORDERE	D, THIS	DAY OF	, 20	0	
			ABLE MICHAE	L J. REAGAN RICT COURT JUI	——— DGE

United States of America v.
Illinois Power and Dynegy Midwest Generation Inc.

FOR THE UNITED STATES OF AMERICA:

THOMAS L. SANSONETTI

Assistant Attorney General Environmental and Natural Resources Division United States Department of Justice

Nicole Veilleux Trial Attorney Environmental Enforcement Section Environmental and Natural Resources Division United States Department of Justice

William Coonan Assistant United States Attorney Southern District of Illinois United States Department of Justice

United States of America

ν.

Illinois Power Company and Dynegy Midwest Generation Inc.

THOMAS V. SKINNER

Acting Assistant Administrator Office of Enforcement and Compliance Assurance United States Environmental Protection Agency

ADAM M. KUSHNER

Acting Director, Air Enforcement Division Office of Enforcement and Compliance Assurance United States Environmental Protection Agency

Edward J. Messina Attorney Advisor Air Enforcement Division Office of Enforcement and Compliance Assurance United States Environmental Protection Agency

United States of America

 ν .

Illinois Power Company and Dynegy Midwest Generation Inc.

Bharat Mathur
Acting Regional Administrator
U.S. Environmental Protection Agency
Region 5

Mark Palermo Associate Regional Counsel U.S. Environmental Protection Agency Region 5

United States of America v.
Illinois Power Company and Dynegy Midwest Generation Inc.

FOR THE STATE OF ILLINOIS PEOPLE OF THE STATE OF ILLINOIS ex rel:

LISA MADIGAN Attorney General of the State of Illinois

MATTHEW J. DUNN, Chief Environmental Enforcement/Asbestos Litigation Division

by: Thomas Davis, Chief Environmental Bureau Assistant Attorney General

United States of America v.
Illinois Power Company and Dynegy Midwest Generation Inc.

FOR CITIZEN PLAINTIFFS:

Albert Ettinger
Senior Staff Attorney
Environmental Law and Policy Center of the Midwest

United States of America Illinois Power Company and Dynegy Midwest Generation Inc.

FOR DYNEGY MIDWEST GENERATION:

Alec G. Dreyer President Dynegy Midwest Generation, Inc.

United States of America v.
Illinois Power Company and Dynegy Midwest Generation Inc.

FOR ILLINOIS POWER COMPANY:

Steven R. Sullivan
Senior Vice President, General Counsel and Secretary
Illinois Power Company

APPENDIX A - MITIGATION PROJECTS REQUIREMENTS

In compliance with and in addition to the requirements in Section VIII of the Consent Decree, DMG shall comply with the requirements of this Appendix to ensure that the benefits of the environmental mitigation projects are achieved.

- I. Advanced Truck Stop Electrification Project
- Α. Within one hundred thirty five (135) days after entry of this Consent Decree, DMG shall submit a plan to the Plaintiffs for review and approval for the completion of the installation of Advanced Truck Stop Electrification, preferably at State of Illinois owned rest areas along Illinois interstate highways in the St. Louis Metro East area (comprised of Madison, St. Clair and Monroe Counties in Illinois) or as nearby as possible. Long-haul truck drivers typically idle their engines at night at rest areas to supply heat or cooling in their sleeper cab compartments, and to maintain vehicle battery charge while electrical appliances such as TVs, computers and microwaves are in use. Modifications to rest areas to provide parking spaces with electrical power, heat and air conditioning will allow truck drivers to turn their engines off. Truck driver utilization of the Advanced Truck Stop Electrification will result in reduced idling time and therefore reduced fuel usage, reduced emissions of PM, NOx, VOCs and toxics, and reduced noise. This Project shall include, where necessary, techniques and infrastructure needed to support such project. DMG shall spend no less than \$1.5 million in Project Dollars in performing this Advanced Truck Stop Electrification Project.
- B. The proposed plan shall satisfy the following criteria:
 - 1. Describe how the work or project to be performed is consistent with requirements of Section I. A., above.
 - 2. Involve rest areas located in areas that are either in the St. Louis Metro East area (comprised of Madison, St. Clair and Monroe Counties in Illinois) or as nearby as reasonably possible.
 - 3. Provide for the construction of Advanced Truck Stop Electrification stations with established technologies and equipment designed to reduce emissions of particulates and/or ozone precursors.
 - 4. Account for hardware procurement and installation costs at the recipient truck stops.
 - 5. Include a schedule for completing each portion of the project.
 - 6. Describe generally the expected environmental benefits of the project.
 - 7. DMG shall not profit from this project for the first five years of implementation.
- C. Performance Upon approval of plan by the Plaintiffs, DMG shall complete the mitigation project according to the approved plan and schedule, but no later than December 31, 2007.

II. Middle Fork/Vermilion Land Donation

- A. Within sixty (60) days after entry of the Consent Decree, DMG shall submit a plan to the Plaintiffs for review and approval for the transfer of ownership to the State of Illinois Department of Natural Resources (IDNR), of an approximately 1135 acre parcel of land along the Middle Fork Vermilion River in Vermilion County identified as the Middle Fork/Vermilion ("Property"). The value of the Property to be donated can be fairly valued at \$2.25 million. Accordingly, DMG's full and final transfer of the Property in accordance with the plan shall satisfy its requirement to spend at least \$2.25 million Project Dollars to implement this project.
- B. The proposed plan shall satisfy the following criteria:
 - 1. Describe how the work or project to be performed is consistent with requirements of Section II. A., above.
 - 2. This project entails the donation of the entire parcel of land owned by DMG (an approximately 1135 acre parcel of land) as of lodging of the Consent Decree along the East side of the Middle Fork Vermilion River in Vermilion County. The Property is located between Kickapoo State Park and the Middle Fork State Fish and Wildlife Area and Kennekuk County Park on the East side of the Middle Fork of the Vermilion River. Ownership of the Property and management of the natural resources thereon shall be transferred to IDNR so as to ensure the continued preservation and public use of the Property.
 - 3. The plan shall include DMG's agreement to convey to IDNR, the Property, the Ancillary Structures and the Personal Property, if any, to the extent located on the Property, and to the extent owned by DMG. The plan shall include steps for resolution of all past liens, payment of all outstanding taxes, title transfer, and other such information as would be necessary to convey the Property to IDNR. In all other respects, the Property will be conveyed subject to the easements, rights-of-way and similar rights of third parties existing as of the date of the conveyance.
 - 4. DMG shall retain its existing right to take and use the water from a stripmine lake located in the NW ¼ of Section 28, T-20_N, R-12-W, 3 P.M. and in the NE ¼ of Section 29, T-20_N, R-12-W, 3rd P.M. of Vermillion County, and an easement to access this water and to provide electrical power to pump the water.
 - 5. DMG agrees to furnish to IDNR a current Alta/ACSM Land Title Survey of the Property prepared and certified by an Illinois registered land surveyor.
 - 6. Describe generally the expected environmental benefit for the project.
- C. Performance Upon approval of plan by the Plaintiffs, DMG shall complete the mitigation project according to the approved plan and schedule, and convey such Property prior to the date 180 days from entry of this Consent Decree or June 30, 2006, whichever is earlier.

- III. Metro East Land Acquisition and Preservation and Illinois River Projects
- Within sixty (60) days after entry of the Consent Decree, and following Α. consultation with Plaintiffs, including on behalf of the State of Illinois, the Illinois Department of Natural Resources, DMG shall submit a plan to the Plaintiffs for review and approval for the transfer of \$2.75 million to the Illinois Conservation Foundation, 20 ILCS 880/15 (2004). The funds transferred by DMG to the Illinois Conservation Foundation shall be used for the express purpose of acquiring natural lands and habitat in the St Louis Metro East area, for acquiring and/or restoring endangered habitat along the Illinois River, and for future funding of the Illinois River Sediment Removal and Beneficial Reuse Initiative, administered by the Waste Management Resource Center of IDNR. In addition, to the extent possible, the funding shall be utilized to enhance existing wetlands and create new wetlands restoration projects at sites along the Illinois River between DMG's Havana Station and the Hennepin Station, and provide for public use of acquired areas in a manner consistent with the ecology and historic uses of the area. Further, to the extent possible, the funding shall enable the removal and transport of high quality soil sediments from the Illinois River bottom to end users, including State fish and wildlife areas, a local environmental remediation project, and other projects deemed beneficial by plaintiffs. Any properties acquired through funding of this project shall be placed in the permanent ownership of the State of Illinois and preserved for public use by IDNR.
- B. The proposed plan shall satisfy the following criteria:
 - 1. Describe how the work or project to be performed is consistent with requirements of Section III. A., above.
 - 2. Include a schedule for completing the funding of each portion of the project.
 - 3. Describe generally the expected environmental benefit for the project.
- C. Performance Upon approval of plan by the Plaintiffs, DMG shall complete the mitigation project according to the approved plan and schedule, but no later than December 31, 2007.

IV. <u>Vermilion Power Station Mercury Control Project</u>

A. Within sixty (60) days of entry of the Consent Decree, DMG shall submit a plan to the Plaintiffs for review and approval for the performance of the Vermilion Power Station Mercury Control Project. The project will result in the installation of a baghouse, along with a sorbent injection system, to control mercury emissions from Vermilion Units 1 and 2, with a goal of achieving 90% mercury reduction. For purposes of the Consent Decree, of the approximately \$26.0 million expected capital cost for construction and installation of the baghouse with a sorbent injection system, DMG shall be deemed to have expended \$7.5 million Project Dollars upon commencement of operation of this control technology, provided that DMG continues to operate the control technology for five (5) years and surrenders any mercury allowances and/or mercury reduction credits, as applicable, during the five (5) year period. DMG shall complete

construction and installation of the baghouse with a sorbent injection system, and commence operation of such control device, no later than June 30, 2007.

- B. The proposed plan shall satisfy the following criteria:
 - 1. Describe how the work or project to be performed is consistent with requirements of Section IV. A., above.
 - 2. Include a general schedule and budget for completion of the construction of the baghouse and sorbent injection system, along with a plan for the submittal of periodic reports to the Plaintiffs on the progress of the work through completion of the construction and the commencement of operation of the baghouse and sorbent injection system.
 - 3. The sorbent injection system shall be designed to inject sufficient amounts of sorbent to collect (and remove) mercury emissions from the coal-fired boilers and to promote the goal of achieving a total mercury reduction of 90%.
 - 4. DMG shall not be permitted to benefit, under any federal or state mercury cap and trade program, from the operation of this project before June 30, 2012 (if such a cap and trade system is legally in effect at that time). Specifically, DMG shall not be permitted to sell, or use within its system, any mercury allowances and/or mercury reduction credits earned through resulting mercury reductions under any Mercury MACT rule or other state or federal mercury credit/allowance trading program, through June 30, 2012.
 - 5. From July 1, 2007 through June 30, 2012, DMG shall surrender to EPA any and all mercury credits/allowances obtained through mercury reductions resulting from this project.
 - 6. DMG shall provide the Plaintiffs, upon completion of the construction and continuing for five (5) years thereafter, with semi-annual updates documenting: a) the mercury reduction achieved, including summaries of all mercury testing and any available continuous emissions monitoring data; and b) any mercury allowances and/or mercury reduction credits earned through resulting mercury reductions under any Mercury MACT rule or other state or federal mercury credit/allowance trading program, and surrender thereof. DMG also shall make such semi-annual updates concerning the performance of the project available to the public. Such information disclosure shall include, but not be limited to, release of semi-annual progress reports clearly identifying demonstrated removal efficiencies of mercury, sorbent injection rates, and cost effectiveness.
 - 7. Describe generally the expected environmental benefit for the project.
- C. Performance Upon approval of plan by the Plaintiffs, DMG shall complete the mitigation project according to the approved plan and schedule.

- V. <u>Municipal and Educational Building Energy Conservation & Energy Efficiency Projects</u>
- A. Within one hundred thirty five (135) days after entry of the Consent Decree, DMG shall submit a plan to Plaintiffs for review and approval for the completion of the Municipal and Educational Building Energy Conservation & Energy Efficiency Projects, as described herein. DMG shall spend no less than \$1.0 million Project Dollars for the purchase and installation of environmentally beneficial energy technologies for municipal and public educational buildings in the Metro East area or the City of St. Louis.
- B. The proposed plan shall satisfy the following criteria:
 - 1. Describe how the work or project to be performed is consistent with requirements of Section V. A., above.
 - 2. Include a general schedule and budget (for \$1.0 million) for completion of the projects.
 - 3. Describe generally the expected environmental benefit for the project.
- C. Performance Upon approval of plan by the Plaintiffs, DMG shall complete the mitigation project according to the approved plan and schedule, but no later than December 31, 2007.

IN THE UNITED STATES DISTRICT COURT FOR THE CENTRAL DISTRICT OF ILLINOIS

UNITED STATES OF AMERICA,)
Plaintiff,)
,)
	,
)
V.)
)
Dominion Energy, Inc.,)
Dominion Energy Brayton Point, LLC, and)
Kincaid Generation, LLC,) Civil Action No.:
Timedia Concration, 220,)
D.C. 1.)
Defendants.)
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CONSENT DECREE

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APPENDIX A ENVIRONMENTAL MITIGATION PROJECTS	

WHEREAS, Plaintiff, the United States of America ("the United States"), on behalf of the United States Environmental Protection Agency ("EPA"), is concurrently filing a Complaint and Consent Decree for injunctive relief and civil penalties pursuant to Sections 113(b)(2) and 167 of the Clean Air Act (the "Act"), 42 U.S.C. §§ 7413(b)(2) and 7477, alleging that Defendants, Dominion Energy, Inc., et al. (hereinafter "Dominion"), violated the Prevention of Significant Deterioration ("PSD") provisions of Part C of Subchapter I of the Act, 42 U.S.C. §§ 7470-7492, the Non-Attainment New Source Review ("NA-NSR") provisions found at Part D of Subchapter I of the Act, 42 U.S.C. §§ 7501-7515, the New Source Performance Standards ("NSPS"), 42 U.S.C. § 7411, requirements of Title V of the Act, 42 U.S.C. §§ 7661-7661f, and the federally enforceable Indiana, Illinois, and Massachusetts State Implementation Plans ("SIPs");

WHEREAS, on April 16, 2009, EPA issued a Notice of Violation and Finding of Violation ("NOV/FOV") to Dominion with respect to certain alleged violations of the CAA;

WHEREAS, the United States provided Dominion and the States of Indiana, Illinois and Massachusetts with actual notice pertaining to Dominion's alleged violations, in accordance with Section 113 of the Act, 42 U.S.C. § 7413;

WHEREAS, in the Complaint, the United States alleges claims upon which, if proven, relief can be granted against Dominion under Sections 113 and 167 of the Act, 42 U.S.C. §§ 7413 and 7477;

WHEREAS, in the Complaint, the United States alleges, *inter alia*, that Dominion made major modifications to major emitting facilities, and failed to obtain the necessary permits and install and operate the controls necessary under the Act to reduce sulfur dioxide ("SO₂"),

nitrogen oxides ("NO_x"), and/or particulate matter ("PM") emissions, and that such emissions damage human health and the environment;

WHEREAS, Dominion has not answered the Complaint in light of the settlement memorialized in this Decree;

WHEREAS, Dominion has denied and continues to deny the violations alleged in the NOV and Complaint; maintains that it has been and remains in compliance with the Act and is not liable for civil penalties or injunctive relief; and states that it is agreeing to the obligations imposed by this Decree solely to avoid the costs and uncertainties of litigation and to improve the environment;

WHEREAS, the United States and Dominion (collectively, the "Parties") have agreed that settlement of this action is in the best interests of the Parties and in the public interest, and that entry of this Consent Decree without further litigation is the most appropriate means of resolving this matter;

WHEREAS, the Parties anticipate that the installation and operation of pollution control equipment pursuant to this Consent Decree, and the retirement of certain facilities required by this Consent Decree, will achieve significant reductions of SO₂, NO_x, and PM emissions, as well as other pollutants, and improve air quality;

WHEREAS, the Parties have agreed, and this Court by entering this Consent Decree finds, that this Consent Decree has been negotiated in good faith and at arm's length and that this Consent Decree is fair, reasonable, in the public interest, and consistent with the goals of the Act; and

WHEREAS, the Parties have consented to entry of this Consent Decree without trial of any issues;

NOW, THEREFORE, without any admission of fact or law, it is hereby ORDERED, ADJUDGED, AND DECREED as follows:

I. JURISDICTION AND VENUE

- 1. This Court has jurisdiction over this action, the subject matter herein, and the Parties consenting hereto, pursuant to 28 U.S.C. §§ 1331, 1345, 1355, and 1367, and pursuant to Sections 113 and 167 of the Act, 42 U.S.C. §§ 7413 and 7477. Venue is proper under Section 113(b) of the Act, 42 U.S.C. § 7413(b), and under 28 U.S.C. § 1391(b) and (c). Solely for the purposes of this Consent Decree and the underlying Complaint, and for no other purpose, Dominion waives all objections and defenses that it may have to the Court's jurisdiction over this action, the Court's jurisdiction over Dominion, and to venue in this judicial district. Dominion consents to and shall not challenge entry of this Consent Decree or this Court's jurisdiction to enter and enforce this Consent Decree. Notwithstanding the foregoing, should this Consent Decree not be entered by this Court, then the waivers and consents set forth in this Section I (Jurisdiction and Venue) shall be null and void and of no effect.
- Except as expressly provided for herein, this Consent Decree shall not create any rights in or obligations of any party other than the Parties to this Consent Decree. Except as provided in Section XXVI (Public Comment) of this Consent Decree, the Parties consent to entry of this Consent Decree without further notice.

II. APPLICABILITY

- Upon entry, the provisions of this Consent Decree shall apply to and be binding upon the
 United States, and upon Dominion and any successors, assigns, or other entities or
 persons otherwise bound by law.
- 4. Dominion shall provide a copy of this Consent Decree to all vendors, suppliers, consultants, contractors, agents, and any other company or other organization retained to perform any of the work required by this Consent Decree. Notwithstanding any retention of contractors, subcontractors, or agents to perform any work required under this Consent Decree, Dominion shall be responsible for ensuring that all work is performed in accordance with the requirements of this Consent Decree. In any action to enforce this Consent Decree, Dominion shall not assert as a defense the failure of its officers, directors, employees, servants, agents, or contractors to take actions necessary to comply with this Consent Decree, unless such failure is determined to be a Force Majeure Event as defined in Paragraph 147 of this Consent Decree.

III. DEFINITIONS

- 5. Every term expressly defined by this Section shall have the meaning given that term herein. Every other term used in this Consent Decree that is also a term used under the Act or in a federal regulation implementing the Act shall mean in this Consent Decree what such term means under the Act or those regulations.
- 6. A "12-Month Rolling Average Emission Rate" shall be expressed in lb/mmBTU and calculated in accordance with the following procedure: first, sum the pounds of the pollutant in question emitted from the applicable Unit during the most recent complete Month and the previous eleven (11) Months; second, sum the heat input to the applicable

Unit in mmBTU during the most recent complete Month and the previous eleven (11) Months; and third, divide the total number of pounds of the pollutant emitted during the twelve (12) Months by the total heat input during the twelve (12) Months. A new 12-Month Rolling Average Emission Rate shall be calculated for each new complete Month in accordance with the provisions of this Consent Decree. Each 12-Month Rolling Average Emission Rate shall include all emissions that occur during all periods of operation, including startup, shutdown, and Malfunction, except as otherwise provided by Section XV (Force Majeure).

- A "30-Day Rolling Average Emission Rate" for a Unit shall be expressed in lb/mmBTU and calculated in accordance with the following procedure: first, sum the total pounds of pollutant emitted from the Unit during the current Unit Operating Day and the previous twenty-nine (29) Unit Operating Days; second, sum the total heat input to the Unit in mmBTU during the current Unit Operating Day and the previous twenty-nine (29) Unit Operating Days; and third, divide the total number of pounds of pollutant emitted during the thirty (30) Unit Operating Days by the total heat input during the thirty (30) Unit Operating Days. A new 30-Day Rolling Average Emission Rate shall be calculated for each new Operating Day. Each 30-Day Rolling Average Emission Rate shall include all emissions that occur during all periods within any Operating Day, including emissions from startup, shutdown, and Malfunction, except as otherwise provided by Section XV (Force Majeure).
- 8. "Baghouse" means a full stream (fabric filter) particulate emissions control device.

- 9. "Brayton Point" means, for purposes of this Consent Decree, Dominion's Brayton Point Power Station consisting of three coal-fired units designated as Unit 1 (244 net MW), Unit 2 (244 net MW), and Unit 3 (612 net MW), located in Somerset, Massachusetts.
- 10. "CEMS" or "Continuous Emission Monitoring System," means, for obligations involving the monitoring of NO_x and SO₂ emissions under this Consent Decree, the devices defined in 40 C.F.R. § 72.2 and installed and maintained as required by 40 C.F.R. Part 75.
- 11. "Clean Air Act" or "Act" means the federal Clean Air Act, 42 U.S.C. §§ 7401-7671q, and its implementing regulations.
- 12. "Consent Decree" means this Consent Decree and the Appendix hereto, which is incorporated into the Consent Decree.
- 13. "Continuous Operation" and "Continuously Operate" mean that when a pollution control technology or combustion control is required to be used at a Unit pursuant to this Consent Decree (including, but not limited to, SCR, FGD, DSI, ESP, Baghouse, LNB, or OFA), it shall be operated at all times such Unit is in operation while burning any coal (except as otherwise provided by Section XV (Force Majeure)), consistent with the technological limitations, manufacturers' specifications, good engineering and maintenance practices, and good air pollution control practices for minimizing emissions (as defined in 40 C.F.R. § 60.11(d)) for such equipment and the Unit.
- 14. "Date of Entry" means the date this Consent Decree is approved or signed by the United States District Court Judge.
- 15. "Date of Lodging" means the date this Consent Decree is filed for lodging with the Clerk of the Court for the United States District Court for the Central District of Illinois.
- 16. "Day" means calendar day unless otherwise specified in this Consent Decree.

- 17. "Dominion" or "Defendant" means Dominion Energy, Inc., Dominion Energy Brayton Point, LLC, and Kincaid Generation, LLC.
- 18. "Dominion System" means the Brayton Point, Kincaid, and State Line facilities as defined herein.
- 19. "Dry Sorbent Injection" or "DSI" means a process in which a sorbent is pneumatically injected into the ducting downstream of the boiler where the coal is combusted and flue gas is produced, and upstream of the PM Control Device.
- 20. "Electrostatic Precipitator" or "ESP" means a device for removing particulate matter from combustion gases by imparting an electric charge to the particles and then attracting them to a metal plate or screen of opposite charge before the combustion gases are exhausted to the atmosphere.
- 21. "Emission Rate" for a given pollutant means the number of pounds of that pollutant emitted per million British thermal units of heat input (lb/mmBTU), calculated in accordance with this Consent Decree.
- 22. "Environmental Mitigation Projects" or "Projects" means the projects identified in Section IX and Appendix A of this Consent Decree.
- 23. "EPA" means the United States Environmental Protection Agency.
- 24. "Flue Gas Desulfurization System" or "FGD" means a pollution control device that removes sulfur compounds from a flue gas stream, including an absorber or absorbers utilizing lime, limestone, or a sodium-based slurry, for the reduction of SO₂ emissions.
- 25. "Fossil Fuel" means any hydrocarbon fuel, including coal, petroleum coke, petroleum oil, fuel oil, or natural gas.

- 26. "Kincaid" means Dominion's Kincaid Power Station consisting of two cyclone boilers, designated as Unit 1 (579 net MW) and Unit 2 (579 net MW), located in Kincaid, Illinois. Kincaid Unit 1 and Unit 2 exhaust to a common stack where all emissions are monitored. Accordingly, so long as the two Units exhaust to a common stack, notwithstanding any other provision, any Emission Rates set forth under this Consent Decree as applicable to each of Kincaid Unit 1 and Unit 2 shall be measured and calculated for the two Units together as if they were a single Unit (e.g., where the Consent Decree specifies that Dominion shall operate controls at Kincaid Unit 1 and Unit 2 to achieve and maintain a 30-Day Rolling Average Emissions Rate for SO₂ of 0.100 lb/mmBTU at each Unit, the emissions rate calculation for the Kincaid Units will be based on the total SO₂ emissions and heat input for the two Units together measured at the stack). A violation of any such rate based on common stack measurements shall be presumed to be two violations, unless Dominion proves to EPA's satisfaction that the violation is due solely to the malperformance of one of the two units.
- 27. "KW" means Kilowatt or one thousand watts.
- 28. "lb/mmBTU" means one pound per million British thermal units.
- 29. "Low NO_x Burner" or "LNB" means commercially available combustion modification technology that minimizes NO_x formation by introducing coal and combusting air into a boiler such that initial combustion occurs in a manner that promotes rapid coal devolatilization in a fuel-rich (i.e. oxygen deficient) environment and introduces additional air to achieve a final fuel-lean (i.e. oxygen rich) environment to complete the combustion processes.

- 30. "Malfunction" means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not Malfunctions.
- 31. "Month" means a calendar month.
- 32. "MW" means a megawatt or one million watts.
- 33. "National Ambient Air Quality Standards" or "NAAQS" means national ambient air quality standards promulgated pursuant to Section 109 of the Act, 42 U.S.C. § 7409.
- 34. "Netting" shall mean the process of determining whether a particular physical change or change in the method of operation of a major stationary source results in a net emissions increase, as that term is defined at 40 C.F.R. § 52.21(b)(3)(i) and/or an applicable SIP.
- 35. "NO_x" means oxides of nitrogen, measured in accordance with the provisions of this Consent Decree.
- 36. "NO_x Allowance" means an authorization to emit a specified amount of NO_x that is allocated or issued under an emissions trading or marketable permit program of any kind established under the Clean Air Act or applicable State Implementation Plan; provided, however, that with respect to any such program that first applies to emissions occurring after December 31, 2011, a "NO_x Allowance" shall include an allowance created and allocated to a Dominion System Unit under such program only for control periods starting on or after the fourth anniversary of the Date of Entry of this Consent Decree.
- 37. "Nonattainment NSR" means the new source review program within the meaning of Part D of Subchapter I of the Act, 42 U.S.C. §§ 7501-7515 and 40 C.F.R. Part 51, and

- corresponding provisions of the federally enforceable Illinois, Indiana, or Massachusetts SIPs.
- 38. "Operational or Ownership Interest" means part or all of Dominion's legal or equitable operational or ownership interest in any Unit at Brayton Point, Kincaid, or State Line.
- 39. "Operating Day" means any calendar day on which a Unit fires Fossil Fuel.
- 40. "Over Fire Air" or "OFA" mean an in-furnace staged combustion control to reduce NO_x emissions.
- 41. "Parties" means the United States of America on behalf of EPA; and Dominion. "Party" means one of the named "Parties."
- 42. "PM" means total filterable particulate matter, measured in accordance with the provisions of this Consent Decree.
- 43. "PM CEMS" or "PM Continuous Emission Monitoring System" means, for obligations involving the monitoring of PM emissions under this Consent Decree, the continuous emission monitors installed and maintained as described in 40 C.F.R. § 60.49Da(v).
- 44. "PM Control Device" means the following devices which reduce emissions of PM: ESPs at Kincaid and State Line, and Baghouses at Brayton Point.
- 45. "PM Emission Rate" means the number of pounds of PM emitted per million BTU of heat input (lb/mmBTU).
- 46. "Plant-Wide Annual Tonnage Limitation" means the limitation, as specified in this Consent Decree, on the number of tons of pollutant (SO₂ or NO_x) that may be emitted from the respective facility during the relevant calendar year (i.e., January 1 through December 31), and shall include all emissions of the specified pollutant that occur during all periods of operation, including startup, shutdown, and Malfunction.

- 47. "Prevention of Significant Deterioration" or "PSD" means the new source review program within the meaning of Part C of Subchapter I of the Clean Air Act, 42 U.S.C. §§ 7470-7492 and 40 C.F.R. Part 52, and corresponding provisions of the federally enforceable Illinois, Indiana, or Massachusetts SIPs.
- 48. "Project Dollars" means Dominion's expenditures and payments incurred or made in carrying out the Environmental Mitigation Projects identified in Section IX and Appendix A of this Consent Decree to the extent that such expenditures or payments both: (a) comply with the requirements set forth in Section IX and Appendix A of this Consent Decree, and (b) constitute Dominion's direct payments for such projects, or Dominion's external costs for contractors, vendors, and equipment.
- 49. "Retire" means to permanently shut down and physically render the Unit inoperable such that the Unit cannot physically or legally burn coal, and to comply with applicable state and federal requirements for permanently ceasing operation of the Unit as a coal-fired electric generating Unit, including amending any submissions to state air emissions inventories, and submitting applications to amend all applicable permits so as to reflect the permanent shutdown status of such Unit.
- 50. "SCR" or "Selective Catalytic Reduction" means a pollution control device that destroys NO_x by injecting a reducing agent (e.g., ammonia) into the flue gas that, in the presence of a catalyst (e.g., vanadium, titanium, or zeolite), converts NO_x into molecular nitrogen and water.
- 51. "SO₂" means sulfur dioxide, measured in accordance with the provisions of this Consent Decree.

- 52. "SO₂ Allowance" means an authorization to emit a specified amount of SO₂ that is allocated or issued under an emissions trading or marketable permit program of any kind established under the Clean Air Act or applicable State Implementation Plan; provided, however, that with respect to any such program that first applies to emissions occurring after December 31, 2011, an "SO₂ Allowance" shall include an allowance created and allocated to a Dominion System Unit under such program only for control periods starting on or after the fourth anniversary of the Date of Entry of this Consent Decree.
- 53. "State Implementation Plan" or "SIP" means regulations and other materials promulgated by a state for purposes of meeting the requirements of the Clean Air Act that have been approved by EPA pursuant to Section 110 of the Act, 42 U.S.C. § 7410.
- 54. "State Line" means Dominion's State Line Power Station consisting of two coal-fired generating units designated as Unit 3 (197 net MW) and Unit 4 (318 net MW), located in Hammond, Indiana.
- 55. "Surrender" or "Surrender of Allowances" means, for purposes of SO₂ or NO_x

 Allowances, permanently surrendering allowances from the accounts administered by

 EPA and Indiana, Illinois, and Massachusetts for all Units in the Dominion System, so
 that such allowances can never be used thereafter to meet any compliance requirements
 under the Clean Air Act, a SIP, or this Consent Decree.
- 56. "Title V Permit" means the permit required for Defendant's major sources pursuant to Subchapter V of the Act, 42 U.S.C. §§ 7661-7661e.
- 57. "Unit" means collectively, the coal pulverizer, stationary equipment that feeds coal to the boiler, the boiler that produces steam for the steam turbine, the steam turbine, the generator, the equipment necessary to operate the generator, steam turbine, and boiler,

and all ancillary equipment, including pollution control equipment and systems necessary for production of electricity. An electric steam generating station may comprise one or more Units.

IV. NO_x EMISSION REDUCTIONS AND CONTROLS

A. NO_x Emission Limitations and Control Requirements

- 1. Selective Catalytic Reduction, Low NOx Burner and Over Fire Air,
 Operation and Performance Requirements at Brayton Point Unit 1 and Unit
 3
- 58. Commencing no later than thirty (30) Days after the Date of Entry of the Consent Decree, and continuing thereafter, Dominion shall Continuously Operate the SCR, OFA, and LNB at Unit 1 and Unit 3. Commencing no later than thirty (30) Operating Days thereafter, Dominion shall Continuously Operate such SCR, OFA, and LNB so that each Unit achieves and maintains a 30-Day Rolling Average NO_x Emission Rate of no greater than 0.080 lb/mmBTU. During any 30-Day period used to calculate a 30-Day Rolling Average NO_x Emission Rate for Brayton Point Unit 1 or Unit 3, if the dispatch of either Unit requires operation of such Unit(s) burning only natural gas at a load level that results in flue gas temperature so low that it becomes technically infeasible to Continuously Operate the SCR despite Dominion's best efforts to do so, Dominion shall not be subject to stipulated penalties pursuant to Section XIV (Stipulated Penalties) for violating the Emission Rate required by this Paragraph provided that Dominion's emissions do not exceed a 30-Day Rolling Average NO_x Emission Rate of 0.090 lb/mmBTU and Dominion provides EPA with data and calculations to demonstrate that but for such low load operation burning only natural gas, Dominion would have achieved and maintained

a 30-Day Rolling Average NO_x Emission Rate of no greater than 0.080 lb/mmBTU at such Unit(s).

2. Low NO_x Burner and Over Fire Air Operation and Performance Requirements at Brayton Point Unit 2

59. Commencing no later than thirty (30) Days after the Date of Entry of the Consent Decree, and continuing thereafter, Dominion shall Continuously Operate the LNB and OFA at Unit 2. Commencing no later than thirty (30) Operating Days thereafter, Dominion shall Continuously Operate such LNB and OFA so that the Unit achieves and maintains a 30-Day Rolling Average NO_x Emission Rate of no greater than 0.280 lb/mmBTU.

3. Selective Catalytic Reduction and Over Fire Air Operation and Performance Requirements at Kincaid Unit 1 and Unit 2

Operate each SCR and OFA at Kincaid Unit 1 and Unit 2. Commencing no later than thirty (30) Operating Days thereafter, Dominion shall Continuously Operate each such SCR and OFA so that each Unit achieves and maintains a 30-Day Rolling Average Emission Rate for NOx of no greater than 0.080 lb/mmBTU. During any 30-Day period used to calculate a 30-Day Rolling Average NO_x Emission Rate for Kincaid Unit 1 or Unit 2, if the dispatch of either Unit requires operation of such Unit(s) at a load level that results in flue gas temperature so low that it becomes technically infeasible to Continuously Operate the SCR despite Dominion's best efforts to do so (including, but not limited to, maintaining minimum load operation which provides for achieving sufficient inlet temperatures for injection of ammonia to the SCR), Dominion shall not be subject to stipulated penalties pursuant to Section XIV (Stipulated Penalties) for violating

the Emission Rate required by this Paragraph provided that Dominion's emissions do not exceed a 30-Day Rolling Average NO_x Emission Rate of 0.090 lb/mmBTU and Dominion provides EPA with data and calculations to demonstrate that but for such low load operation, Dominion would have achieved and maintained a 30-Day Rolling Average NO_x Emission Rate of no greater than 0.080 lb/mmBTU at such Unit(s).

4. Annual NO_x Tonnage Limitations

61. In calendar year 2014, and in each calendar year thereafter, Kincaid shall not exceed a Plant-Wide Annual Tonnage Limitation of 3,500 tons of NO_x, and Brayton Point shall not exceed a Plant-Wide Annual Tonnage Limitation of 4,600 tons of NO_x.

B. Monitoring of NO_x Emissions

- 62. In determining a 30-Day Rolling Average NO_x Emission Rate, Dominion shall use CEMS in accordance with the procedures of 40 C.F.R. Part 75 and 40 C.F.R. Part 60, Appendix F, Procedure 1, except that NO_x emissions data for the 30-Day Rolling Average NO_x Emission Rate need not be bias adjusted and the missing data substitution procedures of 40 C.F.R. Part 75 shall not apply.
- 63. For purposes of calculating the Plant-Wide Annual NO_x Tonnage Limitation, Dominion shall use CEMS in accordance with the procedures at 40 C.F.R. Part 75.

C. Use and Surrender of NO_x Allowances

64. Except as may be necessary to comply with Section XIV (Stipulated Penalties),

Dominion shall not use NO_x Allowances to comply with any requirement of this Consent

Decree, including by claiming compliance with any emission limitation required by this

Consent Decree by using, tendering, or otherwise applying NO_x Allowances to offset any
excess emissions (i.e., emissions above the limits set forth in this Consent Decree).

- 65. Except as provided in this Consent Decree, and except as required under the current Power Purchase Agreement ("PPA") with ComEd for Kincaid, which will expire on February 28, 2013, beginning in calendar year 2013 Dominion shall not sell, bank, trade, or transfer any NOx Allowances allocated to the Dominion System.
- 66. Beginning in calendar year 2013, and continuing each calendar year thereafter, Dominion shall Surrender all NO_x Allowances (other than those NO_x Allowances required to be transferred to the previous owner of Kincaid under the PPA referenced in Paragraph 65) allocated to the Dominion System for that calendar year that Dominion does not need in order to meet its own federal and/or state Clean Air Act regulatory requirements for the Dominion System Units. However, NO_x Allowances allocated to the Dominion System may be used by Dominion to meets its own federal and/or state Clean Air Act regulatory requirements for such Units.
- 67. Nothing in this Consent Decree shall prevent Dominion from purchasing or otherwise obtaining NO_x Allowances from another source for purposes of complying with federal and/or state Clean Air Act regulatory requirements to the extent otherwise allowed by law.
- 68. The requirements of this Consent Decree pertaining to Dominion's use and Surrender of NO_x Allowances are permanent injunctions not subject to any termination provision of this Consent Decree.

D. Super-Compliant NO_x Allowances

69. Notwithstanding Paragraphs 65 and 66, in each calendar year beginning in 2014, and continuing thereafter, Dominion may sell, bank, use, trade, or transfer NO_x Allowances made available in that calendar year solely as a result of:

- a. the installation and operation of any NO_x pollution control that is not otherwise required by, or necessary to maintain compliance with, any provision of this Consent Decree, and is not otherwise required by law; or
- b. achievement and maintenance of an Emission Rate below an applicable 30-Day Rolling Average NO_x Emission Rate,

provided that Dominion is also in compliance for that calendar year with all emission limitations for NO_x set forth in this Consent Decree. Dominion shall timely report the generation of such super-compliant NO_x Allowances in accordance with Section XII (Periodic Reporting) of this Consent Decree.

E. Method for Surrender of NO_x Allowances

- 70. Dominion shall Surrender, or transfer to a non-profit third-party selected by Dominion for Surrender, all NO_x Allowances required to be Surrendered pursuant to Paragraph 66 by April 30 of the immediately following calendar year.
- The state of the NO_x Allowances required to be Surrendered under this Consent Decree are transferred directly to a non-profit third-party, Dominion shall include a description of such transfer in the next report submitted to EPA pursuant to Section XII (Periodic Reporting) of this Consent Decree. Such report shall: (a) identify the non-profit third-party recipient(s) of the NO_x Allowances and list the serial numbers of the transferred NO_x Allowances; and (b) include a certification by the third-party recipient(s) stating that the recipient(s) will not sell, trade, or otherwise exchange any of the NO_x Allowances and will not use any of the NO_x Allowances to meet any obligation imposed by any environmental law. No later than the third periodic report due after the transfer of any NO_x Allowances, Dominion shall include a statement that the third-party recipient(s)

Surrendered the NO_x Allowances for permanent Surrender to EPA in accordance with the provisions of Paragraph 72 within one (1) year after Dominion transferred the NO_x Allowances to them. Dominion shall not have complied with the NO_x Allowance Surrender requirements of this Paragraph until all third-party recipient(s) have actually Surrendered the transferred NO_x Allowances to EPA.

72. For all NO_x Allowances required to be Surrendered, Dominion or the third-party recipient(s) (as the case may be) shall first submit a NO_x Allowance transfer request to EPA's Office of Air and Radiation's Clean Air Markets Division directing the transfer of such NO_x Allowances to the EPA Enforcement Surrender Account or to any other EPA account that EPA may direct in writing. Such NO_x Allowance transfer requests may be made in an electronic manner using the EPA's Clean Air Markets Division Business System or similar system provided by EPA. As part of submitting these transfer requests, Dominion or the third-party recipient(s) shall irrevocably authorize the transfer of these NO_x Allowances and identify – by name of account and any applicable serial or other identification numbers or station names – the source and location of the NO_x Allowances being Surrendered.

V. SO₂ EMISSION REDUCTIONS AND CONTROLS

A. SO₂ Emission Limitations and Control Requirements

1. Dry FGD Operation and Performance Requirements at Brayton Point Unit 1 and Unit 2

73. Commencing no later than sixty (60) Days after the Date of Entry of this Consent Decree, and continuing thereafter, Dominion shall Continuously Operate the existing dry FGDs at

- both Brayton Point Unit 1 and Unit 2 so that each Unit achieves and maintains a 12-Month Rolling Average Emission Rate for SO₂ of no greater than 0.150 lb/mmBTU.
- 74. Commencing on December 31, 2014, and continuing thereafter, Dominion shall Continuously Operate the dry FGDs at both Brayton Point Unit 1 and Unit 2 so that each Unit achieves and maintains a 30-Day Rolling Average Emission Rate for SO₂ of no greater than 0.150 lb/mmBTU. Days on which there is a "gas curtailment" shall be excluded from the calculation of the 30-Day Rolling Average Emission Rate required by this Paragraph. For purposes of this Paragraph, "gas curtailment" means: (a) that ISO-New England has requested that Brayton Point not burn gas during a declared "Energy Emergency" under Operating Procedure No. 21 or during a declared "Cold Weather Event" under Section III.H.3.4(c) of Market Rule 1, Appendix H; (b) that the natural gas transmission pipeline operator (e.g., currently, Algonquin Gas Transmission Company) has posted a notice to its Electronic Bulletin Board that restricts deliveries on the "G-System," or issues an Operational Flow Order, which limits the delivery of gas to Brayton Point; or (c) that there is a physical disruption in the delivery of natural gas to Brayton Point. To exclude a period of gas curtailment under this Paragraph, Dominion must provide notice to EPA of such curtailment within 10 Days of such curtailment, and provide EPA with data or information in the next scheduled periodic report required by Section XII of this Consent Decree that demonstrates that but for such curtailment, Dominion would have achieved and maintained the 30-Day Rolling Average Emission Rate otherwise required by this Paragraph. A gas curtailment shall not be deemed to occur on the basis of any increase in the cost of supply or transportation of otherwise available natural gas to Brayton Point.

2. Dry Flue Gas Desulfurization Operation and Performance Requirements at Brayton Point Unit 3

Operate dry FGD at Brayton Point Unit 3. Commencing no later than thirty (30)

Operating Days thereafter, Dominion shall Continuously Operate such dry FGD so as to achieve and maintain (a) a 30-Day Rolling Average Emission Rate for SO₂ of no greater than 0.100 lb/mmBTU, and (b) a 12-Month Rolling Average Emission Rate for SO₂ of no greater than 0.080 lb/mmBTU.

3. Dry Sorbent Injection and Performance Requirements at Kincaid

76. Commencing on January 1, 2014, and continuing thereafter, Dominion shall Continuously Operate DSI at Kincaid Unit 1 and Unit 2. Commencing no later than thirty (30) Operating Days thereafter, Dominion shall Continuously Operate each such DSI so that each Unit achieves and maintains a 30-Day Rolling Average Emission Rate for SO₂ of no greater than 0.100 lb/mmBTU.

4. Annual SO₂ Tonnage Limitations

77. In calendar year 2014 and in each calendar year thereafter, Kincaid shall not exceed a Plant-Wide Annual Tonnage Limitation of 4,400 tons of SO₂, and Brayton Point shall not exceed a Plant-Wide Annual Tonnage Limitation of 4,100 tons of SO₂.

B. Monitoring of SO₂ Emissions

78. In determining a 30-Day Rolling Average SO₂ Emission Rate or a 12-Month Rolling Average SO₂ Emission Rate, Dominion shall use CEMS in accordance with the procedures of 40 C.F.R. Part 75 and 40 C.F.R. Part 60, Appendix F, Procedure 1, except that SO₂ emissions data for the 30-Day Rolling Average SO₂ Emission Rate need not be

- bias adjusted and the missing data substitution procedures of 40 C.F.R. Part 75 shall not apply.
- 79. For purposes of calculating the Plant-Wide Annual SO₂ Tonnage Limitation, Dominion shall use CEMS in accordance with the procedures specified in 40 C.F.R. Part 75.

C. Use and Surrender of SO₂ Allowances

- 80. Except as may be necessary to comply with Section XIV (Stipulated Penalties),

 Dominion shall not use SO₂ Allowances to comply with any requirement of this Consent

 Decree, including by claiming compliance with any emission limitation required by this

 Consent Decree by using, tendering, or otherwise applying SO₂ Allowances to offset any
 excess emissions.
- 81. Except as provided in this Consent Decree, and except as required under the current PPA with ComEd for Kincaid, which will expire on February 28, 2013, beginning in calendar year 2013 Dominion shall not sell, bank, trade, or transfer any SO₂ Allowances allocated to the Dominion System. The Parties recognize that this obligation does not apply with respect to specific Allowances that were previously allocated to the prior owner of any Dominion System Unit under the 1990 Clean Air Act Amendments' Acid Rain Program and that are not owned or controlled by Dominion.
- 82. Beginning in calendar year 2013, and continuing each year through calendar year 2015, Dominion shall Surrender all SO2 Allowances (other than those SO₂ Allowances required to be transferred to the previous owner of Kincaid under the PPA referenced in Paragraph 81 and other than the SO₂ Allowances that were previously allocated to the prior owner of any Dominion System Unit under the 1990 Clean Air Act Amendments'

Acid Rain Program and that are not owned or controlled by Dominion) provided to Dominion for the Dominion System for that calendar year that Dominion does not need in order to meet its own federal and/or state Clean Air Act regulatory requirements for the Dominion System Units. Beginning in calendar year 2016, and continuing each calendar year thereafter, Dominion shall Surrender all SO₂ Allowances allocated to the Dominion System for that calendar year that Dominion does not need in order to meet its own federal and/or state Clean Air Act regulatory requirements for the Dominion System Units. However, SO₂ Allowances allocated to the Dominion System may be used by Dominion to meets its own federal and/or state Clean Air Act regulatory requirements for such Units.

- 83. Nothing in this Consent Decree shall prevent Dominion from purchasing or otherwise obtaining SO₂ Allowances from another source for purposes of complying with federal and/or state regulatory requirements to the extent otherwise allowed by law.
- 84. The requirements of this Consent Decree pertaining to Dominion's use and Surrender of SO₂ Allowances are permanent injunctions not subject to any termination provision of this Consent Decree.

D. Super-Compliant SO₂ Allowances

- 85. Notwithstanding Paragraphs 81 and 82, in each calendar year beginning in 2014, and continuing thereafter, Dominion may sell, bank, use, trade, or transfer SO₂ Allowances made available in that calendar year solely as a result of:
 - a. the installation and operation of any SO₂ pollution control that is not otherwise required by, or necessary to maintain compliance with, any provision of this Consent Decree, and is not otherwise required by law; or

b. achievement and maintenance of an Emission Rate below an applicable 30-Day Rolling Average SO₂ Emission Rate,

provided that Dominion is also in compliance for that calendar year with all emission limitations for SO₂ set forth in this Consent Decree. Dominion shall timely report the generation of such super-compliant SO₂ Allowances in accordance with Section XII (Periodic Reporting) of this Consent Decree.

E. Method for Surrender of SO₂ Allowances

- 86. Dominion shall Surrender, or transfer to a non-profit third party selected by Dominion for Surrender, all SO₂ Allowances required to be Surrendered pursuant to Paragraph 82 by April 30 of the immediately following calendar year.
- 87. If any SO₂ Allowances required to be Surrendered under this Consent Decree are transferred directly to a non-profit third party, Dominion shall include a description of such transfer in the next report submitted to EPA pursuant to Section XII (Periodic Reporting) of this Consent Decree. Such report shall: (a) identify the non-profit third party recipient(s) of the SO₂ Allowances and list the serial numbers of the transferred SO₂ Allowances; and (b) include a certification by the non-profit third party recipient(s) stating that the recipient(s) will not sell, trade, or otherwise exchange any of the allowances and will not use any of the SO₂ Allowances to meet any obligation imposed by any environmental law. No later than the third periodic report due after the transfer of any SO₂ Allowances, Dominion shall include a statement that the non-profit third party recipient(s) Surrendered the SO₂ Allowances for permanent Surrender to EPA in accordance with the provisions of Paragraph 88 within one (1) year after Dominion transferred the SO₂ Allowances to them. Dominion shall not have complied with the SO₂

- Allowance Surrender requirements of this Paragraph until all third party recipient(s) have actually Surrendered the transferred SO₂ Allowances to EPA.
- 88. For all SO₂ Allowances required to be Surrendered, Dominion or the third party recipient(s) (as the case may be) shall first submit an SO₂ Allowance transfer request to EPA's Office of Air and Radiation's Clean Air Markets Division directing the transfer of such SO₂ Allowances to the EPA Enforcement Surrender Account or to any other EPA account that EPA may direct in writing. Such SO₂ Allowance transfer requests may be made in an electronic manner using the EPA's Clean Air Markets Division Business System or similar system provided by EPA. As part of submitting these transfer requests, Dominion or the third party recipient(s) shall irrevocably authorize the transfer of these SO₂ Allowances and identify by name of account and any applicable serial or other identification numbers or station names the source and location of the SO₂ Allowances being Surrendered.

VI. PM EMISSION REDUCTIONS AND CONTROLS

A. Optimization of Baghouse and Existing ESPs

89. By no later than thirty (30) Days from the Date of Entry of this Consent Decree, and continuing thereafter, Dominion shall Continuously Operate each PM Control Device on each Unit in the Dominion System. Dominion shall, at a minimum, to the extent practicable: (a) fully energize each section of the ESP for each Unit, where applicable; operate each compartment of the Baghouse for each Unit (except the compartment provided as a spare compartment under the design of the baghouse), where applicable (regardless of whether those actions are needed to comply with opacity limits); and repair any failed ESP section or Baghouse compartment at the next planned Unit outage (or

unplanned outage of sufficient length); (b) operate automatic control systems on each ESP to maximize PM collection efficiency, where applicable; (c) maintain and replace bags on each Baghouse as needed to maximize collection efficiency, where applicable; and (d) inspect for and repair during the next planned Unit outage (or unplanned outage of sufficient length) any openings in ESP or Baghouse casings, ductwork and expansion joints to minimize air leakage.

B. PM Emission Rate and Monitoring Requirements

- 90. Commencing no later than sixty (60) Days from the Date of Entry of this Consent

 Decree, and continuing thereafter, Dominion shall Continuously Operate the Baghouses
 at Brayton Point Unit 1 and Unit 2 so that each Unit achieves and maintains a PM

 Emission Rate of no greater than 0.015 lb/mmBTU.
- 91. Commencing on July 1, 2013, and continuing thereafter, Dominion shall Continuously

 Operate a Baghouse at Brayton Point Unit 3 so as to achieve and maintain a PM Emission

 Rate of no greater than 0.015 lb/mmBTU.
- 92. Commencing no later than sixty (60) Days from the Date of Entry of this Consent Decree, and continuing thereafter, Dominion shall Continuously Operate the ESPs at Kincaid Unit 1 and Unit 2 so as to achieve and maintain a PM Emission Rate of no greater than 0.030 lb/mmBTU.
- 93. Commencing in calendar year 2013, and continuing annually thereafter, Dominion shall conduct a stack test for PM pursuant to Paragraph 94 for Brayton Point Unit 1, Unit 2 and Unit 3, and Kincaid Unit 1 and Unit 2. The annual performance test requirement imposed on Dominion by this Paragraph may be satisfied by stack tests conducted by Dominion as may be required by its permits from the applicable State for any year that

such stack tests are required under the permits. Dominion may perform testing every other year, rather than every year, provided that two of the most recently completed test results from tests conducted in accordance with the methods and procedures specified in this Consent Decree demonstrate that the PM emissions are equal to or less than 0.015 lb/mmBTU for those units with an ESP and 0.010 lb/mmBTU for those units with a Baghouse. Dominion shall perform testing every year, rather than every other year, beginning in the year immediately following any test result demonstrating that the PM emissions are greater than 0.015 lb/mmBTU for those units with an ESP or 0.010 lb/mmBTU for those units with a Baghouse .

- 94. To determine compliance with the PM Emission Rate established in Paragraphs 90-92, Dominion shall use the applicable reference methods and procedures (filterable portion only) specified in its Clean Air Act permits and applicable SIP. Each test shall consist of three separate runs performed under representative operating conditions not including periods of startup, shutdown, or Malfunction. The sampling time for each run shall be at least 120 minutes and the volume of each run shall be at least 1.70 dry standard cubic meters (60 dry standard cubic feet). Dominion shall calculate the PM Emission Rate from the stack test results in accordance with 40 C.F.R. § 60.8(f). The results of each PM stack test shall be submitted to EPA within sixty (60) Days of completion of each test.
- 95. Commencing in calendar year 2013, and continuing thereafter in each year that testing is required pursuant to Paragraph 93, Dominion shall conduct a PM stack test for condensable PM at Brayton Point Unit 1, Unit 2 and Unit 3, and Kincaid Unit 1 and Unit 2, using the reference methods and procedures set forth at 40 C.F.R. Part 51, Appendix M, Method 202 and as set forth in Paragraph 94. Each test shall consist of three separate

runs performed under representative operating conditions not including periods of startup, shutdown, or Malfunction. The sampling time for each run shall be at least 120 minutes and the volume of each run shall be 1.70 dry standard cubic meters (60 dry standard cubic feet). Dominion shall calculate the number of pounds of condensable PM emitted in lb/mmBTU of heat input from the stack test results in accordance with 40 C.F.R. § 60.8(f). The results of the PM stack test conducted pursuant to this Paragraph shall not be used for the purpose of determining compliance with the PM Emission Rates required by this Consent Decree. The results of each PM stack test shall be submitted to EPA and the applicable state agency within sixty (60) Days of completion of each test.

96. When Dominion submits the application for amendment to its Title V Permit pursuant to Paragraph 168, that application shall include a Compliance Assurance Monitoring ("CAM") plan, under 40 C.F.R. Part 64, for the PM Emission Rate in Paragraphs 90-92. The PM CEMS required under Paragraphs 97-101 may be used in that CAM plan.

C. PM CEMS

97. Dominion shall install, correlate, maintain, and operate PM CEMS on Brayton Point Unit 1, Unit 2, and Unit 3, and Kincaid Unit 1 and Unit 2, as specified below. The PM CEMS shall comprise a continuous particle mass monitor measuring particulate matter concentration, directly or indirectly, on an hourly average basis and a diluent monitor used to convert the concentration to units expressed in lb/mmBTU. The PM CEMS installed at each Unit must be appropriate for the anticipated stack conditions and capable of measuring PM concentrations on an hourly average basis. Installation and operation of a single PM CEMS at the common stack of Kincaid Units 1 and 2 shall serve the requirement for both units. Dominion shall maintain, in an electronic database, the

- hourly average emission values of all PM CEMS in lb/mmBTU. Except for periods of monitor malfunction, maintenance, or repair, Dominion shall continuously operate the PM CEMS at all times when the Unit it serves is operating.
- 98. By no later than nine (9) Months from the Date of Entry of this Consent Decree,

 Dominion shall submit to EPA for review and approval pursuant to Section XIII (Review and Approval of Submittals) of this Consent Decree a plan for the installation and correlation of the PM CEMS for Brayton Point Unit 1, Unit 2 and Unit 3, and the common stack of Kincaid Unit 1 and Unit 2.
- 99. By no later than twelve (12) Months from the Date of Entry of this Consent Decree,
 Dominion shall submit to EPA for review and approval pursuant to Section XIII (Review and Approval of Submittals) of this Consent Decree a proposed Quality
 Assurance/Quality Control ("QA/QC") protocol that shall be followed for such PM
 CEMS. The proposed QA/QC protocol may include a process for streamlined revisions to stay current with regulatory changes (e.g., PS 11) and PM monitor vendor recommendations.
- 100. In developing both the plan for installation and correlation of the PM CEMS and the QA/QC protocol, Dominion shall use the criteria set forth in 40 C.F.R. Part 60, Appendix B, Performance Specification 11, and Appendix F, Procedure 2. Following EPA's approval (in consultation with the appropriate state agency) of the plan described in Paragraph 98 and the QA/QC protocol described in Paragraph 99, Dominion shall thereafter operate the PM CEMS in accordance with the approved plan and QA/QC protocol.

101. By no later than eighteen (18) Months after the date that EPA approves the plan for the installation of the PM CEMS for Kincaid Units 1 and 2, and by no later than twenty four (24) months after the date that EPA approves the plan for the installation of the PM CEMS for Brayton Point Units 1, 2, and 3, Dominion shall install, correlate, maintain, and operate PM CEMS at each Unit or stack, conduct performance specification tests on the PM CEMS, and demonstrate compliance with the plan and protocol submitted to and approved by EPA in accordance with Paragraphs 98 and 99. Dominion shall report, pursuant to Section XII (Periodic Reporting), the data recorded by the PM CEMS, expressed in lb/mmBTU on a rolling average 3-hour basis and a rolling average 24-hour basis in electronic format (Microsoft Excel compatible) to EPA. Notwithstanding any other provision of this Consent Decree, exceedances of the PM Emission Rate that occur as a result of detuning emission controls as required to achieve the high level PM test runs during the correlation testing shall not be considered a violation of the requirements of this Consent Decree and shall not be subject to stipulated penalties; provided, however, that Dominion shall make best efforts to keep the high level PM test runs during such correlation testing below the applicable PM Emission Rate.

D. General PM Provisions

- 102. Stack testing shall be used to determine compliance with the PM Emission Rate established by this Consent Decree. Data from PM CEMS shall be used, at a minimum, to monitor progress in reducing PM emissions on a continuous basis.
- 103. Nothing in this Consent Decree is intended to, or shall, alter or waive any applicable law (including but not limited to any defenses, entitlements, challenges, or clarifications

related to the Credible Evidence Rule, 62 Fed. Reg. 8314 (Feb. 24, 1997)) concerning the use of data for any purpose under the Act.

VII. RETIRE STATE LINE

104. No later than June 1, 2012, Dominion shall permanently shut down State Line Unit 3 and Unit 4. No later than the Date of Entry of this Consent Decree, Dominion shall implement all other requirements to Retire State Line Unit 3 and Unit 4.

VIII. PROHIBITION ON NETTING CREDITS OR OFFSETS

- Entry of this Consent Decree to comply with the requirements of this Consent Decree shall not be considered as a creditable contemporaneous emission decrease for the purpose of obtaining a Netting credit or offset under the Clean Air Act's Nonattainment NSR and PSD programs. Notwithstanding the preceding sentence, and subject to the limitations provided in the following Paragraph 106, Dominion may treat up to (a) 75 tons of NO_x, 75 tons of SO₂, and 15 tons of PM emission reductions at the Kincaid plant as if they were not otherwise required by this Consent Decree for purposes of netting at the Kincaid plant, and (b) 75 tons of NO_x, 75 tons of SO₂, and 15 tons of PM emission reductions at Brayton Point Unit 3 as if they were not otherwise required by this Consent Decree for purposes of Netting at Brayton Point Unit 3.
- 106. Use of the Netting credits provided in Paragraph 105 is subject to the following additional restrictions:
 - (a) The emission reductions of NO_x, SO₂, and PM Dominion intends to utilize for Netting purposes must be contemporaneous and otherwise creditable within the meaning of the Act and the applicable SIP, and Dominion must comply with, and be subject to, all

- requirements and criteria for creating contemporaneous creditable decreases as set forth in 40 C.F.R. § 52.21(b) and the applicable SIP, subject to the limitations of this Section,
- (b) Dominion must apply for, and obtain, any required minor NSR permits for any project in which emission reductions under Paragraph 105 are used for Netting.

 Dominion shall provide notice and a copy of its permit application to EPA in accordance with Section XIX (Notices), concurrent with its permit application submission to the relevant permitting authority,
- (c) The emission reductions of NO_x , SO_2 , and PM Dominion intends to utilize for Netting shall not be available under this Section if such use would result in an exceedance of a PSD increment, an adverse impact on a Class I area, or an interference with "reasonable further progress" toward attainment of a NAAQS in accordance with Part D of the CAA, and
- (d) Dominion must be and remain in full compliance with the provisions of this Consent Decree establishing performance, operational, maintenance, and control technology requirements at the plant at which netting is used or proposed to be used, including Emission Rates, Plant-Wide Annual Tonnage Limitations, and the requirements pertaining to the Surrender of SO₂ and NO_x Allowances.
- 107. The limitations on the generation and use of Netting credits and offsets set forth in this Section do not apply to emission reductions achieved by a particular Dominion System Unit that are greater than those required under this Consent Decree for that particular Dominion System Unit. For purposes of this Paragraph, emission reductions from a Dominion System Unit are greater than those required under this Consent Decree if they result from such Unit's compliance with federally-enforceable emission limits that are

- more stringent than those limits imposed on the Unit under this Consent Decree and under applicable provisions of the Clean Air Act or the applicable SIP.
- 108. Nothing in this Consent Decree is intended to preclude the emission reductions generated under this Consent Decree from being considered by the applicable state regulatory agency or EPA for the purpose of attainment demonstrations submitted pursuant to § 110 of the Act, 42 U.S.C. § 7410, or in determining impacts on National Ambient Air Quality Standards, PSD increment, or air quality related values, including visibility, in a Class I area.

IX. ENVIRONMENTAL MITIGATION PROJECTS

- 109. Dominion shall implement the Environmental Mitigation Projects ("Projects") described in Appendix A to this Consent Decree in compliance with the approved plans and schedules for such Projects and other terms of this Consent Decree. In implementing the Projects, Dominion shall spend no less than \$9.75 million in Project Dollars. Dominion shall not include its own personnel costs in overseeing the implementation of the Projects as Project Dollars.
- 110. Dominion shall maintain, and present to EPA upon request, all documents to substantiate the Project Dollars expended to implement the Projects described in Appendix A, and shall provide these documents to EPA within thirty (30) Days of a request for the documents.
- 111. All plans and reports prepared by Dominion pursuant to the requirements of this Section IX of the Consent Decree and required to be submitted to EPA shall be publicly available from Dominion without charge.

- Dominion shall certify, as part of each plan submitted to EPA for any Project, that

 Dominion is not otherwise required by law to perform the Project described in the plan,
 that Dominion is unaware of any other person who is required by law to perform the
 Project, and that Dominion will not use any Project, or portion thereof, to satisfy any
 obligations that it may have under other applicable requirements of law, including any
 applicable renewable or energy efficiency portfolio standards.
- 113. Dominion shall use good faith efforts to secure as much environmental benefit as possible for the Project Dollars expended, consistent with the applicable requirements and limits of this Consent Decree.
- 114. If Dominion elects (where such an election is allowed) to undertake a Project by contributing funds to another person or entity that will carry out the Project in lieu of Dominion, but not including Dominion's agents or contractors, that person or instrumentality must, in writing: (a) identify its legal authority for accepting such funding; and (b) identify its legal authority to conduct the Project for which Dominion contributes the funds. Regardless of whether Dominion elects (where such election is allowed) to undertake a Project by itself or to do so by contributing funds to another person or instrumentality that will carry out the Project, Dominion acknowledges that it will receive credit for the expenditure of such funds as Project Dollars only if Dominion demonstrates that the funds have been actually spent by either Dominion or by the person or instrumentality receiving them, and that such expenditures met all requirements of this Consent Decree.
- 115. Dominion shall comply with the reporting requirements described in Appendix A.

- 116. In connection with any communication to the public or to shareholders regarding

 Dominion's actions or expenditures relating in any way to the Environmental Mitigation

 Projects in this Consent Decree, Dominion shall include prominently in the

 communication the information that the actions and expenditures were required as part of
 a consent decree to resolve allegations that Dominion violated the Clean Air Act.
- 117. Within sixty (60) Days following the completion of each Project required under this

 Consent Decree (including any applicable periods of demonstration or testing), Dominion
 shall submit to the United States a report that documents the date that the Project was
 completed, the results achieved by implementing the Project, including the emission
 reductions or other environmental benefits, and the Project Dollars expended by
 Dominion in implementing the Project.

X. CIVIL PENALTY

118. Within thirty (30) Days after the Date of Entry of this Consent Decree, Dominion shall pay to the United States a civil penalty in the amount of \$3.4 million. The civil penalty shall be paid by Electronic Funds Transfer ("EFT") to the United States Department of Justice, in accordance with current EFT procedures, referencing USAO File Number 2013V00150, DOJ Case Number 90-5-2-1-09860, and the civil action case name and case number of this action. The costs of such EFT shall be Dominion's responsibility. Payment shall be made in accordance with instructions provided to Dominion by the Financial Litigation Unit of the U.S. Attorney's Office for the Central District of Illinois. Any funds received after 2:00 p.m. EDT shall be credited on the next business day. At the time of payment, Dominion shall provide notice of payment, referencing the USAO File Number, the DOJ Case Number, and the civil action case name and case number, to

- the United States Department of Justice and to EPA in accordance with Section XIX (Notices) of this Consent Decree.
- 119. Failure to timely pay the civil penalty shall subject Dominion to interest accruing from the date payment is due until the date payment is made at the rate prescribed by 28 U.S.C. § 1961, and shall render Dominion liable for all charges, costs, fees, and penalties established by law for the benefit of a creditor or of the United States in securing payment.
- 120. Payments made pursuant to this Section, and payments made pursuant to Section XIV (Stipulated Penalties), are penalties within the meaning of Section 162(f) of the Internal Revenue Code, 26 U.S.C. § 162(f), and are not tax-deductible expenditures for purposes of federal law.

XI. RESOLUTION OF CLAIMS AGAINST DOMINION

A. Resolution of U.S. Civil Claims

121. Claims of the United States Based on Modifications Occurring Before the Date of Lodging of this Consent Decree. Entry of this Consent Decree shall resolve all civil claims of the United States against Dominion that arose from any modifications commenced at any Dominion System Unit prior to the Date of Lodging of this Consent Decree, including but not limited to those modifications alleged in the NOV/FOV issued by EPA to Dominion on April 16, 2009 and the Complaint filed in this civil action, under any or all of: (a) Parts C or D of Subchapter I of the Clean Air Act, 42 U.S.C. §§ 7470-7492, 7501-7515, and the implementing PSD and Nonattainment NSR provisions of the relevant SIPs; (b) Section 111 of the Clean Air Act and 40 C.F.R. Section 60.14; and (c) Title V of the Clean Air Act, 42 U.S.C. § 7661-7661f, but only to the extent that such

Title V claims are based on Dominion's failure to obtain an operating permit that reflects applicable requirements imposed under Parts C or D of Subchapter I of the Clean Air Act. Entry of this Consent Decree shall also resolve the civil claims of the United States for any opacity claims at State Line that occurred prior to the lodging of this Consent Decree, including the opacity violations alleged in EPA's April 16, 2009 NOV/FOV.

XII. PERIODIC REPORTING

- 122. After entry of this Consent Decree, Dominion shall submit to EPA a periodic report, within sixty (60) Days after the end of each half of the calendar year (January through June and July through December). The report shall include the following information:
 - a. all information necessary to determine compliance with the requirements of the following provisions of this Consent Decree: Section IV concerning NO_x emissions and monitoring (including all information necessary to determine whether it is technically infeasible to Continuously Operate the SCR as provided in Paragraphs 58 and 60), and the surrender of NO_x Allowances; Section V concerning SO₂ emissions and monitoring (including all information concerning gas curtailments as provided in Paragraph 74), and the surrender of SO₂ Allowances; Section VI concerning PM emissions and monitoring;
 - b. 3-hour rolling average and 24-hour rolling average PM CEMS data as required by Paragraph 101 in electronic format (Microsoft Excel compatible), and an identification of all periods of monitor malfunction, maintenance, and/or repair as provided in Paragraph 97;

- c. Any submittals to the applicable permitting authority requesting use of Netting credits or offsets generated by Paragraph 105 of this Consent Decree.
- all information relating to Super-Compliant NO_x and SO₂ Allowances that
 Dominion claims to have generated in accordance with Sections IV.D and V.D
 through compliance beyond the requirements of this Consent Decree;
- e. all information indicating that the installation or upgrade and commencement of operation of a new or upgraded pollution control device may be delayed, including the nature and cause of the delay, and any steps taken by Dominion to mitigate such delay;
- f. all affirmative defenses asserted pursuant to Paragraphs 138 through 144 during the period covered by the progress report;
- g. an identification of all periods when any pollution control device required by this

 Consent Decree to Continuously Operate was not operating, the reason(s) for the
 equipment not operating, and the basis for Dominion's compliance or noncompliance with the Continuous Operation requirements of this Consent Decree;
 and
- a summary of actions implemented and expenditures made pursuant to
 implementation of the Environmental Mitigation Projects required pursuant to
 Section IX and Appendix A.
- 123. In any periodic report submitted pursuant to this Section, Dominion may incorporate by reference information previously submitted under its Title V permitting requirements, provided that Dominion attaches the Title V Permit report (or the pertinent portions of

- such report) and provides a specific reference to the provisions of the Title V Permit report that are responsive to the information required in the periodic report.
- 124. In addition to the reports required pursuant to this Section, if Dominion violates or deviates from any provision of this Consent Decree, Dominion shall submit to EPA a report on the violation or deviation within ten (10) business days after Dominion knew or should have known of the event. In the report, Dominion shall explain the cause or causes of the violation or deviation and any measures taken or to be taken by Dominion to cure the reported violation or deviation or to prevent such violation or deviation in the future. If at any time, the provisions of this Consent Decree are included in Title V Permits, consistent with the requirements for such inclusion in this Consent Decree, then the deviation reports required under applicable Title V regulations shall be deemed to satisfy all the requirements of this Paragraph.
- 125. Each Dominion report shall be signed by Dominion's Responsible Official as defined in Title V of the Clean Air Act, or his or her equivalent or designee of at least the rank of Vice President, and shall contain the following certification:
 - This information was prepared either by me or under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my evaluation, or the direction and my inquiry of the person(s) who manage the system, or the person(s) directly responsible for gathering the information, I hereby certify under penalty of law that, to the best of my knowledge and belief, this information is true, accurate, and complete. I understand that there are significant penalties for submitting false, inaccurate, or incomplete information to the United States.
- 126. If any NO_x or SO₂ Allowances are surrendered to any non-profit third party pursuant to Paragraphs 71 and/or 87, the non-profit third party's certification shall be signed by a managing officer of the non-profit third party and shall contain the following language:

I certify under penalty of law that ______ [name of non-profit third party] will not sell, trade, or otherwise exchange any of the allowances and will not use any of the allowances to meet any obligation imposed by any environmental law. I understand that there are significant penalties for making misrepresentations to or misleading the United States.

XIII. REVIEW AND APPROVAL OF SUBMITTALS

- Dominion shall submit each plan, report, or other submission required by this Consent

 Decree to EPA whenever such a document is required to be submitted for review or
 approval pursuant to this Consent Decree. For any submittal requiring EPA approval
 under this Consent Decree, EPA may approve the submittal or decline to approve it and
 provide written comments explaining the bases for declining such approval as soon as
 reasonably practicable. Within sixty (60) Days of receiving written comments from EPA,
 Dominion shall either: (a) revise the submittal consistent with the written comments and
 provide the revised submittal to EPA; or (b) submit the matter for dispute resolution,
 including the period of informal negotiations, under Section XVI (Dispute Resolution) of
 this Consent Decree.
- 128. Upon receipt of EPA's final approval of the submittal, or upon completion of the submittal pursuant to dispute resolution, Dominion shall implement the approved submittal in accordance with the schedule specified therein or another EPA-approved schedule.

XIV. STIPULATED PENALTIES

129. For any failure by Dominion to comply with the terms of this Consent Decree, and subject to the provisions of Sections XV (Force Majeure) and XVI (Dispute Resolution), Dominion shall pay, within thirty (30) Days after receipt of written demand to Dominion by the United States, the following stipulated penalties to the United States:

Consent Decree Violation	Stipulated Penalty
a. Failure to pay the civil penalty as required by Section X (Civil Penalty) of this Consent Decree	\$10,000 per Day
b. Failure to comply with any applicable 30-Day Rolling Average Emission Rate.	\$2,500 per Day per violation where the violation is less than 5% in excess of the lb/mmBTU limits
	\$5,000 per Day per violation where the violation is equal to or greater than 5% but less than 10% in excess of the lb/mmBTU limits
	\$10,000 per Day per violation where the violation is equal to or greater than 10% in excess of the lb/mmBTU limits
c. Failure to comply with any applicable 12-Month Rolling Average Emission Rate	\$200 per Operating Day per violation where the violation is less than 5% in excess of the lb/mmBTU limits
	\$400 per Operating Day per violation where the violation is equal to or greater than 5% but less than 10% in excess of the lb/mmBTU limits
	\$800 per Operating Day per violation where the violation is equal to or greater than 10% in excess of the lb/mmBTU limits
d. Failure to comply with an applicable Plant-Wide Annual Tonnage Limitation	\$5,000 per ton for first 100 tons, \$10,000 per ton for each additional ton above 100 tons, plus the surrender of NO _x or SO ₂ Allowances in an amount equal to two times the number of tons of NO _x or SO ₂ emitted that exceeded the Plant-Wide Annual Tonnage Limitation

e. Failure to install, commence Continuous Operation, or Continuously Operate a NO _x , SO ₂ , or PM control device as required by this Consent Decree	\$10,000 per Day per violation during the first 30 Days; \$37,500 per Day per violation thereafter
f. Failure to comply with any applicable PM Emission Rate, where the violation is less than 5% in excess of the lb/mmBTU limit	\$2,500 per Operating Day per violation, starting on the Day a stack test result demonstrates a violation and continuing each Operating Day thereafter until and excluding such Day on which a subsequent stack test* demonstrates compliance with the applicable PM Emission Rate
g. Failure to comply with any applicable PM Emission Rate, where the violation is equal to or greater than 5% but less than 10% in excess of the lb/mmBTU limit	\$5,000 per Operating Day per violation, starting on the Day a stack test result demonstrates a violation and continuing each Operating Day thereafter until and excluding such Day on which a subsequent stack test* demonstrates compliance with the applicable PM Emission Rate
h. Failure to comply with any applicable PM Emission Rate, where the violation is equal to or greater than 10% in excess of the lb/mmBTU limit	\$10,000 per Operating Day per violation, starting on the Day a stack test result demonstrates a violation and continuing each Operating Day thereafter until and excluding such Day on which a subsequent stack test* demonstrates compliance with the applicable PM Emission Rate
i. Failure to Retire a Unit as required by this Consent Decree	\$10,000 per Day per violation during the first 30 Days; \$37,500 per Day per violation thereafter
j. Failure to conduct a stack test for PM and as required by Section VI of this Consent Decree	\$1,000 per Day per violation
k. Failure to install or operate CEMS as required by this Consent Decree	\$1,000 per Day per violation

l. Failure to apply for any permit required by Section XVII of this Consent Decree	\$1,000 per Day per violation
m. Failure to timely submit, modify, or implement, as approved, the reports, plans, studies, analyses, protocols, or other submittals required by this Consent Decree	\$750 per Day per violation during the first 10 Days; \$1,000 per Day per violation thereafter
n. Failure to surrender SO ₂ Allowances as required by this Consent Decree	\$37,500 per Day, plus \$1,000 per SO ₂ Allowance not surrendered
o. Failure to surrender NO _x Allowances as required by this Consent Decree	\$37,500 per Day, plus \$1,000 per NO _x Allowance not surrendered
p. Using, selling, banking, trading, or transferring NO _x Allowances or SO ₂ Allowances except as permitted by this Consent Decree	The surrender of Allowances in an amount equal to four (4) times the number of Allowances used, sold, banked, traded, or transferred in violation of this Consent Decree
q. Failure to demonstrate the third-party surrender of a NO _x or SO ₂ Allowance as required by Paragraphs 72 and 88 of this Consent Decree	\$2,500 per Day per violation
r. Failure to optimize the existing ESPs and baghouses as required by Paragraph 89 of this Consent Decree	\$1,000 per Day per violation
s. Failure to undertake and complete any of the Environmental Mitigation Projects in compliance with Section IX and Appendix A of this Consent Decree	\$1,000 per Day per violation during the first 30 Days; \$5,000 per Day per violation thereafter
t. Any other violation of this Consent Decree	\$1,000 per Day per violation

^{*}Dominion shall not be required to make any submission, including any notice or test protocol, or to obtain any approval to or from EPA in advance of conducting such a subsequent stack test, provided that Dominion uses test protocols previously approved by EPA.

130. Violations of any limit based on a 30-Day rolling average constitutes thirty (30) Days of violation but where such a violation (for the same pollutant and from the same Unit) recurs within periods less than thirty (30) Days, Dominion shall not be obligated to pay a daily stipulated penalty for any Day of the recurrence for which a stipulated penalty has already been paid.

- Violations of any limit based on a 12-Month rolling average shall be assessed a stipulated penalty for each Operating Day in the 365 Days comprising the 12-Month period at issue, excluding any Operating Day for which a stipulated penalty has already been paid for a violation of an applicable 30-Day Rolling Average Emission Rate (for the same pollutant and from the same Unit). Where such a violation of the 12-Month Rolling Average Emission Rate (for the same pollutant and from the same Unit) recurs within periods less than 12 Months, Dominion shall not be obligated to pay a monthly stipulated penalty for any Day of the recurrence for which a stipulated penalty has already been paid.
- 132. All stipulated penalties shall begin to accrue on the Day after the performance is due or on the Day a violation occurs, whichever is applicable, and shall continue to accrue until performance is satisfactorily completed or until the violation ceases, whichever is applicable. Nothing in this Consent Decree shall prevent the simultaneous accrual of separate stipulated penalties for separate violations of this Consent Decree.
- 133. Dominion shall pay all stipulated penalties to the United States within thirty (30) Days of receipt of written demand to Dominion from the United States, and shall continue to make such payments every thirty (30) Days thereafter until the violation(s) no longer continues, unless Dominion elects within twenty (20) Days of receipt of written demand to Dominion from the United States to dispute the accrual of stipulated penalties in accordance with the provisions in Section XVI (Dispute Resolution) of this Consent Decree.
- 134. Stipulated penalties shall continue to accrue as provided in accordance with Paragraph132 during any dispute, with interest on accrued stipulated penalties payable and

calculated at the rate established by the Secretary of the Treasury, pursuant to 28 U.S.C. § 1961, but need not be paid until the following:

- a. If the dispute is resolved by agreement, or by a decision of the United States pursuant to Section XVI (Dispute Resolution) of this Consent Decree that is not appealed to the Court, accrued stipulated penalties agreed or determined to be owing, together with accrued interest, shall be paid within thirty (30) Days of the effective date of the agreement or of the receipt of the United States' decision;
- b. If the dispute is appealed to the Court and the United States prevails in whole or in part, Dominion shall, within thirty (30) Days of receipt of the Court's decision or order, pay all accrued stipulated penalties determined by the Court to be owing, together with interest accrued on such penalties determined by the Court to be owing, except as provided in Subparagraph (c), below;
- c. If the Court's decision is appealed by either Party, Dominion shall, within fifteen (15) Days of receipt of the final appellate court decision, pay all accrued stipulated penalties determined by the appellate court to be owing, together with interest accrued on such stipulated penalties.

Notwithstanding any other provision of this Consent Decree, the accrued stipulated penalties agreed by the United States and Dominion, or determined by the United States through Dispute Resolution, to be owing may be less than the stipulated penalty amounts set forth in Paragraph 129.

135. All monetary stipulated penalties shall be paid in the manner set forth in Section X (Civil Penalty) of this Consent Decree, and all Allowance Surrender stipulated penalties shall comply with the Allowance Surrender procedures of Paragraphs 70-72 and 86-88.

- 136. Should Dominion fail to pay stipulated penalties in compliance with the terms of this Consent Decree, the United States shall be entitled to collect interest on such penalties, as provided for in 28 U.S.C. § 1961.
- other rights, remedies, or sanctions available to the United States by reason of Dominion's failure to comply with any requirement of this Consent Decree or applicable law, except that for any violation of the Act for which this Consent Decree provides for payment of a stipulated penalty, Dominion shall be allowed a credit for stipulated penalties paid against any statutory penalties also imposed for such violation.
- Malfunctions: If any of the Units at Brayton or Kincaid exceed an applicable 30-Day Rolling Average Emission Rate for NO_x or SO₂ set forth in this Consent Decree due to Malfunction, Dominion, bearing the burden of proof, has an affirmative defense to stipulated penalties under this Consent Decree, if Dominion has complied with the reporting requirements of Paragraphs 143 and 144 and has demonstrated all of the following:
 - a. the excess emissions were caused by a sudden, unavoidable breakdown of technology, beyond Dominion's control;
 - b. the excess emissions (1) did not stem from any activity or event that could have been foreseen and avoided, or planned for, and (2) could not have been avoided by better operation and maintenance practices;

- c. to the maximum extent practicable, the air pollution control equipment and processes were maintained and operated in a manner consistent with good practice for minimizing emissions;
- d. repairs were made in an expeditious fashion when Dominion knew or should have known that an applicable 30-Day Rolling Average Emission Rate was being or would be exceeded. Off-shift labor and overtime must have been utilized, to the extent practicable, to ensure that such repairs were made as expeditiously as practicable;
- e. the amount and duration of the excess emissions (including any bypass) were minimized to the maximum extent practicable during periods of such emissions;
- f. all possible steps were taken to minimize the impact of the excess emissions on ambient air quality;
- g. all emission monitoring systems were kept in operation if at all possible;
- h. Dominion's actions in response to the excess emissions were documented by properly signed, contemporaneous operating logs, or other relevant evidence;
- i. the excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance; and
- j. Dominion properly and promptly notified EPA as required by this Consent Decree.
- 139. To assert an affirmative defense for Malfunction under Paragraph 138, Dominion shall submit all data demonstrating the actual emissions for the Day the Malfunction occurs and the 29-Day period following the Day the Malfunction occurs. Dominion may, if it

- elects, submit emissions data for the same 30-Day period but that excludes the excess emissions.
- 140. Affirmative Defense as to Stipulated Penalties for Excess Emissions Occurring During

 Startup and Shutdown: If any of the Units at Brayton or Kincaid exceed an applicable

 30-Day Rolling Average Emission Rate for NO_x or SO₂ set forth in this Consent Decree

 due to startup or shutdown, Dominion, bearing the burden of proof, has an affirmative

 defense to stipulated penalties under this Consent Decree, if Dominion has complied with

 the reporting requirements of Paragraphs 143 and 144 and has demonstrated all of the

 following:
 - a. the periods of excess emissions that occurred during startup and shutdown were short and infrequent and could not have been prevented through careful planning and design consistent with good engineering, operation, and maintenance practices and manufacturers' specifications and recommendations;
 - b. the excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance;
 - c. if the excess emissions were caused by a bypass (an intentional diversion of control equipment), then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - at all time, the facility was operated in a manner consistent with good practice for minimizing emissions;
 - e. the frequency and duration of operation in startup or shutdown mode was minimized to the maximum extent practicable and consistent with good

engineering, operation, and maintenance practices and manufacturers' specifications and recommendations;

- f. all possible steps were taken to minimize the impact of the excess emissions on ambient air quality;
- g. All emissions monitoring systems were kept in operation if at all possible;
- h. Dominion's actions during the period of excess emissions were documented by properly signed, contemporaneous operating logs, or other relevant evidence; and
- i. Dominion properly and promptly notified EPA as required by this Consent Decree.
- 141. To assert an affirmative defense for startup or shutdown under Paragraph 140, Dominion shall submit all data demonstrating the actual emissions for the Day the excess emissions from startup or shutdown occurs and the 29-Day period following the Day the excess emissions from startup or shutdown occurs. Dominion may, if it elects, submit emissions data for the same 30-Day period but that excludes the excess emissions.
- 142. If excess emissions occur due to a Malfunction during routine startup and shutdown, then those instances shall be treated as other Malfunctions subject to Paragraph 138.
- 143. For an affirmative defense under Paragraphs 138 and 140, Dominion, bearing the burden of proof, shall demonstrate, through submission of the data and information under the reporting provisions of this Section, that all reasonable and practicable measures within Dominion's control were implemented to prevent the occurrence of the excess emissions.
- 144. Dominion shall provide notice to EPA in writing of Dominion's intent to assert an affirmative defense for Malfunction, startup, or shutdown under Paragraphs 138 and 140,

in Dominion's semi-annual progress reports as required by Paragraph 122. This notice shall be submitted to EPA pursuant to the provisions of Section XIX (Notices). The notice shall contain:

- a. The identity of each stack or other emission point where the excess emissions occurred;
- b. The magnitude of the excess emissions expressed in lb/mmBTU and the operating data and calculations used in determining the magnitude of the excess emissions;
- c. The time and duration or expected duration of the excess emissions;
- d. The identity of the equipment from which the excess emissions emanated;
- e. The nature and cause of the excess emissions;
- f. The steps taken, if the excess emissions were the result of a Malfunction, to remedy the Malfunction and the steps taken or planned to prevent the recurrence of the Malfunction;
- g. The steps that were or are being taken to limit the excess emissions; and
- h. If applicable, a list of the steps taken to comply with permit conditions governing Unit operation during periods of startup, shutdown, and/or Malfunction.
- 145. A Malfunction, startup, or shutdown shall not constitute a Force Majeure Event unless the Malfunction, startup, or shutdown meets the definition of a Force Majeure Event, as provided in Section XV (Force Majeure).

146. The affirmative defense provided herein is only an affirmative defense to stipulated penalties for violations of this Consent Decree, and not a defense to any civil or administrative action for injunctive relief.

XV. FORCE MAJEURE

- 147. For purposes of this Consent Decree, a "Force Majeure Event" shall mean an event that has been or will be caused by circumstances beyond the control of Dominion, its contractors, or any entity controlled by Dominion that delays or prevents compliance with any provision of this Consent Decree or otherwise causes noncompliance with any provision of this Consent Decree despite Dominion's best efforts to fulfill the obligation. "Best efforts to fulfill the obligation" include using the best efforts to anticipate any potential Force Majeure Event and to address the effects of any such event (a) as it is occurring, and (b) after it has occurred, such that the delay or noncompliance, and any adverse environmental effect of the delay or noncompliance, is minimized to the greatest extent possible.
- 148. Notice of Force Majeure Events. If any event occurs or has occurred that may delay or prevent compliance with or otherwise cause noncompliance with any obligation under this Consent Decree, as to which Dominion intends to assert a claim of Force Majeure, Dominion shall notify the United States in writing as soon as practicable, but in no event later than fourteen (14) Days following the date Dominion first knew, or by the exercise of due diligence should have known, that the event caused or may cause such delay or noncompliance. In this notice, Dominion shall reference this Paragraph of this Consent Decree and describe the anticipated length of time that the delay or noncompliance may persist, the cause or causes of the delay or noncompliance, all measures taken or to be

taken by Dominion to prevent or minimize the delay or noncompliance and any adverse environmental effect of the delay or noncompliance, the schedule by which Dominion proposes to implement those measures, and Dominion's rationale for attributing a delay or noncompliance to a Force Majeure Event. Dominion shall adopt all reasonable measures to avoid or minimize such delays or noncompliance. Dominion shall be deemed to know of any circumstance which Dominion, its contractors, or any entity controlled by Dominion knew or should have known.

- 149. <u>Failure to Give Notice</u>. If Dominion fails to comply with the notice requirements of this Section, the United States may void Dominion's claim for Force Majeure as to the specific event for which Dominion has failed to comply with such notice requirement.
- Dominion's claim of Force Majeure as soon as reasonably practicable. If the United States agrees that a Force Majeure Event has delayed or prevented, or will delay or prevent, compliance with any provision of this Consent Decree, or has otherwise caused or will cause noncompliance with any provision of this Consent Decree, the United States and Dominion shall stipulate to an extension of deadline(s) for performance of the affected compliance requirement(s) by a period equal to the delay or period of noncompliance actually caused by the event.
- 151. <u>Disagreement</u>. If the United States does not accept Dominion's claim of Force Majeure, or if the United States and Dominion cannot agree on the length of the delay or noncompliance actually caused by the Force Majeure Event, the matter shall be resolved in accordance with Section XVI (Dispute Resolution) of this Consent Decree.

- Burden of Proof. In any dispute regarding Force Majeure, Dominion shall bear the burden of proving that any delay in performance or any other noncompliance with any requirement of this Consent Decree was caused by or will be caused by a Force Majeure Event. Dominion shall also bear the burden of proving that Dominion gave the notice required by this Section and the burden of proving the anticipated duration and extent of any delay(s) or noncompliance attributable to a Force Majeure Event. An extension of one compliance date based on a particular event may, but will not necessarily, result in an extension of a subsequent compliance date.
- 153. Events Excluded. Unanticipated or increased costs or expenses associated with the performance of Dominion's obligations under this Consent Decree shall not constitute a Force Majeure Event.
- 154. Potential Force Majeure Events. The Parties agree that, depending upon the circumstances related to an event and Dominion's response to such circumstances, the kinds of events listed below are among those that could qualify as Force Majeure Events within the meaning of this Section: construction, labor, or equipment delays; Malfunction of a Unit or emission control device; unanticipated coal supply or pollution control reagent delivery interruptions; acts of God; acts of war or terrorism; and orders by a government official, government agency, other regulatory authority, or a regional transmission organization, acting under and authorized by applicable law, that direct Dominion to supply electricity in response to a system-wide (state-wide or regional) emergency (which could include unanticipated required operation to avoid loss of load or unserved load or to preserve the reliability of the bulk power system). Depending upon the circumstances and Dominion's response to such circumstances, failure of a permitting

authority to issue a necessary permit in a timely fashion may constitute a Force Majeure

Event where the failure of the permitting authority to act is beyond the control of

Dominion and Dominion has taken all steps available to it to obtain the necessary permit,
including, but not limited to: submitting a complete permit application; responding to
requests for additional information by the permitting authority in a timely fashion; and
accepting lawful permit terms and conditions after expeditiously exhausting any legal
rights to appeal terms and conditions imposed by the permitting authority.

(Dispute Resolution) regarding a claim of Force Majeure, the United States and

Dominion by agreement, or this Court by order, may in appropriate circumstances extend
or modify the schedule for completion of work under this Consent Decree to account for
the delay in the work that occurred as a result of any delay agreed to by the United States
or approved by the Court. Dominion shall be liable for stipulated penalties pursuant to
Section XIV (Stipulated Penalties) for its failure thereafter to complete the work in
accordance with the extended or modified schedule (provided that Dominion shall not be
precluded from making a further claim of Force Majeure with regard to meeting any such
extended or modified schedule).

XVI. DISPUTE RESOLUTION

- 156. The dispute resolution procedure provided by this Section shall be available to resolve all disputes arising under this Consent Decree, provided that the Party invoking such procedure has first made a good faith attempt to resolve the matter with the other Party.
- 157. The dispute resolution procedure required herein shall be invoked by one Party giving written notice to the other Party advising of a dispute pursuant to this Section. The notice

- shall describe the nature of the dispute and shall state the noticing Party's position with regard to such dispute. The Party receiving such a notice shall acknowledge receipt of the notice, and the Parties in dispute shall expeditiously schedule a meeting to discuss the dispute informally not later than fourteen (14) Days following receipt of such notice.
- 158. Disputes submitted to dispute resolution under this Section shall, in the first instance, be the subject of informal negotiations between the Parties. Such period of informal negotiations shall not extend beyond thirty (30) Days from the date of the first meeting between the Parties' representatives unless they agree in writing to shorten or extend this period.
- 159. If the Parties are unable to reach agreement during the informal negotiation period, the United States shall provide Dominion with a written summary of its position regarding the dispute. The written position provided by the United States shall be considered binding unless, within forty-five (45) Days thereafter, Dominion seeks judicial resolution of the dispute by filing a petition with this Court. The United States may submit a response to the petition within forty-five (45) Days of filing.
- 160. The time periods set out in this Section may be shortened or lengthened upon motion to the Court of one of the Parties to the dispute, explaining the Party's basis for seeking such a scheduling modification.
- 161. This Court shall not draw any inferences nor establish any presumptions adverse to either Party as a result of invocation of this Section or the Parties' inability to reach agreement.
- 162. As part of the resolution of any dispute under this Section, in appropriate circumstances the Parties may agree, or this Court may order, an extension or modification of the schedule for the completion of the activities required under this Consent Decree to

account for the delay that occurred as a result of dispute resolution. Dominion shall be liable for stipulated penalties pursuant to Section XIV (Stipulated Penalties) for its failure thereafter to complete the work in accordance with the extended or modified schedule, provided that Dominion shall not be precluded from asserting that a Force Majeure Event has caused or may cause a delay in complying with the extended or modified schedule.

163. The Court shall decide all disputes pursuant to applicable principles of law for resolving such disputes. In their filings with the Court under Paragraph 159, the Parties shall state their respective positions as to the applicable standard of law for resolving the particular dispute.

XVII. PERMITS

- 164. Unless expressly stated otherwise in this Consent Decree, in any instance where otherwise applicable law or this Consent Decree requires Dominion to secure a permit to authorize construction or operation of any device, including all preconstruction, construction, and operating permits required under applicable state law, Dominion shall make such application in a timely manner. EPA shall use best efforts to review expeditiously, to the extent applicable, all permit applications submitted by Dominion to meet the requirements of this Consent Decree.
- 165. Notwithstanding Paragraph 164, nothing in this Consent Decree shall be construed to require Dominion to apply for or obtain a PSD or Nonattainment NSR permit for physical changes in, or changes in the method of operation of, any Dominion System Unit that would give rise to claims resolved by Section XI (Resolution of Claims Against Dominion) of this Consent Decree.

- 166. When permits are required, Dominion shall complete and submit applications for such permits to the applicable state agency to allow sufficient time for all legally required processing and review of the permit request, including requests for additional information by the applicable state agency. Any failure by Dominion to submit a timely permit application for Dominion System Units shall bar any use by Dominion of Section XV (Force Majeure) of this Consent Decree, where a Force Majeure claim is based on permitting delays.
- 167. Notwithstanding the reference to Title V Permits in this Consent Decree, the enforcement of such permits shall be in accordance with their own terms and the Act and its implementing regulations. The Title V Permits shall not be enforceable under this Consent Decree, although any term or limit established by or under this Consent Decree shall be enforceable under this Consent Decree regardless of whether such term has or will become part of a Title V Permit, subject to the terms of Section XXVII (Conditional Termination of Enforcement Under Decree) of this Consent Decree.
- 168. Within one hundred eighty (180) Days after the Date of Entry of this Consent Decree,

 Dominion shall modify any applicable Title V Permit application(s), or apply for

 modifications of its Title V Permits, to include a schedule for all Unit-specific, plantspecific, and system-specific performance, operational, maintenance, and control
 technology requirements established by this Consent Decree including, but not limited to,
 (a) Emission Rates, (b) Plant-Wide Annual Tonnage Limitations, (c) the requirements
 pertaining to the Surrender of SO₂ and NO_x Allowances, and (d) the requirements
 pertaining to Retirement of State Line.

- 169. Within one (1) year from the Date of Entry of this Consent Decree, Dominion shall either apply to permanently include the requirements and limitations enumerated in this Consent Decree into a federally enforceable non-Title V permit, or request a site-specific amendment to the applicable SIP to include the requirements and limitations enumerated in this Consent Decree. The federally enforceable permit or SIP amendment shall require compliance with all Unit-specific, plant-specific, and system-specific performance, operational, maintenance, and control technology requirements established by this Consent Decree including, but not limited to, (a) Emission Rates, (b) Plant-Wide Annual Tonnage Limitations, (c) the requirements pertaining to the Surrender of SO₂ and NO_x Allowances, and (d) the requirements pertaining to Retirement of State Line.
- 170. As soon as practicable, but in no event later than one hundred eighty (180) Days after the issuance of the permit or SIP amendment required by Paragraph 169, Dominion shall file a complete application to the appropriate permitting authority to incorporate the requirements of the permit or SIP amendment into the Title V operating permit for each plant.
- 171. Dominion shall provide the United States with a copy of each application for a federally enforceable permit or SIP amendment, as well as a copy of any permit proposed as a result of such application, to allow for timely participation in any public comment opportunity.
- 172. Prior to conditional termination of enforcement through this Consent Decree, Dominion shall obtain enforceable provisions in its Title V permits that incorporate all Unit-specific, plant-specific, and system-specific performance, operational, maintenance, and control technology requirements established by this Consent Decree including, but not

- limited to, (a) Emission Rates, (b) Plant-Wide Annual Tonnage Limitations, and (c) the requirements pertaining to the Surrender of SO₂ and NO_x Allowances.
- 173. If Dominion proposes to sell or transfer to an entity unrelated to Dominion ("Third Party Purchaser") part or all of its Operational or Ownership Interest covered under this Consent Decree, Dominion shall comply with the requirements of Section XX (Sales or Transfers of Operational or Ownership Interests) of this Consent Decree with regard to that Operational or Ownership Interest prior to any such sale or transfer.

XVIII. INFORMATION COLLECTION AND RETENTION

- 174. Any authorized representative of the United States, including its attorneys, contractors, and consultants, upon presentation of credentials, shall have a right of entry upon the premises of an Dominion System Unit at any reasonable time for the purpose of:
 - a. monitoring the progress of activities required under this Consent Decree;
 - b. verifying any data or information submitted to the United States in accordance with the terms of this Consent Decree;
 - c. obtaining samples and, upon request, splits of any samples taken by Dominion or its representatives, contractors, or consultants; and
 - d. assessing Dominion's compliance with this Consent Decree.
- 175. Dominion shall retain, and instruct its contractors and agents to preserve, all non-identical copies of all records and documents (including records and documents in electronic form) that are now in its or its contractors' or agents' possession or control, and that directly relate to Dominion's performance of its obligations under this Consent Decree for the following periods: (a) until December 31, 2023 for records concerning physical or operational changes undertaken in accordance with Section IV (NO_x Emission

Reductions and Controls), Section V (SO₂ Emission Reductions and Controls), and Section VI (PM Emission Reductions and Controls); and (b) until December 31, 2019 for all other records. This record retention requirement shall apply regardless of any corporate document retention policy to the contrary.

- 176. All information and documents submitted by Dominion pursuant to this Consent Decree shall be subject to any requests under applicable law providing public disclosure of documents unless (a) the information and documents are subject to legal privileges or protection, or (b) Dominion claims and substantiates in accordance with 40 C.F.R. Part 2 that the information and documents contain confidential business information.
- 177. Nothing in this Consent Decree shall limit the authority of EPA to conduct tests and inspections at Dominion's facilities under Section 114 of the Act, 42 U.S.C. § 7414, or any other applicable federal laws, regulations, or permits.

XIX. NOTICES

178. Unless otherwise provided herein, whenever notifications, submissions, or communications are required by this Consent Decree, they shall be made in writing and addressed as follows:

As to the United States of America:

(if by mail service)
Chief, Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
P.O. Box 7611, Ben Franklin Station
Washington, DC 20044-7611
DJ# 90-5-2-1-09860

(if by commercial delivery service) Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice ENRD Mailroom, Room 2121 601 D Street, NW Washington, DC 20004 DJ# 90-5-2-1-09860

and

(if by mail service)
Director, Air Enforcement Division
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
Mail Code 2242A
1200 Pennsylvania Avenue, NW
Washington, DC 20460

(if by commercial delivery service)
Director, Air Enforcement Division
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
Ariel Rios South Building, Room 1119
1200 Pennsylvania Avenue, NW
Washington, DC 20004

and

(by mail or commercial delivery service) Director, Air Division U.S. Environmental Protection Agency, Region 5 77 W. Jackson Blvd. (AE-17J) Chicago, IL 60604

and

(by mail or commercial delivery service)
Director, Office of Environmental Stewardship
U.S. Environmental Protection Agency, Region 1
Mail Code OES04-5
5 Post Office Square, Suite 100
Boston, MA 02190-3912

As to DOMINION:

Senior Vice President – Fossil and Hydro Dominion Energy – Dominion Generation 5000 Dominion Boulevard Glen Allen, VA 23060

- All notifications, communications, or submissions made pursuant to this Section shall be sent either by: (a) overnight mail or overnight delivery service with signature required for delivery, or (b) certified or registered mail, return receipt requested. All notifications, communications, and transmissions sent by overnight, certified, or registered mail shall be deemed submitted on the date they are postmarked, or, if sent by overnight delivery service, they shall be deemed submitted on the date they are delivered to the delivery service.
- 180. Either Party may change either the notice recipient or the address for providing notices to it by serving the other Party with a notice setting forth such new notice recipient or address.

$\frac{\textbf{XX. SALES OR TRANSFERS OF OPERATIONAL OR OWNERSHIP}}{\textbf{INTERESTS}}$

- 181. If Dominion proposes to sell or transfer an Operational or Ownership Interest in Kincaid or Brayton Point to an entity unrelated to Dominion (a "Third Party Purchaser"),

 Dominion shall advise the Third Party Purchaser in writing of the existence of this

 Consent Decree prior to such sale or transfer, and shall send a copy of such written notification to the United States pursuant to Section XIX (Notices) of this Consent

 Decree at least sixty (60) Days before such proposed sale or transfer.
- 182. No sale or transfer of an Operational or Ownership Interest, whether in compliance with the procedures of this Section or otherwise, shall relieve Dominion of its obligation to

ensure that the terms of this Consent Decree are implemented, unless (1) the proposed transferee agrees to undertake all of the obligations required by this Consent Decree that may be applicable to the transferred or purchased Operational or Ownership Interests, and to be substituted for Dominion as a Party under the Decree pursuant to Section XXIII (Modification) and thus be bound by the terms thereof, and (2) the United States consents to relieve Dominion of its obligations. The United States may refuse to approve the substitution of the proposed transferee for Dominion if it determines that the proposed transferee does not possess the requisite technical abilities or financial means to comply with the Consent Decree. Dominion shall provide the United States with a copy of any proposed written agreement transferring an Operation or Ownership Interest at least 30 Days prior to such transfer, in accordance with Section XIX (Notices). The United States shall inform Dominion if it does not consent to relieve Dominion of its obligations within thirty (30) Days of receipt of such proposed written agreement.

- 183. This Consent Decree shall not be construed to impede the transfer of any Operational or Ownership Interests between Dominion and any Third Party Purchaser so long as the requirements of this Consent Decree are met. Any transfer of ownership or operation of Kincaid or Brayton Point without complying with this Section constitutes a violation of this Consent Decree.
- 184. Dominion may not assign, and may not be released from, any obligation under this

 Consent Decree that is not specific to the purchased or transferred Operational or

 Ownership Interests, including the obligations set forth in Sections IX (Environmental

 Mitigation Projects) and X (Civil Penalty).

185. Paragraphs 182 through 184 of this Consent Decree do not apply if an Operational or Ownership Interest is sold or transferred solely as collateral security in order to consummate a financing arrangement (not including a sale-leaseback), so long as Dominion: (a) remains the operator (as that term is used and interpreted under the Clean Air Act) of the subject Unit(s); (b) remains subject to and liable for all obligations and liabilities of this Consent Decree; and (c) supplies Plaintiff with the following certification within thirty (30) Days of the sale or transfer:

"Certification of Change in Ownership Interest Solely for Purpose of Consummating Financing. We, the Chief Executive Officer and General Counsel of Dominion Energy, Inc. ("Dominion"), hereby jointly certify under Title 18 U.S.C. Section 1001, on our own behalf and on behalf of Dominion, that any change in Dominion's Ownership Interest in any Unit that is caused by the sale or transfer as collateral security of such Ownership Interest in such Unit(s) pursuant to the financing agreement consummated on [insert applicable date] between Dominion and [insert applicable entity]: a) is made solely for the purpose of providing collateral security in order to consummate a financing arrangement; b) does not impair Dominion's ability, legally or otherwise, to comply timely with all terms and provisions of the Consent Decree entered in *United States v. Dominion Energy, Inc., et al.*, Civil Action_____; c) does not affect Dominion's operational control of any Unit covered by that Consent Decree in a manner that is inconsistent with Dominion's performance of its obligations under the Consent Decree; and d) in no way affects the status of Dominion's obligations or liabilities under that Consent Decree."

XXI. EFFECTIVE DATE

186. The effective date of this Consent Decree shall be the Date of Entry.

XXII. RETENTION OF JURISDICTION

187. The Court shall retain jurisdiction of this case after entry of this Consent Decree to enforce compliance with the terms and conditions of this Consent Decree and to take any action necessary or appropriate for the interpretation, construction, execution, or modification of the Consent Decree, or for adjudication of disputes. During the term of

this Consent Decree, any Party to this Consent Decree may apply to the Court for any relief necessary to construe or effectuate this Consent Decree.

XXIII. MODIFICATION

188. The terms of this Consent Decree may be modified only by a subsequent written agreement signed by the Parties. Where the modification constitutes a material change to any term of this Consent Decree, it shall be effective only upon approval by the Court.

XXIV. GENERAL PROVISIONS

- 189. When this Consent Decree specifies that Dominion shall achieve and maintain a 30-Day Rolling Average Emission Rate, the Parties expressly recognize that compliance with such 30-Day Rolling Average Emission Rate shall commence immediately upon the date specified, and that compliance as of such specified date (e.g., December 30) shall be determined based on data from the 29 prior Unit Operating Days (e.g., December 1-29).
- 190. When this Consent Decree specifies that Dominion shall achieve and maintain a 12-Month Rolling Average Emission Rate, then the Month Containing that Day if that Day is the first Day of the Month, or if that Day is not the first Day of the Month then the next complete Month, shall be the first Month subject to the specified 12-Month limitation. For example, if the specified 12-Month Rolling Average Emission Rate is to be achieved starting December 31, 2012, then January 2013 is the first Month included in the first applicable 12-Month Rolling Average Emission Rate, such that the first complete 12-Month Rolling Average Emission Rate period would include January 2013 through December 2013.
- 191. This Consent Decree is not a permit. Compliance with the terms of this Consent Decree does not guarantee compliance with all applicable federal, state, or local laws or

regulations. The emission rates and removal efficiencies set forth herein do not relieve

Dominion from any obligation to comply with other state and federal requirements under
the Clean Air Act, including Dominion's obligation to satisfy any state modeling
requirements set forth in the applicable SIP.

- 192. This Consent Decree does not apply to any claim(s) of alleged criminal liability.
- In any subsequent administrative or judicial action initiated by the United States for injunctive relief or civil penalties relating to any of the facilities in the Dominion System as covered by this Consent Decree, Dominion shall not assert any defense or claim based upon principles of waiver, res judicata, collateral estoppel, issue preclusion, claim preclusion, or claim splitting, or any other defense based upon the contention that the claims raised by the United States in the subsequent proceeding were brought, or should have been brought, in the instant case; provided, however, that nothing in this Paragraph is intended to affect the validity of Section XI (Resolution of Claims Against Dominion).
- 194. Nothing in this Consent Decree shall relieve Dominion of its obligation to comply with all applicable federal, state, and local laws and regulations, including, but not limited to, the Clean Water Act and the National Pollutant Discharge Elimination System (NPDES) implementing regulations, National Ambient Air Quality Standards, the National Emission Standards for Hazardous Air Pollutants From Coal and Oil-Fired Electric Utility Steam Generating Units (Utility MACT), and Standards of Performance for Fossil-Fuel-Fired Electric Utility, Industrial-commercial-Institutional, and Small Industrial Commercial-Institutional Steam Generating Units (Utility NSPS). Nothing in this Consent Decree shall be construed to provide any relief from the emission limits or deadlines for the installation of pollution controls or the implementation of other

- pollution control-related measures specified in these regulations, nor shall this Decree be construed as a pre-determination of eligibility for the one year extension that may be provided under 42 U.S.C. § 7412(i)(3)(B).
- 195. Subject to the provisions in Section XI (Resolution of Claims Against Dominion), nothing contained in this Consent Decree shall be construed to prevent or limit the rights of the United States to obtain penalties or injunctive relief under the Act or other federal, state, or local statutes, regulations, or permits.
- 196. Each limit and/or other requirement established by or under this Consent Decree is a separate, independent requirement.
- 197. Performance standards, emissions limits, and other quantitative standards set by or under this Consent Decree must be met to the number of significant digits in which the standard or limit is expressed. For example, an Emission Rate of 0.100 is not met if the actual Emission Rate is 0.101. Dominion shall round the fourth significant digit to the nearest third significant digit, or the third significant digit to the nearest second significant digit, depending upon whether the limit is expressed to three or two significant digits. For example, if an actual Emission Rate is 0.1004, that shall be reported as 0.100, and shall be in compliance with an Emission Rate of 0.100, and if an actual Emission Rate is 0.1005, that shall be reported as 0.101, and shall not be in compliance with an Emission Rate of 0.100. Dominion shall report data to the number of significant digits in which the standard or limit is expressed.
- 198. This Consent Decree does not limit, enlarge, or affect the rights of any Party to this Consent Decree as against any third parties.

- 199. This Consent Decree constitutes the final, complete, and exclusive agreement and understanding among the Parties with respect to the settlement embodied in this Consent Decree, and supersedes all prior agreements and understandings among the Parties related to the subject matter herein. No document, representation, inducement, agreement, understanding, or promise constitutes any part of this Consent Decree or the settlement it represents, nor shall they be used in construing the terms of this Consent Decree.
- 200. Each Party to this action shall bear its own costs and attorneys' fees, except that the

 United States shall be entitled to collect the costs (including attorneys' fees) incurred in
 any action necessary to collect any portion of the civil penalty or any stipulated penalties
 due but not paid by Dominion.

XXV. SIGNATORIES AND SERVICE

- 201. Each undersigned representative of Dominion, and the Assistant Attorney General for the Environment and Natural Resources Division of the United States Department of Justice, certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind to this document the Party he or she represents.
- 202. This Consent Decree may be signed in counterparts, and such counterpart signature pages shall be given full force and effect.
- 203. Each Party hereby agrees to accept service of process by mail with respect to all matters arising under or relating to this Consent Decree and to waive the formal service requirements set forth in Rule 4 of the Federal Rules of Civil Procedure and any applicable Local Rules of this Court including, but not limited to, service of a summons.

204. Unless otherwise ordered by the Court, the United States agrees that Dominion will not be required to file any answer or other pleading responsive to the Complaint in this matter until and unless the Court expressly declines to enter this Consent Decree, in which case Dominion shall have no less than thirty (30) Days after receiving notice of such express declination to file an answer or other pleading in response to the Complaint.

XXVI. PUBLIC COMMENT

205. The Parties agree and acknowledge that final approval by the United States and entry of this Consent Decree is subject to the procedures of 28 C.F.R. § 50.7, which provides for notice of the lodging of this Consent Decree in the Federal Register, an opportunity for public comment, and the right of the United States to withdraw or withhold consent if the comments disclose facts or considerations which indicate that this Consent Decree is inappropriate, improper, or inadequate. Dominion shall not oppose entry of this Consent Decree by this Court or challenge any provision of this Consent Decree unless the United States has notified Dominion, in writing, that the United States no longer supports entry of this Consent Decree.

XXVII. CONDITIONAL TERMINATION OF ENFORCEMENT UNDER DECREE

- 206. Termination as to Completed Tasks. As soon as Dominion completes a construction project or any other requirement of this Consent Decree that is not ongoing or recurring, Dominion may, by motion to this Court, seek termination of the provision or provisions of this Consent Decree that imposed the requirement.
- 207. <u>Conditional Termination of Enforcement Through this Consent Decree</u>. Subject to the provisions of Paragraph 208, after Dominion:

- a. has successfully completed construction, and has maintained operation, of all pollution controls as required by this Consent Decree for a period of two (2) years, and has successfully completed all actions necessary to Retire State Line; and
- b. has obtained all the final permits and/or site-specific SIP amendments (1) as required by Section XVII (Permits) of this Consent Decree, and (2) that include as federally enforceable permit terms, all Unit-specific, plant-specific, and system-specific performance, operational, maintenance, and control technology requirements established by this Consent Decree;

then Dominion may so certify these facts to the United States and this Court. If the United States does not object in writing with specific reasons within sixty (60) Days of receipt of Dominion's certification, then, for any violations of this Consent Decree that occur after the filing of notice, the United States shall pursue enforcement of the requirements through the applicable permits and/or other enforcement authorities and not through this Consent Decree.

208. Resort to Enforcement Under this Consent Decree. Notwithstanding Paragraph 207, if enforcement of a provision in this Consent Decree cannot be pursued by the United States under the applicable permit(s) issued pursuant to the Clean Air Act or its implementing regulations ("CAA Permit"), or if a Consent Decree requirement was intended to be part of a CAA Permit and did not become or remain part of such permit, then such requirement may be enforced under the terms of this Consent Decree at any time.

XXVIII. FINAL JUDGMENT

209. Upon approval and entry of this Consent Decree by the Court, this Consent Decree shall constitute a final judgment between the Parties.

Signature Page for United States of America v. Dominion Energy, Inc. et al. Consent Decree

FOR THE UNITED STATES DEPARTMENT OF JUSTICE

Respectfully submitted,

s/Ignacia S. Moreno_

IGNACIA S. MORENO Assistant Attorney General Environment & Natural Resources Division

s/ Jason A. Dunn_____

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FOR THE UNITED STATES DEPARTMENT OF JUSTICE

Respectfully submitted,

JAMES A. LEWIS United States Attorney

By: s/ Gerard A. Brost_

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FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Respectfully submitted,

s/ Cynthia Giles__

CYNTHIA GILES
Assistant Administrator
Office of Enforcement and
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United States Environmental
Protection Agency

s/ Phillip A. Brooks_

PHILLIP A. BROOKS
Director, Air Enforcement Division
United States Environmental
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<u>s/ Seema Kakade_</u>

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FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Respectfully submitted,

s/ Susan Hedman___

SUSAN HEDMAN Regional Administrator United States Environmental Protection Agency, Region 5

s/Nicole Wood-Chi_

NICOLE WOOD-CHI Associate Regional Counsel United States Environmental Protection Agency, Region 5 77 W. Jackson Blvd. (C-14J) Chicago, IL 60604

FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Respectfully submitted,

s/ Curt Spalding_

CURT SPALDING
Regional Administrator
United States Environmental
Protection Agency, Region 1

s/ Susan Studlein_

SUSAN STUDLIEN
Director, Office of Environmental Stewardship
United States Environmental
Protection Agency, Region 1

s/ Steven Viggiani_

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Signature Page for United States of America v. Dominion Energy, Inc. et al. Consent Decree

FOR DOMINION ENERGY, INC., DOMINION ENERGY BRAYTON POINT, LLC, AND KINCAID GENERATION, LLC

Respectfully submitted,

By: <u>s/J. David Rives</u>

J. DAVID RIVES Senior Vice President – Fossil & Hydro Dominion Energy, Inc.

APPENDIX A ENVIRONMENTAL MITIGATION PROJECTS

Dominion shall spend \$9,750,000, and shall comply with the requirements of this Appendix and with Section IX of this Consent Decree (Environmental Mitigation Projects) to implement and secure the environmental benefits of the Environmental Mitigation Projects described below.

I. Forest Service/Park Service Mitigation

- A. Within forty-five (45) days from the Date of Entry, Dominion shall pay to the United States Forest Service the sum of \$250,000 to be used in accordance with 16 U.S.C. § 579c, for the improvement, protection, or rehabilitation of lands under the administration of the Forest Service. The Project(s) shall focus on one or more areas alleged by Plaintiffs to have been injured by emissions from Dominion System plants, including but not limited to the Shawnee National Forest and the Midewin National Tallgrass Prairie.
- B. Within forty-five (45) days from the Date of Entry, Dominion shall pay to the National Park Service the sum of \$500,000 to be used in accordance with the Park System Resource Protection Act, 16 U.S.C. § 19jj, for the restoration of land, watersheds, vegetation, and forests using techniques designed to improve ecosystem health and mitigate harmful effects from air pollution. The Project(s) shall focus on one or more areas alleged by Plaintiffs to have been injured by emissions from Dominion System plants, including but not limited to the Cape Cod National Seashore, Indiana Dunes National Lakeshore, and the Boston Harbor Islands National Recreation Area.
- C. Payment of the amounts specified in the preceding paragraphs shall be made to the Forest Service and Park Service pursuant to payment instructions provided to Dominion before or after the Date of Lodging. Notwithstanding Section I.A of this Appendix, payment of funds by Dominion is not due until ten (10) days after receipt of payment instructions, or forty-five (45) days after the Date of Entry, whichever is later.
- D. Upon payment of the amount specified in Section I.A of this Appendix, Dominion shall have no further responsibilities regarding the implementation of any Projects selected by the Forest Service or Park Service in connection with this provision of the Consent Decree.

II. Overall Schedule and Budget for Additional Environmental Mitigation Projects

- A. Within one hundred twenty (120) days of the Date of Entry, unless otherwise specified by this Appendix, Dominion shall submit proposed plans ("Project Plans") to EPA for review and approval pursuant to Section XIII of the Consent Decree (Review and Approval of Submittals) for spending \$9,000,000 in Project Dollars for the Projects listed in Sections III through XI below in accordance with the deadlines established in this Appendix. Dominion shall ensure that \$3,625,000 is spent in Massachusetts, Rhode Island and Connecticut, and \$5,375,000 is spent in Illinois and Indiana. EPA reserves the right to disapprove any project after an analysis of its Project Plan and potential environmental impacts.
- B. Dominion may, at its election, consolidate the Project Plans required by this Appendix into one or more Project Plans.
- C. Unless otherwise specified by this Appendix, Dominion may, at its election, spread its payments for Environmental Mitigation Projects over the five-year period commencing upon the Date of Entry. Dominion may also accelerate its payments to better effectuate a proposed mitigation plan, but Dominion shall not be entitled to any reduction in the nominal amount of the required payments by virtue of the early expenditures. Any funds designated for a specific Project that are left unspent, or are projected to be left unspent, at the Project's completion may be redirected by Dominion, after consultation with and approval by EPA, to one or more of the Projects listed in Sections III-XI below. Unspent funds for New England projects shall be redirected to other New England projects; unspent funds for Midwestern projects, to other Midwestern projects.
- D. All proposed Project Plans shall include the following:
 - 1. A plan for implementing the Project.
 - 2. A summary-level budget for the Project.
 - 3. A time line for implementation of the Project.
 - 4. A description of the anticipated environmental benefits of the Project including an estimate of emission reductions (e.g., SO₂, NO_x, PM, mercury, CO₂) expected to be realized.
- E. Upon approval by EPA of the plan(s) required by this Appendix, Dominion shall complete the approved Projects according to the approved plan(s). Nothing in this Consent Decree shall be interpreted to prohibit Dominion or any third party from completing the Projects ahead of schedule.
- F. Commencing with its first progress report due pursuant to Section XII (Periodic Reporting) of the Consent Decree, and continuing annually thereafter

- until completion of the Projects, Dominion will include in the progress report information describing the progress of each Project and the Project Dollars expended on each Project to date.
- G. In accordance with the requirements of Paragraph 117, within sixty (60) days following the completion of each Project, Dominion shall submit to the United States for approval, a report that documents:
 - 1. The date the Project was completed.
 - 2. The results of implementation of the Project, including the estimated emission reductions or other environmental benefits achieved.
 - 3. The Project Dollars incurred by Dominion in implementing the Project.
- H. If EPA concludes based on the project completion report or subsequent information provided by Dominion that a Project has been performed and completed in accordance with the Consent Decree, then EPA will approve completion of the Project for purposes of the Consent Decree. Nothing in this Consent Decree or Appendix shall be construed to require Dominion to spend more than the amounts set forth in Paragraph 109 of the Consent Decree and in Sections I and II.A of this Appendix on Environmental Mitigation Projects, provided that the amounts expended by Dominion and any third party are spent in compliance with all requirements of the Consent Decree and this Appendix.
- I. The Parties recognize that implementation of the Projects in this Appendix may require action by third parties, such as non-profit organizations (e.g., Projects in Sections III and IV), other non-government entities (e.g., Project in Section V), and state or local government entities (e.g., Projects in Sections VII and IX to XI). If Dominion is unable to complete an approved Project in accordance with this Appendix and the approved Project Plan due to such third-party's failure to fulfill its obligations under the Plan, and that failure is not caused by Dominion and is beyond the control of Dominion despite Dominion's best efforts to fulfill its obligations regarding the Project as set out in the Consent Decree, this Appendix, and any approved Project Plan, then EPA and Dominion may agree to (1) allow Dominion and the third party(ies) to amend the Project Plan as appropriate to successfully complete the Project, or (2) cancel the Project and redirect any unspent funds for the Project to one or more of the Projects listed in Sections III-XI below. Unspent funds for New England projects shall be redirected to other New England projects; unspent funds for Midwestern projects, to other Midwestern projects.

III. New England Wood Stove Changeout Project

- Consistent with the requirements of Section II of this Appendix, Dominion shall Α. propose a plan to sponsor a wood-burning appliance changeout and retrofit project ("Wood Stove Changeout Project" or "WSC Project") that shall be implemented by one or more state, local or tribal air pollution control agencies, or by one or more third-party non-profit organizations or entities, in areas that would benefit from reductions of fine particle pollution and hazardous air pollutants. The air pollutant reductions shall be obtained by replacing, retrofitting or upgrading inefficient, higher polluting wood-burning appliances (e.g., outdoor boilers and stoves) with cleaner burning appliances and technologies, such as: (1) retrofitting older hydronic heaters (aka outdoor wood boilers) to meet EPA Phase II hydronic heater standards; (2) replacing older hydronic heaters with EPA Phase II hydronic heaters, or with EPA-certified wood stoves, other cleaner burning, more energy efficient hearth appliances (e.g., wood pellet, gas or propane appliances), or EPA Energy Star qualified heating appliances; (3) replacing non EPA-certified wood stoves with EPA-certified wood stoves or cleaner burning, more energy-efficient hearth appliances; and (4) replacing spent catalysts in EPAcertified wood stoves. To qualify for replacement, retrofitting or upgrading, the older wood-burning appliance must currently be used as a source of residential heat.
- B. Dominion shall spend a maximum of \$2,025,000 in Project Dollars to implement the WSC Project, and shall complete it not later than four years after the Date of Entry, except that Dominion may request an extension of time to complete the project if it appears likely that all Project Dollars will not be spent within such four year period despite Dominion's best efforts to implement the WSC Project.
- C. Dominion shall sponsor the implementation of the WSC Project in Bristol, Plymouth and Norfolk Counties in Massachusetts, in Bristol, Newport, Providence, Kent and Washington Counties in Rhode Island, and in New London and Windham Counties in Connecticut. If two years after the Date of Entry it appears that the full amount of Project Dollars allocated for the Project will not be spent within four years after the Date of Entry, Dominion may, in consultation with its implementation partner(s) and with EPA, and in accordance with the other requirements of this Appendix, expand the implementation area to other counties in Eastern Massachusetts. In determining the specific areas to implement this project within the aforementioned geographic areas, Dominion shall give priority to: (1) areas with high amounts of air pollution, especially particle pollution and hazardous air pollutants; (2) areas located within a geography and topography that make them susceptible to high levels of particle pollution; (3) areas that have a significant number of older hydronic heaters and non EPAcertified wood stoves; and (4) areas with dense residential populations.

- D. Dominion and the air pollution control agency(ies) or non-profit organization(s) that will implement the WSC Project shall consult with EPA's Residential Wood Smoke Reduction Team and shall implement the WSC Project consistent with the materials available on EPA's Burn Wise website at http://www.epa.gov/burnwise.
- E. Dominion shall limit the use of Project Dollars for administrative costs associated with implementation of the WSC Project to no greater than 10% of the Project Dollars that Dominion provides to a specific air pollution control agency or non-profit organization. If, after two years after the Date of Entry, significant additional administrative costs (e.g., additional advertising or outreach costs), not contemplated at the WSC Project's inception, will be required to fully implement the Project within the time frames set forth in this Section, the air pollution control agency or non-profit organization(s) administering the Project may request that Dominion allow the use of additional Project Dollars for such costs, and Dominion may, after consultation with EPA, allow for no more than an additional 2% of Project Dollars to be applied to them.
- F. The WSC Project shall provide incentives for the older wood-burning appliance replacements, retrofits and upgrades described above in this Section through rebates, vouchers and/or discounts. The WSC Project shall provide for the issuance of rebates, vouchers and/or discounts to residential homeowners in amounts ranging from \$2,000 to \$5,000 for replacing or retrofitting older hydronic heaters, \$1,000 to \$2,000 for each replacement wood stove or hearth appliance, and \$100 to \$300 for replacement catalyst. The WSC Project may also provide rebates or vouchers for the full cost of replacing older hydronic heaters and non EPA-certified wood stoves for income-qualified residential homeowners, if such full cost rebates or vouchers are included and approved in the Plan in accordance with the requirements of Section H.5 below.
- G. The WSC Project shall provide educational information and outreach regarding the energy efficiency, health and safety benefits of cleaner-burning alternatives to older hydronic heaters and non EPA-certified wood stoves, and the proper operation of wood-burning heaters, stoves and hearth appliances. Particular emphasis shall be given to the importance of burning dry seasoned wood and the use of moisture meters to test firewood moisture levels.
- H. The WSC Project Plan proposed by Dominion shall:
 - 1. Identify the air pollution control agency(ies) or non-profit organization(s) that have agreed to implement the WSC Project.
 - 2. Describe the schedule and the budgetary increments in which Dominion shall provide the necessary funding to the air pollution control agency(ies) or non-profit organization(s) to implement the WSC Project.

- 3. Describe all of the elements of the WSC Project that the air pollution control agency(ies) and/or non-profit(s) will implement.
- 4. Include measures to ensure that the air pollution control agency(ies), or non-profit organization(s), that are acting on Dominion's behalf shall implement the WSC Project in accordance with the requirements of this Appendix, and that the Project Dollars will be used to support the actual replacement, retrofitting, and/or upgrading of wood-burning stoves and boilers currently used as a source of residential heat.
- 5. If the plan proposes to provide rebates or vouchers for the full cost of replacing older hydronic heaters or non EPA-certified wood stoves for income-qualified residential homeowners, describe and estimate the number of energy efficient appliances it intends to make available, the cost per unit, and the criteria the air pollution control agency(ies) or nonprofit organization(s) will use to determine which residential homeowners should be eligible for such full cost replacement. If applicable, identify any organizations or entities with which the air pollution control agency(ies) or non-profit organization(s) will partner to implement the WSC Project, including wood-burning appliance trade associations, national or local health organizations, facilities that will dispose of the older wood-burning appliances so that they cannot be resold or reused, individual wood stove retailers, propane dealers, housing assistance agencies, local fire departments, and local green energy organizations.
- 6. Describe how the air pollution control agency(ies) or non-profit organization(s) will ensure that the older, inefficient, higher polluting wood-burning appliances that are replaced under the WSC Project will be properly recycled or disposed.
- 7. Describe how the air pollution control agency(ies) or non-profit organization(s) will conduct outreach in the Massachusetts, Rhode Island, and Connecticut counties within the geographic area of the WSC Project.

IV. Illinois and Indiana Wood Stove Changeout Project

- A. The Illinois and Indiana WSC Project shall be planned and implemented in accordance with the requirements for the WSC Project set out in Section III above, except where local circumstances make such requirements inapplicable.
- B. Dominion shall spend \$525,000 in Project Dollars to implement the Illinois and Indiana WSC Project, and shall sponsor the implementation of the Project in Christian County in Illinois, Lake County in Indiana, and any adjacent counties thereto in Illinois and Indiana.

V. Switcher Locomotive Idle Reduction Project

- A. Consistent with the requirements of Section II of this Appendix, Dominion shall spend \$400,000 in Project Dollars to outfit switcher locomotives with equipment necessary to enable use of a layover heating system and for installation of the layover system infrastructure at some or all of Norfolk Southern Railway Company's ("NSRC") Calumet (Stony Island Ave. and East 103rd St.), Park Manor (East 63rd St.), 47th Street (between W 47th St and W. Garfield Blvd.), Landers (West Columbus Ave. and West 79th St.), and Ashland (South Ashland Ave and Pershing Rd.) Yards, all of which are located in Chicago, Illinois; and Colehour (parallel to South Indianapolis Ave.) Yard, located in both Chicago and Whiting, Indiana ("Rail Yards"). These Rail Yards are a significant transportation and railroad hub located in a potential environmental justice area on the south side of Chicago. Chicago is currently located in an area designated as non-attainment with the National Ambient Air Quality Standards ("NAAQS") for ozone (smog), fine particulate matter, and lead.
- B. Project Scope: The switching locomotive project at NSRC's Rail Yards will include the installation of the infrastructure necessary to support locomotive layover heating systems, and the installation of layover heating systems on an estimated twelve existing locomotives. Due to the nature of rail yard operations, a switching locomotive spends a considerable amount of time idling, sometimes totaling up to eight to twelve hours within a day, depending on operational needs and weather conditions. Traditional switching locomotives do not use antifreeze, and cannot be shut down during colder weather due to the likelihood of freezing water irreparably damaging the engine block. Therefore, even where it is contemplated that a locomotive may not be used for a period of time, it is necessary in certain cold weather conditions to keep the engine running to eliminate the risk of engine damage.

The proposed layover heating system will provide a means for locomotive engines to be shut down for extended periods of time even in colder weather when those engines otherwise would have had to idle.

The funding provided by Dominion for this project will be used to install the necessary infrastructure in the Rail Yards to support the layover heating system and to outfit an estimated twelve locomotives with the equipment necessary to enable use of the layover heating system, including a battery charger. The layover heating system is a Verified Idling Reduction Technology as evaluated by EPA's Smartway Technology Program under which it is identified as a Shore Connection System for locomotives. The infrastructure to be installed at the Rail Yards will consist of the necessary power lines, poles, transformer, and a power

- distribution panel that will monitor the power for electric grounds.
- C. Benefits: This project will result in reduced idling time and therefore reduced fuel usage, reduced emissions of PM, NO_X, VOCs and toxics, and reduced noise in an urban environment.
- D. Costs: Dominion shall spend \$400,000 in Project Dollars in performing this Project. The estimated portion of the total costs to be paid by Dominion for this project includes approximately \$243,000 for the heating system infrastructure at the six Rail Yards and approximately \$175,000 for the necessary compatibility equipment on twelve locomotives that will operate in and around the Rail Yards.
- E. Performance: Within ninety (90) days from the Date of Entry, Dominion shall enter into an agreement ("performance agreement") with NRSC requiring:
 - 1. Completion Date: NSRC to complete the entire Project Scope above within two years from the effective date of the performance agreement between NRSC and Dominion, provided that the local utility timely installs new service as requested by NSRC. In the event that delays caused by failure of the local utility to install the new electric service required for the layover system cause a delay in the completion of the Project Scope (despite diligent efforts on the part of NSRC to obtain that service), the two year timeline will be delayed commensurate with the delay in utility service.
 - 2. That any costs greater than the cost allotted by this Consent Decree shall be paid by NSRC for completion of the project.
 - 3. Fuel Savings: NSRC to submit a report to Dominion and EPA annually for two years detailing the estimated fuel savings realized due to the project. The report shall be due within sixty (60) days after the end of each year the project was implemented.
 - 4. Final Report: Within thirty (30) days after project completion, NSRC to submit a final report to Dominion and EPA that includes the following:
 - i. A detailed timeline of all completed construction activities for the Project.
 - ii. A breakdown of the total costs (funded and unfunded by Dominion) by NSRC to implement the Project.
 - iii. The results of implementation of the Project, including the estimated emission reductions or other environmental benefits achieved.
 - iv. A description of any significant problems that occurred during implementation of the Project and how they were overcome.

- F. Project Completion Report: In addition to the information required by Section II of this Appendix, Dominion's project completion report for this Project shall include the following:
 - 1. A detailed timeline of all completed construction activities for the Project.
 - 2. A breakdown of the total costs (funded and unfunded by Dominion) by NSRC to implement the Project.
 - 3. A description of any significant problems that occurred during implementation of the Project and how they were overcome.

VI. Lake Michigan Watershed and Indiana Dunes National Lakeshore Land Acquisition and Restoration Project(s)

- A. Consistent with the requirements of Section II of this Appendix, Dominion shall submit a Project Plan to EPA for review and approval for the use of up to \$2,500,000 in Project Dollars for acquisition and restoration of lands that are part of, adjacent to, or near the Indiana Dunes National Lakeshore and have an ecological or environmental significance to the ecosystems in the Lake Michigan Watershed of Lake and Porter Counties in the State of Indiana. The Project Dollars for this project are in addition to the funding described in Section I of this Appendix (Forest Service/Park Service Mitigation).
- B. The goal of this Project is the protection through acquisition and/or restoration of ecologically significant land, watersheds, vegetation, and forests using adaptive management techniques designed to improve ecosystem health and mitigate harmful effects from air pollution. In addition the funding shall be used to provide for public use of acquired areas in a manner consistent with the ecology of the area.

For purposes of this Appendix and Section IX (Environmental Mitigation Projects) of this Consent Decree, land acquisition means purchase of interests in land, including fee ownership, easements, or other restrictions that run with the land that provide for the perpetual protection of the acquired land. Restoration may include (but is not limited to), reforestation or revegetation (using plants native to the area) and/or removal of non-native, invasive plant species. Any restoration action must incorporate the acquisition of an interest in the restored lands sufficient to ensure perpetual protection of the restored land.

C. In addition to the information required by Section II of this Appendix, the Project Plan shall include:

- 1. A general description of the areas proposed to be acquired or restored, including a map clearly identifying the location of the land relative to the decommissioned State Line Power Station and all city, state, or federal publically protected lands/parks in the area surrounding the proposed land to be acquired/restored.
- 2. A justification of why the area should be considered ecologically and/or environmentally significant and warrants preservation and/or restoration.
- 3. A description of the projected cost of the land acquisition and/or restoration.
- 4. Identification of any person or entity(s) other than Dominion that will be involved in the land acquisition and restoration. Dominion shall describe the third-party's roles in the action and the basis for asserting that such entity is able and suited to perform the intended role. Any proposed third-party must be legally authorized to perform the proposed action or receive Project Dollars.
- 5. A schedule for completing and funding each portion of the project.
- D. Upon EPA's approval of the Project Plan, Dominion may transfer up to \$2,500,000 of Project Dollars to one or more land acquisition funds, such as Save the Dunes Conservation Fund, for partial or full implementation of the land acquisitions and restorations described in the Project Plan.
- E. Performance: All Project Dollars shall be expended in accordance with subsections A through C above and within two years of entry of the Consent Decree.
- F. Project Completion Report: In addition to the information required by Section II of this Appendix, Dominion's project completion report for this Project shall include any reports related to this Project that Save the Dunes or applicable third party fund or organization provided to Dominion.

VII. Energy Efficiency Project for South Fork School District in Kincaid, Illinois

A. Consistent with the requirements of Section II of this Appendix, Dominion shall submit a Project Plan to EPA for review and approval to spend a maximum of \$200,000 in Project Dollars to implement and complete an Energy Efficiency/ Weatherization project to reduce the energy demand in one or more of the schools that make up the South Fork School District 14 in the town of Kincaid, Illinois, which are in the Kincaid Generation power station service area. The project may

- include (1) the replacement of leaking windows and entrance doors at the high school and gym and (2) weatherization of the high school building exterior.
- B. Upon EPA's approval of the Project Plan for the Energy Efficiency Project for South Fork School District, Dominion shall implement the Project according to the approved plan.
- C. Completion Date: The entire Project above shall be completed within three (3) years from the Date of Entry, except that Dominion may request an extension of time to complete the project if it appears likely that all Project Dollars will not be spent within such three year period despite Dominion's best efforts to implement the Project within such period.

VIII. Energy Efficiency and Geothermal Projects for the Central Illinois FoodBank

- A. Consistent with the requirements of Section II of this Appendix, Dominion shall submit a Project Plan to EPA for review and approval to spend a maximum of \$750,000 in Project Dollars to implement and complete the Energy Efficiency/Weatherization and Geothermal Projects that will reduce the energy demand at the new FoodBank location in Springfield, Illinois. The Central Illinois FoodBank covers 21 counties in central Illinois and distributes over eight million pounds of food a year to more than 150 food pantries in its service territory.
- B. The Energy Efficiency/Weatherization Project may include (1) a new energy efficient freezer/cold storage area (approximately 10,000 sq. ft), (2) new energy efficient, motion activated lighting, and (3) motion-activated, insulated loading-dock doors.
- C. The Geothermal Project shall include the purchase and installation of a geothermal heat pump system that utilizes the earth as a heat source in the winter and a heat sink in the summer to reduce energy consumption. The geothermal heat pump system shall include the equipment necessary to support the installation and operation of a geothermal heat pump, including the exterior building components (e.g., well field holes, subsurface piping, and circulation pumps), the heat pump unit (evaporator and condenser, compressor, expansion valve and refrigerant) and any internal building components (e.g., HVAC distribution system and ductwork) necessary for the proper operation of the new system. The Project shall include funding for system commissioning and performance optimization within the first year of system operation. The Project shall also include funding to restore the project site, particularly the well field to its original or near-original condition.

System Application and Design: The Project shall be limited to serving space heating and cooling building loads, with the option to add a desuperheater to the project to serve hot water loads when practical. Prior to the design modeling of the system and production loop installation, the contractor/project designer shall conduct an in-situ formation thermal conductivity test for ambient deep earth temperature, thermal conductivity, and thermal diffusivity, for a minimum of 40 hours to assess the subsurface soil conditions. (The contractor/project designer shall provide the building owner with copies of the related site drilling logs, soil sample documentation and in-situ thermal conductivity analyses). The contractor/project designer shall employ quality assurance measures to prevent "short looping" of well field bore holes during the drilling process.

<u>Contractor/Project Designer Selection</u>: The Project's design, installation and system commissioning shall be performed by International Ground Source Heat Pump Association (IGSHPA) professionals or by other professionals certified by geothermal manufacturers to design and/or install the manufacturers' systems. Best efforts shall be made to select project designers and installers (including engineers, architects, and bore hole drillers) with experience on at least three successful geothermal projects.

Manufacturer, Equipment and System: Heat pumps should be Air-Conditioning, Heating and Refrigeration Institute (AHRI) and Energy Star rated. Heat pumps should meet the minimum EER and COP ratings required by Energy Star at the time the heat pumps are installed. The system shall include the installation of monitoring equipment to allow facility managers and staff to monitor the operation and performance of the system.

<u>Maintenance</u>: The Project may include the establishment of an escrow account for the FoodBank to maintain and/or replace the heat pump unit or other elements of the system, or may otherwise include funding or pre-payment for an extended warranty or service contract for such maintenance/replacement.

<u>End-user Documentation and Training Requirements</u>: The project developer/contractor shall provide the FoodBank with:

- System design drawings including a map detailing the subsurface location of well field bore holes;
- Copies of permits and inspections demonstrating compliance with local codes;
- Copies of the drilling logs, soil sample documentation and in-situ thermal conductivity analysis;
- Copies of simulated design and financial performance (energy and cost

- saving) analyses of the system;
- System documentation including, system maintenance and operational requirements, component manuals, operation manuals and warranty information; and
- In-person, on-site, system operation user training.
- D. In addition to the information required by Section II.D of this Appendix, the Project Plan for this project shall:
 - 1. Describe how Dominion and/or the project developer/contractor(s) will meet the requirements set forth in Subparagraphs B and C of this Section;
 - 2. Describe the proposed geothermal system design (e.g., a closed loop design with either horizontal or vertical loop well fields, a standing column well, or station surface sources); and
 - 3. Identify the contractor/project designer(s) and/or other third parties with whom Dominion and/or the FoodBank will contract or partner with to implement the Project, and list any relevant accreditations or certifications held by such contractor/designer(s) or parties.
- E. Completion Date: The entire Project above shall be completed within three (3) years from the Date of Entry, except that Dominion may request an extension of time to complete the project if it appears likely that all Project Dollars will not be spent within such three year period despite Dominion's best efforts to implement the Project within such period.

IX. Illinois Clean Diesel Project

A. Consistent with the requirements of Section II of this Appendix, Dominion shall submit a Project Plan to EPA for review and approval for the completion of an Illinois Clean Diesel Project in which Dominion shall spend \$500,000 in Project Dollars to fund retrofit, replacement or repowering of busses in the Chicagoland and Kincaid areas.

The Project Plan may provide for transfer of funds to the Illinois EPA Clean Diesel Grant Program, which administers a grant program that provides grants for heavy-duty natural gas or propane-powered trucks and buses. The stated goal of this program is "to reduce particulate matter emissions and other pollutants from diesel-powered vehicles and to improve public health." <u>See http://www.illinoisgreenfleets.org/clean-diesel-grant/diesel-fact-sheet.pdf.</u>

B. Completion Date: The Project above shall be completed within three (3) years from the Date of Entry, except that Dominion may request an extension of time

to complete the project if it appears likely that all Project Dollars will not be spent within such three year period despite Dominion's best efforts to implement the Project within such period.

X. Northern Indiana Clean Diesel Project

A. Consistent with the requirements of Section II of this Appendix, Dominion shall submit to EPA a Project Plan for the completion of the Indiana Clean Diesel Project in which Dominion shall spend \$500,000 in Project Dollars to fund clean air projects that will significantly reduce diesel emissions from diesel engines and vehicles that serve public needs in Northern Indiana. The diesel engines and vehicles must be based and operated in or near the cities of Gary, Hammond, Michigan City, South Bend, Elkhart, and/or Fort Wayne.

The Project Plan may provide for the transfer of funds to the Indiana Department of Environmental Management's DieselWise Indiana Program, which funds clean air projects that reduce emissions from diesel engines and vehicles.

B. Completion Date: The Project above shall be completed within three (3) years from the Date of Entry, except that Dominion may request an extension of time to complete the project if it appears likely that all Project Dollars will not be spent within such three year period despite Dominion's best efforts to implement the Project within such period.

XI. Northeast Clean Energy and Clean Diesel Projects

A. Consistent with the requirements of Section II of this Appendix, Dominion, in consultation with the Town of Somerset and the City of Fall River ('the municipalities"), shall submit one or more Project Plans to EPA for review and approval to implement (a) Energy Efficiency, Geothermal, and/or Solar Photovoltaic ("PV") Projects at one or more public school buildings in either or both municipalities, and/or (b) Clean Diesel Project(s) to retrofit or repower higher-polluting diesel engines in either or both municipalities. The proposed Projects may include the installation of centrally-monitored digital controls and timers for heating/cooling systems in school buildings in either or both municipalities ("Energy Efficiency Project"). The proposed Projects may also include the installation of a geothermal heating and/or cooling system ("Geothermal Project"), and/or a solar photovoltaic project consisting of electricity-generating solar panels ("PV Project") for public school buildings in either or both municipalities. The Projects may also include the retrofit or repower of eligible diesel engines on diesel-powered municipal construction or public works vehicles or equipment owned or operated on a long-term basis by either or both municipalities in order to reduce diesel pollutant emissions ("Clean Diesel Retrofit and Repower Project").

- B. Dominion shall spend a maximum of \$1,600,000 in Project Dollars to implement the Energy Efficiency, Geothermal, PV, and/or Clean Diesel Retrofit and Repower Projects described in this Section, and shall complete them not later than three years after the Date of Entry, except that Dominion may request an extension of time to complete one or more of the Projects if it appears likely that, despite Dominion's best efforts, the Projects will not be completed within such three year period. The Projects shall be planned and implemented with the municipalities and with other third parties as needed. The Parties' expectation is that approximately half of the total Project Dollars will be spent in Somerset, but the final distribution will depend on the Projects (and their costs) that can be proposed and implemented within the time frames and other requirements set out in this Appendix.
- C. The Geothermal Project identified in Section XI.A shall consist of all equipment and installation necessary to construct and implement the Project at public school buildings in either or both municipalities. This Project shall be planned and implemented in accordance with the requirements for the geothermal project set out in Sections VIII.C VIII.D above, except where local circumstances make such requirements inapplicable. In addition to the above-referenced requirements, the Project shall include the installation of onsite monitoring equipment supported by kiosk-delivered educational software to enable students, teachers, and facility managers and staff to monitor the operation and performance of the geothermal system.
- D. The PV Project identified in Section XI.A shall, at a minimum, consist of: (1) the installation of solar panels with unobstructed solar access, producing electricity not to exceed the total annual electricity base load of the building the project serves; (2) a grid-tied inverter, appropriately sized for the capacity of the solar panels installed at the location; (3) the appropriate solar panel mounting equipment for the particular school; (4) wiring, conduit, and associated switchgear and metering equipment required for interconnecting the solar generator to the utility grid; and (5) appropriate monitoring equipment supported by kiosk-delivered educational software to enable students, teachers, and facility managers and staff to monitor various aspects of the system, e.g., the total and hourly energy output of the system (kilowatt hours), environmental benefits delivered (pounds CO₂ avoided), hourly ambient temperature and cell temperature (C°), irradiance (W/M2), as well as time sensitive voltage, power and current metrics. The PV Project shall be installed on the customer side of the meter and ownership of the system shall be conveyed to the Somerset Public School system or Fall River Public School System, as appropriate. All related environmental benefits shall be retained by the system owner, including associated renewable energy certificates. To the extent practicable, North American Board of Certified Energy Practitioners (NACEP) certified energy professionals shall perform the

- installation of the PV Projects to ensure the highest quality installation and performance of the system.
- E. The PV Project shall include manufacturer parts warranties for major system components, specifically, a minimum 25 year warranty for the solar panels (modules) and a minimum 10 year warranty for the inverter(s). The Project shall also include the establishment of an escrow account with funding sufficient to support one or more service contracts (or their equivalent) to ensure the ongoing maintenance and performance of the PV system consistent with established industry practice for no less than 25 years, including annual system checkups, annual solar panel (module) cleaning, expected inverter replacements, and remote system monitoring.
- F. All diesel engine retrofits conducted under the Clean Diesel Retrofit and Repower Project shall use exhaust control technologies verified either by EPA or by the California Air Resources Board (CARB), and shall consist of the purchase and installation of EPA or CARB-verified diesel oxidation catalysts (DOCs) or diesel particulate filters (DPFs) on diesel-powered municipal construction or public works vehicles or equipment. A list of EPA-verified retrofit technologies can be found at http://epa.gov/cleandiesel/verification/verif-list.htm; a list of CARB-verified technologies can be found at http://epa.gov/cleandiesel/verification/verif-list.htm; a list of CARB-verified technologies can be found at https://www.arb.ca.gov/diesel/verdev/vt/cvt.htm. If the Project includes DPF retrofits, the Project may also include the purchase of DPF service equipment required for proper DPF maintenance.
- G. All diesel engine repowering conducted under the Clean Diesel Retrofit and Repower Project shall use technologies certified by EPA, or by CARB if available, and shall consist of new engine configurations certified to emission standards. Information on engine certification can be found at www.epa.gov/otaq/certdata.htm.
- H. In determining which vehicles or equipment to retrofit or repower under the Clean Diesel Retrofit and Repower Project, priority should be given to older, higher-polluting vehicles and equipment that have high annual usage rates and/or vehicle miles travelled, so that the pollution reductions obtained from the Project will be maximized.
- I. The Energy Efficiency, Geothermal, and/or PV Projects plan(s) proposed by Dominion shall:
 - 1. Identify the specific proposed Projects to be implemented, and provide implementation timelines and expected completion dates for each Project;
 - 2. Describe each proposed Project's system design;

- 3. Identify any project designers, contractors, or other third parties with whom the municipality's school system will contract or partner with to implement the Projects, and list any relevant accreditations or certifications held by such contractors, designers or parties; and
- 4. Describe the schedule and the budgetary increments in which Dominion shall provide the necessary funding to the municipality's school system or its project designers/contractors to implement the Projects.
- J. The Clean Diesel Retrofit and Repower Project plan(s) proposed by Dominion shall:
 - 1. List the specific proposed vehicles, equipment and diesel engines to be retrofitted or repowered, including model, make and year of manufacture of the vehicles, equipment and engines (and for engines, the engine family name and horsepower), and the EPA or CARB-certified technology with which each engine will be retrofitted or repowered, and include the estimated costs (or contract costs, if available) for the equipment and installation of the proposed retrofits and repowers;
 - 2. Provide implementation timelines and expected completion dates for the proposed retrofits and repowers;
 - 3. Identify any contractors or other third parties with whom the municipality will contract or partner with to implement the Project; and
 - 4. Describe the schedule and the budgetary increments in which Dominion shall provide the necessary funding to the municipality and/or their contractors to implement the Projects.

IN THE UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF INDIANA

UNITED STATES OF AMERICA, et al.)
Plaintiffs,))
v.) Civil Action No. 1:99-cv-01693-LJM-JMS
CINERGY CORPORATION, et al.)
Defendants.)
)

PARTIAL CONSENT DECREE

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APPENDIX A – ENVIRONMENTAL MITIGATION PROJECTS

APPENDIX B – MONITORING REQUIREMENTS AND EMISSION LIMITATIONS

CALCULATIONS

WHEREAS, the United States of America ("United States"), on behalf of the United States Environmental Protection Agency ("EPA"), filed a complaint on November 3, 1999, and amended complaints on March 1, 2000, December 19, 2002, and June 24, 2004, against Cinergy Corp., Cinergy Services, Inc., PSI Energy, Inc., and the Cincinnati Gas and Electric Company, (collectively, "Cinergy") pursuant to Sections 113(b), 165, and 167 of the Clean Air Act (the "Act"), 42 U.S.C. §§ 7413, 7475, and 7477;

WHEREAS, the States of New York, New Jersey, and Connecticut ("the States"), after their motion to intervene was granted, filed a complaint on August 17, 2001, and amended complaints on May 29, 2003 and June 24, 2004, pursuant to Section 304 of the Act, 42 U.S.C. § 7604;

WHEREAS, Hoosier Environmental Council and Ohio Environmental Council ("Citizen Plaintiffs"), after their motion to intervene was granted, filed a complaint on May 1, 2002, and an amended complaint on June 24, 2004, pursuant to Section 304 of the Clean Air Act, 42 U.S.C. § 7604;

WHEREAS, in the Fifth and Sixth Claims for Relief in the United States' Third Amended Complaint, the United States alleges that Cinergy, now Duke Energy Corporation, including Duke Energy Indiana, Inc., Duke Energy Ohio, Inc., and Duke Energy Shared Business Services LLC (collectively, "Duke") violated the Clean Air Act and the Indiana State Implementation Plan by illegally modifying Units 1 and 3 at the Gallagher Generating Station ("Gallagher Plant"), a major emitting facility located in New Albany, Floyd County, Indiana, without obtaining the necessary permits and installing the necessary controls to reduce sulfur dioxide ("SO₂"), and further alleged that such emissions damage human health and the environment;

WHEREAS, in the Thirteenth Claim for Relief in the States' Second Amended Complaint, the States allege that Cinergy violated the Clean Air Act and the Indiana State Implementation Plan by illegally modifying Gallagher Units 1 and 3 without obtaining the necessary permits and installing the necessary controls to reduce SO₂, and further alleged that such emissions damage human health and the environment;

WHEREAS, in the Fifth, Sixth, and Seventh Claims for Relief in the Citizen Plaintiffs' First Amended Complaint, the Citizen Plaintiffs allege that Cinergy violated the Clean Air Act and the Indiana State Implementation Plan by illegally modifying Gallagher Units 1 and 3 without obtaining the necessary permits and installing the necessary controls to reduce SO₂, and further alleged that such emissions damage human health and the environment;

WHEREAS, the complaints filed against Duke sought injunctive relief and the assessment of civil penalties for alleged violations of, *inter alia*, the:

- (a) Prevention of Significant Deterioration and Nonattainment New Source Review provisions in Part C and D of Subchapter I of the Act, 42 U.S.C. §§ 7470-7492, 7501-7515; and
- (b) federally-enforceable state implementation plan developed by Indiana; WHEREAS, EPA issued a notice of violation ("NOV") to Duke with respect to such allegations on November 2, 1999 and March 31, 2004;

WHEREAS, EPA provided Duke and the State of Indiana with actual notice pertaining to Duke's alleged violations, in accordance with Section 113(a)(1) and (b) of the Act, 42 U.S.C. § 7413(a)(1) and (b);

WHEREAS, the Plaintiffs allege that the complaints state claims upon which relief can be granted against Duke under Sections 113, 165, and 167 of the Act, 42 U.S.C. §§ 7413, 7475, and 7477, and 28 U.S.C. § 1355;

WHEREAS, a jury trial on liability was held in May 2008 that resulted, *inter alia*, in findings of Clean Air Act violations at Duke's Wabash River Station located in West Terre Haute, Vigo County, Indiana, and after a bench trial on remedy was held in February 2009, a partial final judgment was entered under Fed. R. Civ. P. 54(b) on the Wabash River claims, and the Plaintiffs and Duke have appealed that judgment to the United States Court of Appeals for the Seventh Circuit;

WHEREAS the Parties to this Consent Decree do not intend for entry of this Consent Decree to have any effect on the judgment or appeals of the Wabash River claims, but the Parties intend to release all other rights to appeal they may have in this matter (including, without limitation, rights to appeal any other claims dismissed before the trials or claims decided by the juries) as provided herein;

WHEREAS, a jury trial on liability was held in May 2009 which found that Duke violated the law by performing pulverizer projects at Unit 1 and Unit 3 at the Gallagher Plant without complying with New Source Review for SO₂ at each Unit;

WHEREAS, a trial is scheduled to commence on January 25, 2010, to determine the appropriate injunctive relief for the two SO₂ violations at Gallagher Unit 1 and Unit 3 found by the jury on May 19, 2009;

WHEREAS, the Plaintiffs anticipate that this Consent Decree, which requires

Duke to Repower Gallagher Unit 1 and Unit 3 to combust Natural Gas or to Retire

Gallagher Unit 1 and Unit 3, install and Continuously Operate Dry Sorbent Injection at

Gallagher Unit 2 and Unit 4, and perform Environmental Mitigation Projects, will achieve significant reductions of SO₂ emissions and thereby significantly improve air quality; and

WHEREAS, the Parties have agreed, and the Court by entering this Consent

Decree finds, that this Consent Decree has been negotiated in good faith and at arm's

length; that this settlement is fair, reasonable, in the public interest, and consistent with

the goals of the Act; and that entry of this Consent Decree without further litigation

regarding the appropriate injunctive relief for the violations found by the jury on May 19,

2009, is the most appropriate means of resolving this matter.

NOW, THEREFORE, without further adjudication of the appropriate injunctive relief for the two SO₂ violations found by the jury on May 19, 2009, it is hereby ORDERED, ADJUDGED, AND DECREED as follows:

I. JURISDICTION AND VENUE

1. This Court has jurisdiction over this action, the subject matter herein, and the Parties consenting hereto, pursuant to 28 U.S.C. §§ 1331, 1345, 1355, and 1367, Sections 113, 167, and 304 of the Act, 42 U.S.C. §§ 7413, 7477, and 7604. Solely for the purposes of this Consent Decree, and no other purpose, venue is proper under Section 113(b) of the Act, 42 U.S.C. § 7413(b), and under 28 U.S.C. § 1391(b) and (c). Solely for the purposes of this Consent Decree, and for no other purpose, Duke waives all objections and defenses that it may have to the Court's jurisdiction over this action, to the Court's jurisdiction over Duke, and to venue in this District. Duke shall not challenge the terms of this Consent Decree or this Court's jurisdiction to enter and enforce this Consent Decree. Solely for the purposes of the claims filed by the Plaintiffs in this matter and

resolved by this Consent Decree, for the purposes of entry and enforcement of this Consent Decree, and for no other purpose, Duke waives any defense or objection based on standing. Except as expressly provided for herein, this Consent Decree shall not create any rights in or obligations of any party other than the Plaintiffs and Duke. Except as provided in Section XXIV (Public Comment) of this Consent Decree, the Parties consent to entry of this Consent Decree without further notice.

II. APPLICABILITY

- 2. Upon entry, the provisions of the Consent Decree shall apply to and be binding upon and inure to the benefit of Plaintiffs and Duke, and their respective successors and assigns, and upon Duke's officers, employees, and agents, solely in their capacities as such.
- 3. Duke shall be responsible for providing a copy of this Consent Decree to all vendors, suppliers, consultants, contractors, agents, and any other company or organization retained to perform any of the work required by this Consent Decree.

 Notwithstanding any retention of contractors, subcontractors, or agents to perform any work required under this Consent Decree, Duke shall be responsible for ensuring that all work is performed in accordance with the requirements of this Consent Decree. For this reason, in any action to enforce this Consent Decree, Duke shall not assert as a defense the failure of its officers, directors, employees, servants, agents, or contractors to take actions necessary to comply with this Consent Decree, unless Duke establishes that such failure resulted from a Force Majeure Event, as defined in Paragraph 94 of this Consent Decree.

III. DEFINITIONS

- 4. For purposes of this Consent Decree, every term expressly defined by this Consent Decree shall have the meaning given to that term by this Consent Decree and, except as otherwise provided in this Consent Decree, every other term used in this Consent Decree that is also a term under the Act or the regulations implementing the Act shall mean in this Consent Decree what such term means under the Act or those implementing regulations.
- 5. A "30-Day Rolling Average Emission Rate" for SO₂ shall be expressed in lb/mmBTU calculated using the following procedure: first, develop hourly average lb/mmBTU values for each hour of the Operating Day and the previous twenty nine (29) Operating Days in accordance with Appendix B of this Consent Decree, and second, average the hourly averages for the Operating Day and the previous twenty nine (29) Operating Days. A new 30-Day Rolling Average Emission Rate shall be calculated for each new Operating Day. Each 30-Day Rolling Average Emission Rate shall include all emissions of SO₂ that occur during all periods within each Operating Day including startup, shutdown, and Malfunction, provided, however, that reported emissions associated with a Malfunction shall be excluded for purposes of determining compliance with this Decree if the Malfunction is determined to be a Force Majeure Event pursuant to Section XIII (Force Majeure). The Parties expressly recognize that compliance with a 30-Day Rolling Average Emission Rate shall commence immediately upon the date specified, and that compliance as of such specified date (e.g., January 30) shall be determined based on data from that Operating Day and the 29 prior Operating Days (e.g., January 1-29).

- 6. An "Annual SO₂ Tonnage Limitation" for Gallagher Unit 1 and Unit 3 means the limitations as specified in this Consent Decree on the total number of tons of SO₂ emitted from Gallagher Unit 1 and Unit 3, individually, during all periods of operation including, without limitation, all SO₂ emitted during periods of startup, shutdown, and Malfunction, during the relevant calendar year (<u>i.e.</u>, January 1 through December 31). Compliance with the Annual SO₂ Tonnage Limitation for Gallagher Unit 1 and for Gallagher Unit 3 shall be determined for each new calendar year.
- 7. "CEMS" or "Continuous Emission Monitoring System" means, for obligations involving SO₂ under this Consent Decree, the equipment required to sample, analyze, measure and provide a permanent and continuous record of emissions of SO₂ in lb/mmBTU. For purposes of this Consent Decree, the following components make up the Continuous Emissions Monitoring System: SO₂ pollutant concentration monitor, diluent gas monitor (carbon dioxide), and a data acquisition and handling system.
- 8. "Citizen Plaintiffs" means, collectively, Hoosier Environmental Council and Ohio Environmental Council.
- 9. "Clean Air Act" or "Act" means the federal Clean Air Act, 42 U.S.C. §§ 7401-7671q, and its implementing regulations.
- 10. "Consent Decree" or "Decree" means this Consent Decree and the appendices attached hereto, which are incorporated into this Consent Decree.
- 11. "Continuously Operate" or "Continuous Operation" means that when DSI is used at Gallagher Unit 2 or Unit 4, it shall be used at all times such Unit is in operation, consistent with the technological limitations, manufacturers' specifications, and good engineering and maintenance practices for such equipment and the Unit. The Parties

recognize that until the thirtieth (30th) Operating Day following January 1, 2011, Duke will be working to optimize performance of the DSI and to identify technological limitations and good engineering and maintenance practices for the DSI at these Units.

- 12. "Date of Entry" means the date this Consent Decree is approved or signed by the United States District Court Judge.
- 13. "Date of Lodging" means the date this Consent Decree is filed for lodging with the Clerk of the Court for the United States District Court for the Southern District of Indiana.
 - 14. "Day" means calendar day, unless otherwise specified.
- 15. "Dry Sorbent Injection" or "DSI" means an SO₂ control system consisting of the injection of trona or sodium bicarbonate (or a similar material of at least equal effectiveness in removing SO₂) in the gas stream upstream of the particulate control device to react with the acid gases and reduce the outlet SO₂ Emission Rate.
- 16. "Duke" or "Defendant" means Duke Energy Corporation, including Duke Energy Indiana, Inc., Duke Energy Ohio, Inc., and Duke Energy Shared Business Services LLC, as well as their predecessors and successors in interest, including but not limited to Cinergy Corp., Cinergy Services, Inc., PSI Energy, Inc., and the Cincinnati Gas and Electric Company.
- 17. "Emission Rate" means the number of pounds of SO₂ emitted per million BTU of heat input ("lb/mmBTU"), measured in accordance with this Consent Decree.
 - 18. "EPA" means the United States Environmental Protection Agency.
- 19. "Environmental Mitigation Project" means a project funded or implemented by Duke as a remedial measure to mitigate alleged damage to human health

or the environment, including National Parks or Wilderness Areas, claimed to have been caused by the alleged violations described in the complaints or to compensate Plaintiffs for costs necessitated as a result of the alleged damages.

- 20. "Gallagher Plant" means, solely for purposes of this Consent Decree, the electric steam generating plant located in New Albany, Floyd County, Indiana, that consists of four coal-fired boilers as of the Date of Lodging of this Consent Decree identified as Units 1, 2, 3, and 4.
 - 21. "IDEM" means the Indiana Department of Environmental Management.
- 22. "Indiana SIP" means the Indiana State Implementation Plan, and any amendments thereto, as approved by EPA pursuant to Section 110 of the Act, 42 U.S.C. § 7410.
 - 23. "lb/mmBTU" means one pound per million British thermal units.
- 24. "Malfunction" means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not Malfunctions.
 - 25. "MW" means a megawatt or one million watts.
- 26. "Natural Gas" means natural gas received directly or indirectly through a connection to an interstate pipeline transporting natural gas governed by a tariff approved by the Federal Energy Regulatory Commission.
- 27. "NSR Permit" means a permit issued pursuant to Parts C and/or D of Subchapter I of the Clean Air Act, and/or applicable New Source Review provisions of a state implementation plan.

- 28. "Nonattainment NSR" means the new source review program within the meaning of Part D of Subchapter I of the Act, 42 U.S.C. §§ 7501-7515, and the federal regulations codified at 40 C.F.R. Part 51, and the federally approved provisions of the Indiana SIP.
 - 29. "Operating Day" means any Day on which a Unit fires coal.
- 30. "Operational or Ownership Interest" means part or all of Duke's legal or equitable operational or ownership interests in any Units at the Gallagher Plant.
- 31. "Parties" means the United States, the States, the Citizen Plaintiffs, and Duke. "Party" means one of the Parties.
 - 32. "Plaintiffs" means the United States, the States, and the Citizen Plaintiffs.
- 33. "Project Dollars" means Duke's expenditures and payments incurred or made in carrying out the Environmental Mitigation Projects identified in Section VIII.B (Environmental Mitigation Projects) of this Consent Decree to the extent that such expenditures or payments both: (a) comply with the requirements set forth in Section VIII.B (Environmental Mitigation Projects) and Appendix A of this Consent Decree, and (b) constitute Duke's direct payments for such projects, or Duke's external costs for contractors, vendors, and equipment.
- 34. "PSD" means the new source review program within the meaning of Part C of Subchapter I of the Clean Air Act, 42 U.S.C. §§ 7470-7492, the federal regulations codified at 40 C.F.R. Part 52, and the federally approved provisions of the Indiana SIP.
- 35. "Repower" or "Repowered" means, solely for purposes of this Consent Decree, the permanent decommissioning of devices, systems, equipment, and ancillary or supporting systems (collectively, "Equipment") for Gallagher Unit 1 and Unit 3 that are

not shared with Gallagher Unit 2 and Unit 4, respectively, such that Gallagher Unit 1 and Unit 3 cannot be fired with coal, and the installation of all Equipment needed to fire Gallagher Unit 1 and Unit 3 with Natural Gas, including installation of the following combustion controls to reduce emissions of nitrogen oxides (NO_x): low-NO_x natural gas burners, an overfire air system, and flue gas recirculation. Nothing herein requires the decommissioning of any Equipment that Gallagher Unit 1 and Unit 2 share and/or that Gallagher Unit 3 and Unit 4 share, that are necessary to operate Gallagher Unit 2 and/or Unit 4. Nothing herein shall prevent Duke from (a) reusing any Equipment from Gallagher Unit 1 and/or Unit 3 at any other existing Unit or new emissions unit at the Gallagher Plant or another facility, provided that Duke applies for, and obtains, all required permits, if any, including, if applicable, an NSR Permit, or (b) selling any Equipment from Gallagher Unit 1 and/or Unit 3.

36. "Retire" means that Duke shall (a) permanently shutdown and cease firing Gallagher Unit 1 and Unit 3 with any fuel and permanently decommission Equipment for Gallagher Unit 1 and Unit 3 that is not shared with Gallagher Unit 2 and Unit 4, respectively, such that Gallagher Unit 1 and Unit 3 cannot be fired with any fuel of any kind, and (b) initiate all necessary steps to remove Gallagher Unit 1 and Unit 3 from Indiana's air emissions inventory and amend all applicable permits to reflect the permanent shutdown status of Gallagher Unit 1 and Unit 3. Nothing herein shall prevent Duke from (i) reusing any Equipment from Gallagher Unit 1 and/or Unit 3 at any other existing Unit or new emissions unit at the Gallagher Plant or at another facility, provided that Duke applies for, and obtains, all required permits, if any, including, if applicable, an NSR Permit, or (ii) selling any Equipment from Gallagher Unit 1 and/or Unit 3. For

purposes of this Paragraph, if Duke seeks to commence operation of Retired Gallagher Unit 1 and/or Unit 3, such Retired Unit would be considered a "new emissions unit" at the Gallagher Plant.

- 37. "SO₂" means sulfur dioxide, as measured in accordance with the provisions of this Consent Decree.
- 38. "SO₂ Allowance" means an authorization or credit to emit a specified amount of SO₂ that is allocated or issued under an emissions trading or marketable permit program of any kind that has been established under the Clean Air Act or the Indiana SIP.
- 39. "Surrender" or "Surrender of Allowances" means, for purposes of SO₂
 Allowances, permanently surrendering allowances from the accounts administered by
 EPA and the State of Indiana, so that such allowances can never be used thereafter to
 meet any compliance requirement under the Clean Air Act, a State Implementation Plan,
 or this Consent Decree.
 - 40. "States" means the States of New York, New Jersey, and Connecticut.
- 41. "Title V Permit" means the permit required for major sources under Subchapter V of the Act, 42 U.S.C. §§ 7661-7661e.
- 42. "Tonnage Equivalent" means, for purposes of determining the requisite number of SO₂ Allowances that must be surrendered pursuant to Paragraph 53, the number of SO₂ Allowances required to be surrendered based on the year the emissions occur and the relationship between SO₂ Allowances and tons emitted as specified in the definition of "CAIR SO₂ allowance" in 40 C.F.R. § 96.202.
- 43. "Unit" means collectively, the coal pulverizer (if applicable), stationary equipment that feeds fuel to the boiler, the boiler that produces steam for the steam

turbine, the steam turbine, the generator, the equipment necessary to operate the generator, steam turbine, and boiler, and all ancillary equipment, including pollution control equipment. An electric steam generating station may comprise one or more Units.

IV. CIVIL PENALTY

- 44. Within thirty (30) days from the Date of Entry of this Consent Decree,
 Duke shall pay the United States a civil penalty in the amount of \$1,750,000. The civil
 penalty shall be paid by Electronic Funds Transfer ("EFT") to the United States
 Department of Justice, in accordance with current EFT procedures, referencing USAO
 File Number 1999v00830 and DOJ Case Number 90-5-2-1-06965 and the civil action
 case name and case number of this action. The costs of such EFT shall be Duke's
 responsibility. Payment shall be made in accordance with instructions provided to Duke
 by the Financial Litigation Unit of the U.S. Attorney's Office for the Southern District of
 Indiana. Any funds received after 2:00 p.m. EDT shall be credited on the next business
 day. At the time of payment, Duke shall provide notice of payment, referencing the
 USAO File Number, the DOJ Case Number, and the civil action case name and case
 numbers, to the Department of Justice and to EPA in accordance with Section XVII
 (Notices) of this Consent Decree.
- 45. Failure to timely pay the civil penalty shall subject Duke to interest accruing from the date payment is due until the date payment is made at the rate prescribed by 28 U.S.C. § 1961, and shall render Duke liable for all charges, costs, fees, and penalties established by law for the benefit of a creditor or of the United States in securing payment.

46. Payment made pursuant to this Section is a penalty within the meaning of Section 162(f) of the Internal Revenue Code, 26 U.S.C. § 162(f), and is not a tax-deductible expenditure for purposes of federal law.

V. SO₂ EMISSION REDUCTIONS AND CONTROLS

- A. Annual SO₂ Tonnage Limitations for Gallagher Units 1 and 3.
- 47. Until such time as Gallagher Unit 1 and Unit 3 are Repowered to Natural Gas or Retired as required by this Consent Decree, Duke shall not exceed an Annual SO₂ Tonnage Limitation for Gallagher Unit 1 of 11,062 tons and an Annual SO₂ Tonnage Limitation for Gallagher Unit 3 of 9,385 tons. Duke's first compliance obligation pursuant to this Paragraph shall be the calendar year from January 1, 2009 through December 31, 2009. Compliance with the Annual SO₂ Tonnage Limitation for Gallagher Unit 1 and Unit 3 shall be determined in accordance with Appendix B.
 - B. SO₂ Emission Limitations and Control Requirements at Gallagher Units 1 and 3.
- 48. Beginning on January 30, 2011, and continuing thereafter until such time as Gallagher Unit 1 and Unit 3 are Repowered to Natural Gas or Retired as required by this Consent Decree, Duke shall operate Gallagher Unit 1 and Unit 3 so that each Unit achieves and maintains a 30-Day Rolling Average Emission Rate for SO₂ of no greater than 1.70 lb/mmBTU.
- 49. By no later than January 1, 2012, Duke shall elect whether to Retire Gallagher Units 1 and 3 or whether to Repower Gallagher Units 1 and 3 to Natural Gas.
- a. If Duke elects to Retire Gallagher Units 1 and 3, then by no later than February 1, 2012, Duke shall Retire Gallagher Units 1 and 3.

- b. If Duke elects to Repower Gallagher Units 1 and 3, then by no later than December 31, 2012, Duke shall have Repowered Gallagher Units 1 and 3. Duke shall provide notice of its election to Plaintiffs in accordance with Section XVII (Notice).
 - C. SO₂ Emission Limitations and Control Requirements at Gallagher Units 2 and 4.
- 50. By no later than January 1, 2011, and continuing thereafter, Duke shall install and commence Continuous Operation of DSI at Gallagher Units 2 and 4.
- 51. Commencing on the sixtieth (60th) Operating Day following January 1, 2011, and continuing thereafter, Duke shall Continuously Operate DSI at Gallagher Unit 2 and Unit 4 so as to achieve and maintain a 30-Day Rolling Average Emission Rate for SO₂ of no greater than 0.800 lb/mmBTU.
- 52. Duke shall not be required to Continuously Operate DSI at Gallagher Unit 2 or Unit 4, respectively, if Duke (a) permanently ceases to emit any SO₂ from Gallagher Unit 2 or Unit 4 or (b) makes physical or operational changes to Gallagher Unit 2 or Unit 4 (including changes to allow combustion of Natural Gas, biomass or other low sulfur fuel, or the installation of an alternative SO₂ pollution control technology) that: (i) alone and without the Continuous Operation of DSI, achieves and maintains a 30-Day Rolling Average Emission Rate for SO₂ of no greater than 0.60 lb/mmBTU and (ii) Duke makes these physical or operational changes, including, if applicable, the Continuous Operation of the alternative SO₂ pollution control technology, and the 30-Day Rolling Average Emission Rate of no greater than 0.60 lb/mmBTU, federally enforceable in accordance with applicable regulatory requirements, including obtaining all necessary construction and operating permits.

VI. SO₂ ALLOWANCE SURRENDER REQUIREMENTS

- A. Use and Surrender of SO₂ Allowances
- 53. In addition to Duke's Title IV compliance obligations for Gallagher Units 1 and 3, and the other requirements of this Consent Decree, Duke shall Surrender the Tonnage Equivalent in SO₂ Allowances, in addition to the surrender required under existing law, for the total tons of SO₂ emitted from Gallagher Unit 1 and Unit 3 from May 19, 2009 (the date of the jury verdict), through the date that Gallagher Unit 1 and Unit 3 are Repowered to Natural Gas or Retired pursuant to Paragraph 49.
- 54. Except as may be necessary to comply with the SO₂ Allowance Surrender requirements of Paragraphs 53, 55 or 86, Duke shall not use SO₂ Allowances to comply with any requirement of this Consent Decree, including by claiming compliance with any emission limitation required by this Consent Decree by using, tendering, or otherwise applying SO₂ Allowances to offset any excess emissions.
- 55. Beginning in calendar year 2010, and continuing each calendar year thereafter, Duke shall Surrender the amount of SO₂ Allowances equal to the amount allocated to the Gallagher Plant for that calendar year that Duke does not need in order meet its federal and/or state Clean Air Act regulatory requirements for the Gallagher Plant. Allowance Surrenders pursuant to Paragraph 53 shall be in addition to any Surrender required by this Paragraph.
- 56. Nothing in this Consent Decree shall prevent Duke from purchasing or otherwise obtaining SO₂ Allowances from another source for purposes of complying with Paragraphs 53, 55, and 86, or federal and/or state Clean Air Act regulatory requirements to the extent otherwise allowed by law.

- 57. The requirements in this Consent Decree pertaining to Duke's use and Surrender of SO₂ Allowances are permanent injunctions not subject to any termination provision of this Consent Decree.
 - B. Method for Surrender of SO₂ Allowances
- 58. Duke shall Surrender, or transfer to a non-profit third party selected by Duke for Surrender, all SO₂ Allowances required to be Surrendered pursuant to Paragraphs 53 and 55 by March 1 of the immediately following year.
- 59. If any SO₂ Allowances required to be Surrendered under this Consent Decree are transferred directly to a non-profit third party, Duke shall include a description of such transfer in the next report submitted to Plaintiffs pursuant to Section X (Periodic Reporting) of this Consent Decree. Such report shall: (i) identify the nonprofit third party recipient(s) of the SO₂ Allowances and list the serial numbers of the transferred SO₂ Allowances; and (ii) include a certification by the non-profit third party recipient(s) stating that the recipient(s) will not sell, trade, or otherwise exchange any of the allowances and will not use any of the SO₂ Allowances to meet any obligation imposed by any environmental law. No later than the third periodic report due after the transfer of any SO₂ Allowances, Duke shall include a statement that the non-profit third party recipient(s) Surrendered the SO₂ Allowances for permanent Surrender to EPA in accordance with the provisions of Paragraph 60 within one (1) year after Duke transferred the SO₂ Allowances to them. Duke shall not have complied with the SO₂ Allowance Surrender requirements of this Paragraph until all third party recipient(s) have actually Surrendered the transferred SO₂ Allowances to EPA.

60. For all SO₂ Allowances required to be Surrendered, Duke or the third party recipient(s) (as the case may be) shall first submit an SO₂ Allowance transfer request form (in paper or electronic format) to EPA's Office of Air and Radiation's Clean Air Markets Division directing the transfer of such SO₂ Allowances to the EPA Enforcement Surrender Account or to any other EPA account that EPA may direct in writing. As part of submitting these transfer requests, Duke or the third party recipient(s) shall irrevocably authorize the transfer of these SO₂ Allowances and identify – by name of account and any applicable serial or other identification numbers or station names – the source and location of the SO₂ Allowances being Surrendered.

VII. PROHIBITION ON NETTING CREDITS OR OFFSETS FROM REQUIRED CONTROLS

- 61. Emission reductions that result from actions to be taken by Duke after the Date of Entry of this Consent Decree to comply with the requirements of this Consent Decree shall not be considered as a creditable contemporaneous emission decrease for the purpose of netting or offset under the Clean Air Act's PSD and Nonattainment NSR programs. Solely for purposes of this Paragraph, Subparagraph 52.b shall not be considered a requirement of this Consent Decree.
- 62. The limitations on the generation and use of netting or offsets set forth in the previous Paragraph do not apply to emission reductions achieved by Gallagher Units 1, 2, 3, or 4 that are greater than those required under this Consent Decree. For purposes of this Paragraph, emission reductions at Gallagher Units 1, 2, 3, or 4 are greater than those required under this Consent Decree if they result from Duke's compliance with a federally enforceable emission limit(s) that is more stringent than those limits imposed on

Gallagher Units 1, 2, 3, or 4 under this Consent Decree and under applicable provisions of the Clean Air Act or the Indiana SIP.

63. Nothing in this Consent Decree is intended to preclude the emission reductions generated under this Consent Decree from being considered by EPA or the State of Indiana for the purpose of attainment demonstrations submitted pursuant to § 110 of the Act, 42 U.S.C. § 7410, or in determining impacts on National Ambient Air Quality Standards, PSD increment, or air quality related values, including visibility, in a Class I area.

VIII. ENVIRONMENTAL MITIGATION PROJECTS

- 64. Duke shall implement the Environmental Mitigation Projects ("Projects") described in Appendix A to this Consent Decree and fund the categories of Projects described in Section B, below, in compliance with the approved plans and schedules for such Projects and other terms of this Consent Decree.
 - A. Requirements for Projects Described in Appendix A (\$5.25 million)
- 65. In implementing the Projects described in Appendix A, Duke shall spend no less than \$5,250,000 in Project Dollars within five (5) years from the Date of Entry of this Consent Decree.
- 66. Duke shall submit plans for the Projects to the United States for review and approval pursuant to Section XI (Review and Approval of Submittals) of this Consent Decree in accordance with Appendix A.
- 67. Duke shall maintain, and present to the United States upon request, all documents to substantiate the Project Dollars expended and shall provide these documents to the United States within sixty (60) Days of a request for the documents.

- 68. All plans and reports prepared by Duke pursuant to the requirements of this Section of the Consent Decree and required to be submitted to the United States shall be publicly available from Duke without charge, subject to the limitations in Paragraph 122.
- 69. Duke shall certify, as part of each plan submitted to the United States for any Project, that Duke is not otherwise required by law to perform the Project described in the plan, that Duke is unaware of any other person who is required by law to perform the Project, and that Duke will not use any Project, or portion thereof, to satisfy any obligations that it may have under other applicable requirements of law as of the date of approval of the Project.
- 70. Duke shall use good faith efforts to secure as much environmental benefit as possible for the Project Dollars expended, consistent with the applicable requirements and limits of this Consent Decree.
- 71. If Duke elects (where such an election is allowed) to undertake a Project by contributing funds to another person or entity that will carry out the Project in lieu of Duke, but not including Duke's agents or contractors, that person or instrumentality must, in writing: (a) identify its legal authority for accepting such funding; and (b) identify its legal authority to conduct the Project for which Duke contributes the funds. Regardless of whether Duke elected (where such election is allowed) to undertake a Project by itself or to do so by contributing funds to another person or instrumentality that will carry out the Project, Duke acknowledges that it will receive credit for the expenditure of such funds as Project Dollars only if Duke demonstrates that the funds have been actually spent by either Duke or by the person or instrumentality receiving them, and that such

expenditures met all requirements of this Consent Decree. This Paragraph does not apply to the State Projects set forth in Section VII(B) or the U.S. Forest Service Mitigation set forth in Appendix A.

- 72. Duke shall comply with the reporting requirements for Projects as described in Section X (Periodic Reporting) and Appendix A.
- 73. In connection with any communication to the public or to shareholders regarding Duke's actions or expenditures relating in any way to the Projects required pursuant to this Consent Decree, Duke shall include prominently in the communication that the actions and expenditures were required as part of a consent decree.
 - B. Mitigation Projects to be Conducted by the States (\$1 million)
- 74. The States, by and through their respective Attorneys General, shall jointly submit to Duke Projects within the categories identified in this Subsection for funding in an amount not to exceed \$1 million. The States may apply for such funds no sooner than thirty (30) Days from the Date of Entry of this Consent Decree. The funds shall be allocated as follows: \$400,000 to New York, \$330,000 to New Jersey, and \$270,000 to Connecticut. Duke shall not have approval rights for the State Projects funded under this Consent Decree. Duke shall pay proceeds as designated by the States in accordance with the Projects submitted for funding within seventy-five (75) Days after being notified in writing by the State(s). Duke's obligations with respect to State Projects shall be complete upon payment of the amount set forth above, and Duke shall have no responsibilities regarding the implementation of any State Projects in connection with this Consent Decree.

- 75. Categories of Projects. The States agree to use money funded by Duke to implement Projects that pertain to energy efficiency and/or pollution reduction. Such Projects may include, but are not limited by, the following:
- a. Retrofitting land and marine vehicles (<u>e.g.</u>, automobiles, off-road and on-road construction and other vehicles, trains, ferries) and transportation terminals and ports, with pollution control devices, such as particulate matter traps, computer chip reflashing, and battery hybrid technology;
 - b. Truck-stop and marine port electrification;
 - c. Purchase and installation of photo-voltaic cells on buildings;
- d. Projects to conserve energy use in new and existing buildings, including appliance efficiency improvement projects, weatherization projects, and projects intended to meet EPA's Green Building guidelines (see http://www.epa.gov/greenbuilding/pubs/components.htm) and/or the Leadership in Energy and Environmental Design (LEED) Green Building Rating System (see http://www.usgbc.org/DisplayPage.aspx?CategoryID=19), and projects to collect information in rental markets to assist in design of efficiency and conservation programs;
- e. Construction associated with the production of energy from wind, solar, and biomass;
- f. "Buy back" programs for dirty old motors (<u>e.g.</u>, automobile, lawnmowers, landscape equipment);
- g. Programs to remove and/or replace oil-fired home heating equipment to allow use of ultra-low sulfur oil;
 - h. Purchase and retirement of SO₂ Allowances; and

i. Funding program to improve modeling of the mobile source sector.

IX. RESOLUTION OF CIVIL CLAIMS AGAINST DUKE

- 76. Entry of this Consent Decree shall resolve all civil claims of Plaintiffs against Duke that arose from any modifications commenced at Gallagher Units 1, 2, 3, and 4 prior to the Date of Lodging of this Consent Decree, including but not limited to those modifications alleged in the Notices of Violation and complaints filed by Plaintiffs in this litigation under any or all of: (a) Parts C or D of Title I of the Act, 42 U.S.C. §§ 7470-7492, 7501-7515, and the regulations promulgated there under as of the Date of Lodging, (b) Section 111 of the Act, 42 U.S.C. § 7411 and 40 C.F.R. § 60.14, (c) the federally-approved and enforceable PSD and Nonattainment NSR provisions of the Indiana SIP, or (d) Sections 502(a) and 504(a) of Title V of the Act, 42 U.S.C. § 7661a and 7661c, and the regulations promulgated there under as of the Date of Lodging, but only to the extent that such claims under Title V are based on Duke's failure to obtain an operating permit that reflects applicable requirements imposed under Parts C or D of Title I or Section 111 of the Act.
- 77. All Parties forever relinquish and waive any and all rights they may have to appeal any rulings, verdicts, or judgments based on the complaints filed by Plaintiffs, except with respect to the existing Wabash River appeal currently pending before the Court of Appeals for the Seventh Circuit.

X. PERIODIC REPORTING

78. By no later than thirty (30) Days after the end of the second full calendar quarter following the Date of Entry of this Consent Decree, and continuing on a semi-annual basis until termination of this Consent Decree, and in addition to any other

express reporting requirement in this Consent Decree, Duke shall submit to the Plaintiffs a progress report.

- 79. The progress report shall contain the following information: (a) the information necessary to determine compliance with the requirements of the following Paragraphs of this Consent Decree: 47, 48, 49, 49a., 49b., 50, 51, 52, 53, 55, 58, 59, 60, 62, 111, 115-118, and Sections VIII and XVIII, and (b) if Duke makes the election under Subparagraph 49.b, the information indicating that the Repowering of Gallagher Unit 1 and Unit 3 to Natural Gas may be delayed beyond December 31, 2012, including the nature and cause of the delay, and any steps taken by Duke to mitigate such delay.
- 80. In any periodic progress report submitted pursuant to this Section, Duke may incorporate by reference information previously submitted under its Title V permitting requirements, provided that Duke attaches the Title V permit report, or the relevant portion thereof, and provides a specific reference to the provisions of the Title V permit report that are responsive to the information required in the periodic progress report.
- 81. In addition to the progress reports required pursuant to this Section, Duke shall provide a written report to the Plaintiffs of any violation of the requirements of this Consent Decree within fifteen (15) calendar Days of when Duke knew or should have known of any such violation. In this report, Duke shall explain the cause or causes of the violation and all measures taken or to be taken by Duke to prevent such violations in the future.

82. Each report shall be signed by Duke's Senior Vice President – Regulated Fleet Operations or his or her equivalent or designee of at least the rank of Vice President, and shall contain the following certification:

This information was prepared either by me or under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my evaluation, or the direction and my inquiry of the person(s) who manage the system, or the person(s) directly responsible for gathering the information, I hereby certify under penalty of law that, to the best of my knowledge and belief, this information is true, accurate, and complete. I understand that there are significant penalties for submitting false, inaccurate, or incomplete information to the United States.

83. If any SO₂ Allowances are Surrendered to any third party pursuant to this Consent Decree, the third party's certification pursuant to Paragraph 59 shall be signed by a managing officer of the third party and shall contain the following language:

I certify under penalty of law that,______ [name of third party] will not sell, trade, or otherwise exchange any of the allowances and will not use any of the allowances to meet any obligation imposed by any environmental law. I understand that there are significant penalties for submitting false, inaccurate, or incomplete information to the United States.

XI. REVIEW AND APPROVAL OF SUBMITTALS

84. Duke shall submit each plan, report, or other submission required by

Section VIII (Environmental Mitigation Projects) of this Consent Decree to the United

States, whenever such a document is required to be submitted for review or approval

pursuant to this Consent Decree. The United States, in consultation with the States and

Citizen Plaintiffs, may approve the submittal or decline to approve it and provide written

comments explaining the basis for declining such approval. Within sixty (60) Days of

receiving written comments from the United States, Duke shall either: (a) revise the

submittal consistent with the written comments and provide the revised submittal to the

United States; or (b) submit the matter for dispute resolution, including the period of informal negotiations, under Section XIV (Dispute Resolution) of this Consent Decree.

85. Upon receipt of the United States' final approval of the submittal, or upon completion of the submittal pursuant to dispute resolution, Duke shall implement the approved submittal in accordance with the schedule specified therein or another United States'-approved schedule.

XII. STIPULATED PENALTIES

86. For any failure by Duke to comply with the terms of this Consent Decree, and subject to the provisions of Sections XIII (Force Majeure) and XIV (Dispute Resolution), Duke shall pay, within thirty (30) Days after receipt of written demand to Duke by the United States, the following stipulated penalties to the United States:

Consent Decree Violation	Stipulated Penalty
	(per Day, per violation, unless
	otherwise specified)
a. Failure to comply with the applicable Annual SO ₂ Tonnage Limitation for Gallagher Unit 1 and Unit 3	\$5,000 per ton for the first 100 tons; \$10,000 per ton for each ton over 100 tons, plus the Surrender of SO ₂ Allowances in an amount equal to two times the number of tons by which the tonnage limitation was exceeded
b. Failure to comply with the applicable 30-Day Rolling Average Emission Rate at Units 1, 2, 3, or 4	\$2,500 per Day where the violation is less than 5% in excess of the limits set forth in this Consent Decree; \$5,000 per Day where the violation is equal to or greater than 5% but less than 10% in excess of the limits set forth in this Consent Decree; \$10,000 per Day where the violation is equal to or greater than 10% in excess of the limits set forth in this Consent Decree

c. Failure to make a timely election pursuant to Paragraph 49	\$1,000 per Day for the first 15 Days; \$15,000 per Day for each Day thereafter
d. Failure to Retire or Repower Gallagher Unit 1 and Unit 3 as required by Paragraph 49	\$10,000 per Day for the first 30 Days; \$37,500 per Day for each Day thereafter
e. Failure to Surrender SO ₂ Allowances as required by Paragraphs 53 or 55	\$37,500 per Day, plus \$1,000 per SO ₂ Allowance not Surrendered
f. Using, selling, or transferring SO ₂ Allowances except as permitted under this Consent Decree	The Surrender of SO ₂ Allowances in an amount equal to four times the number of SO ₂ Allowances used, sold, or transferred in violation of this Consent Decree
g. Failure to install, commence operation, or Continuously Operate, DSI as required under this Consent Decree	\$10,000 per Day for the first 30 days; \$37,500 per Day for each Day thereafter
h. Failure to implement any of the Environmental Mitigation Projects in compliance with Section VIII (Environmental Mitigation Projects) of this Consent Decree.	\$1,000 per Day for the first 30 Days; \$5,000 per Day for each Day thereafter
i. Failure to operate SO ₂ CEMS as required by this Consent Decree	\$1,000 per Day
j. Failure to apply for any permit required under this Consent Decree	\$1,000 per Day
k. Failure to timely submit, modify, or implement, as approved, the reports, plans, studies, analyses, protocols, or other submittals required by this Consent Decree	\$750 per Day for the first 10 Days, \$1,000 per Day for each Day thereafter
1. Failure to demonstrate the non-profit third-party Surrender of SO ₂ Allowances	\$2,500 per Day
m. Failure to make payment as specified in Section IV (Civil Penalty) of this Consent Decree	\$10,000 per Day
n. Any other violation of this Consent Decree.	\$1,000 per Day

- 87. Violation of a 30-Day Rolling Average Emission Rate is a violation on every Day on which the average is based. Where a violation of a 30-Day Rolling Average for the same pollutant and from the same Unit(s) recurs within periods of less than thirty (30) Days, Duke shall not pay a daily stipulated penalty for any Day of the recurrence for which a stipulated penalty has already been paid.
- 88. All stipulated penalties shall begin to accrue on the Day after the performance is due or on the Day a violation occurs, whichever is applicable, and shall continue to accrue until performance is satisfactorily completed or until the violation ceases, whichever is applicable. Nothing in this Consent Decree shall prevent the simultaneous accrual of separate stipulated penalties for separate violations of this Consent Decree.
- 89. Duke shall pay all stipulated penalties to the United States within thirty (30) Days of receipt of written demand to Duke from the United States, and shall continue to make such payments every thirty (30) Days thereafter until the violation(s) no longer continues, unless Duke elects within twenty (20) Days of receipt of written demand to Duke from the United States to dispute the accrual of stipulated penalties in accordance with the provisions in Section XIV (Dispute Resolution) of this Consent Decree.
- 90. Stipulated penalties shall continue to accrue as provided in accordance with Paragraph 88 during any dispute, with interest on accrued stipulated penalties payable and calculated at the rate established by the Secretary of the Treasury, pursuant to 28 U.S.C. § 1961, but need not be paid until the following:

- a. If the dispute is resolved by agreement, or by a decision of Plaintiffs pursuant to Section XIV (Dispute Resolution) of this Consent Decree that is not appealed to the Court, accrued stipulated penalties agreed or determined to be owing, together with accrued interest, shall be paid within thirty (30) Days of the effective date of the agreement or of the receipt of Plaintiffs' decision;
- b. If the dispute is appealed to the Court and Plaintiffs prevail in whole or in part, Duke shall, within sixty (60) Days of receipt of the Court's decision or order, pay all accrued stipulated penalties determined by the Court to be owing, together with interest accrued on such penalties determined by the Court to be owing, except as provided in Subparagraph c, below;
- c. If the Court's decision is appealed by any Party, Duke shall, within fifteen (15) Days of receipt of the final appellate court decision, pay all accrued stipulated penalties determined to be owing, together with interest accrued on such stipulated penalties determined to be owing by the appellate court.

Notwithstanding any other provision of this Consent Decree, the accrued stipulated penalties agreed by Plaintiffs and Duke, or determined by the Plaintiffs through Dispute Resolution, to be owing may be less than the stipulated penalty amounts set forth in Paragraph 86.

91. All monetary stipulated penalties shall be paid in the manner set forth in Section IV (Civil Penalties). All SO₂ Allowance Surrender stipulated penalties shall comply with the allowance surrender procedures set forth in Paragraphs 59-60.

- 92. Should Duke fail to pay a stipulated penalty in compliance with the terms of this Consent Decree, the United States shall be entitled to collect interest on such stipulated penalties, as provided for in 28 U.S.C. § 1961.
- 93. The stipulated penalties provided for in this Consent Decree shall be in addition to any other rights, remedies, or sanctions available to Plaintiffs by reason of Duke's failure to comply with any requirement of this Consent Decree or applicable law, except that for any violation of the Act for which this Consent Decree provides for payment of a stipulated penalty, Duke shall be allowed a credit for stipulated penalties paid against any statutory penalties also imposed for such violation.

XIII. FORCE MAJEURE

- 94. For purposes of this Consent Decree, a "Force Majeure Event" shall mean an event that has been or will be caused by circumstances beyond the control of Duke or any entity controlled by Duke that delays compliance with any provision of this Consent Decree or otherwise causes a violation of any provision of this Consent Decree despite Duke's best efforts to fulfill the obligation. "Best efforts to fulfill the obligation" include using the best efforts to anticipate any potential Force Majeure Event and to address the effects of any such event (a) as it is occurring and (b) after it has occurred, such that the delay and any adverse environmental effect of the violation is minimized to the greatest extent possible.
- 95. Notice of Force Majeure Events. If any event occurs or has occurred that may delay compliance with or otherwise cause a violation of any obligation under this Consent Decree, as to which Duke intends to assert a claim of Force Majeure, Duke shall notify the Plaintiffs in writing as soon as practicable, but in no event later than twenty-

one (21) Days following the date Duke first knew, or by the exercise of due diligence should have known, that the event caused or may cause such delay or violation. In this notice, Duke shall reference this Paragraph of this Consent Decree and describe the anticipated length of time that the delay or violation may persist, the cause or causes of the delay or violation, all measures taken or to be taken by Duke to prevent or minimize the delay and any adverse environmental effect of the violation, the schedule by which Duke proposes to implement those measures, and Duke's rationale for attributing a delay or violation to a Force Majeure Event. Duke shall adopt all reasonable measures to avoid or minimize such delays or violations. Duke shall be deemed to know of any circumstance which Duke or any entity controlled by Duke knew or should have known.

- 96. <u>Failure to Give Notice</u>. If Duke fails to comply with the notice requirements of this Section, the United States (after consultation with the States and Citizen Plaintiffs) may void Duke's claim for Force Majeure as to the specific event for which Duke has failed to comply with such notice requirement.
- 97. The United States' Response. The United States shall notify Duke in writing regarding Duke's claim of Force Majeure as soon as reasonably practicable. If the United States (after consultation with the States and Citizen Plaintiffs) agrees that a delay in performance has been or will be caused by a Force Majeure Event, the United States and Duke shall stipulate to an extension of deadline(s) for performance of the affected compliance requirement(s) by a period equal to the delay actually caused by the event, or the extent to which Duke may be relieved of stipulated penalties or other remedies provided under the terms of this Consent Decree. In such circumstances, an

appropriate modification shall be made pursuant to Section XXI (Modification) of this Consent Decree.

- 98. <u>Disagreement</u>. If the United States (after consultation with the States and Citizen Plaintiffs) does not accept Duke's claim of Force Majeure, or if the United States and Duke cannot agree on the length of the delay actually caused by the Force Majeure Event, the matter shall be resolved in accordance with Section XIV (Dispute Resolution) of this Consent Decree.
- 99. <u>Burden of Proof.</u> In any dispute regarding Force Majeure, Duke shall bear the burden of proving that any delay in performance or any other violation of any requirement of this Consent Decree was caused by or will be caused by a Force Majeure Event. Duke shall also bear the burden of proving that Duke gave the notice required by this Section and the burden of proving the anticipated duration and extent of any delay(s) attributable to a Force Majeure Event. An extension of one compliance date based on a particular event may, but will not necessarily, result in an extension of a subsequent compliance date.
- 100. <u>Events Excluded</u>. Unanticipated or increased costs or expenses associated with the performance of Duke's obligations under this Consent Decree shall not constitute a Force Majeure Event.
- 101. Potential Force Majeure Events. The Parties agree that, depending upon the circumstances related to an event and Duke's response to such circumstances, the kinds of events listed below are among those that could qualify as Force Majeure Events within the meaning of this Section: construction, labor, or equipment delays; Malfunction of a Unit or emission control device; unanticipated coal supply or pollution control

reagent delivery interruptions; acts of God; acts of war or terrorism; and orders by a government official, government agency, other regulatory authority, or a regional transmission organization, acting under and authorized by applicable law, that directs Duke to supply electricity in response to a system-wide (state-wide or regional) emergency. Depending upon the circumstances and Duke's response to such circumstances, failure of a permitting authority to issue a necessary permit in a timely fashion may constitute a Force Majeure Event where the failure of the permitting authority to act is beyond the control of Duke and Duke has taken all steps available to it to obtain the necessary permit, including, but not limited to: submitting a complete permit application; responding to requests for additional information by the permitting authority in a timely fashion; and accepting lawful permit terms and conditions after expeditiously exhausting any legal rights to appeal terms and conditions imposed by the permitting authority.

102. As part of the resolution of any matter submitted to this Court under Section XIV (Dispute Resolution) regarding a claim of Force Majeure, the United States and Duke by agreement, or this Court by order, may in appropriate circumstances extend or modify the schedule for completion of work under this Consent Decree to account for the delay in the work that occurred as a result of any delay agreed to by the United States or approved by the Court. Duke shall be liable for stipulated penalties for its failure thereafter to complete the work in accordance with the extended or modified schedule (provided that Duke shall not be precluded from making a further claim of Force Majeure with regard to meeting any such extended or modified schedule).

XIV. DISPUTE RESOLUTION

- 103. The dispute resolution procedure provided by this Section shall be available to resolve all disputes arising under this Consent Decree, provided that the Party invoking such procedure has first made a good faith attempt to resolve the matter with the other Party.
- Party giving written notice to the other Party advising of a dispute pursuant to this

 Section. The notice shall describe the nature of the dispute and shall state the noticing

 Party's position with regard to such dispute. The Party receiving such a notice shall

 acknowledge receipt of the notice, and the Parties in dispute shall expeditiously schedule

 a meeting to discuss the dispute informally not later than fourteen (14) Days following

 receipt of such notice.
- 105. Disputes submitted to dispute resolution under this Section shall, in the first instance, be the subject of informal negotiations among the disputing Parties. Such period of informal negotiations shall not extend beyond thirty (30) calendar Days from the date of the first meeting among the disputing Parties' representatives unless they agree in writing to shorten or extend this period. During the informal negotiations period, the disputing Parties may also submit their dispute to a mutually agreed upon alternative dispute resolution (ADR) forum if the Parties agree that the ADR activities can be completed within the 30-Day informal negotiations period (or such longer period as the Parties may agree to in writing).
- 106. If the disputing Parties are unable to reach agreement during the informal negotiation period, the Plaintiffs shall provide Duke with a written summary of their

position regarding the dispute. The written position provided by Plaintiffs shall be considered binding unless, within forty-five (45) Days thereafter, Duke seeks judicial resolution of the dispute by filing a petition with this Court. The Plaintiffs may respond to the petition within forty-five (45) Days of filing. In their initial filings with the Court under this Paragraph, the disputing Parties shall state their respective positions as to the applicable standard of law for resolving the particular dispute.

- 107. The time periods set out in this Section may be shortened or lengthened upon motion to the Court of one of the Parties to the dispute, explaining the Party's basis for seeking such a scheduling modification.
- 108. This court shall not draw any inferences nor establish any presumptions adverse to any disputing Party as a result of invocation of this Section or the disputing Parties' inability to reach agreement.
- 109. As part of the resolution of any dispute under this Section, in appropriate circumstances the disputing Parties may agree, or this Court may order, an extension or modification of the schedule for the completion of the activities required under this Consent Decree to account for the delay that occurred as a result of dispute resolution. Duke shall be liable for stipulated penalties for its failure thereafter to complete the work in accordance with the extended or modified schedule, provided that Duke shall not be precluded from asserting that a Force Majeure Event has caused or may cause a delay in complying with the extended or modified schedule.
- 110. The Court shall decide all disputes pursuant to applicable principles of law for resolving such disputes.

XV. PERMITS

- 111. Unless expressly stated otherwise in this Consent Decree, in any instance where otherwise applicable law or this Consent Decree requires Duke to secure a permit to authorize Duke to Retire or Repower Gallagher Units 1 and 3 to Natural Gas, or to authorize construction and/or operation of DSI at Gallagher Units 2 and 4, including all preconstruction, construction, and operating permits required under state law, Duke shall make such application in a timely manner.
- 112. Notwithstanding the previous Paragraph, nothing in this Consent Decree shall be construed to require Duke to apply for or obtain an NSR Permit for physical changes in, or changes in the method of operation of, Gallagher Units 1, 2, 3, or 4 that gave rise to claims that were resolved by Paragraph 76.
- 113. When permits are required pursuant to Paragraph 111, Duke shall complete and submit applications for such permits to the appropriate authorities to allow sufficient time for all legally required processing and review of the permit request, including requests for additional information. Any failure by Duke to submit a timely permit application shall bar any use by Duke of Section XIII (Force Majeure) of this Consent Decree, where a Force Majeure claim is based on permitting delays.
- 114. Notwithstanding the reference to Title V permits in this Consent Decree, the enforcement of such permits shall be in accordance with their own terms and the Clean Air Act and its implementing regulations, including the federally approved Indiana Title V program. The Title V permit shall not be enforceable under this Consent Decree, although any term or limit established by or under this Consent Decree shall be enforceable under this Consent Decree regardless of whether such term has or will

become part of a Title V permit, subject to the terms of Section XXV (Conditional Termination of Enforcement Under Decree) of this Consent Decree.

- 115. Within one hundred eighty (180) Days from the Date of Entry of this Consent Decree, and in accordance with federal and/or state requirements for modifying or renewing a Title V permit, Duke shall amend any applicable Title V permit application, or apply for amendments to its Title V permit, to include a schedule for all Unit-specific and Gallagher Plant-specific requirements established by this Consent Decree, including performance, operational, maintenance, and control technology requirements.
- 116. By no later than January 1, 2012, Duke shall either apply to include the requirements and limitations enumerated in this Consent Decree into a federally enforceable non-Title V permit or request a site-specific amendment to the Indiana SIP to include the requirements and limitations enumerated in this Consent Decree. The permit or Indiana SIP amendment shall require compliance with the following: (a) any applicable 30-Day Rolling Average Emission Rate, (b) the Annual SO₂ Tonnage Limitation, (c) the requirement to Continuously Operate DSI at Gallagher Units 2 and 4, (d) the requirement to either Retire or Repower Gallagher Units 1 and 3, as appropriate, and (e) the requirements pertaining to the Surrender of SO₂ Allowances.
- 117. Duke shall provide notice to the Plaintiffs under Section XVII (Notices) when it submits an application for any permit described in this Section, and shall provide the Plaintiffs with a copy of its application for any federally-enforceable non-Title V permit or SIP amendment, as well as a copy of any permit proposed as a result of such application, to allow for timely participation in any public comment period.

- 118. Prior to termination of this Consent Decree, Duke shall obtain enforceable provisions in its Title V permit for Gallagher Units 1-4 that incorporate (a) Unit-specific and Gallagher Plant-specific performance, operational, maintenance, and control technology requirements established by this Consent Decree and (b) the SO₂ Allowance Surrender requirements.
- 119. If Duke sells or transfers to an entity unrelated to Duke ("Third Party") part or all of Duke's Operational or Ownership Interest in Gallagher Units 1-4, Duke shall comply with the requirements of Section XVIII (Sales or Transfers of Operational or Ownership Interests) with regard to that Unit(s) prior to any such sale or transfer.

XVI. INFORMATION COLLECTION AND RETENTION

- 120. Any authorized representative of the United States, including attorneys, contractors, and consultants, upon presentation of credentials, shall have a right of entry upon the premises of the Gallagher Plant at any reasonable time for the purpose of:
- a. monitoring the progress of activities required under this Consent Decree;
- b. verifying any data or information submitted to the United States in accordance with the terms of this Consent Decree;
- c. obtaining samples and, upon request, splits of any samples taken by Duke or its representatives, contractors, or consultants; and
 - d. assessing Duke's compliance with this Consent Decree.
- 121. Duke shall retain, and instruct its contractors and agents to preserve, all non-identical copies of all records and documents (including records and documents in electronic form) now in its or its contractors' or agents' possession or control, and that

directly relate to Duke's performance of its obligations under this Consent Decree for the following periods: (a) until December 31, 2018 for records concerning physical or operational changes undertaken in accordance with Section V (SO₂ Emission Reductions and Controls) or (b) until December 31, 2015 for all other records. This record retention requirement shall apply regardless of any corporate document retention policy to the contrary. The record retention periods specified herein shall be extended by the length of any delay caused by a Force Majeure Event pursuant to Section XIII (Force Majeure).

- 122. All information and documents submitted by Duke pursuant to this Consent Decree shall be subject to any requests under applicable law providing public disclosure of documents unless (a) the information and documents are subject to legal privileges or protection or (b) Duke claims and substantiates in accordance with 40 C.F.R. Part 2 that the information and documents contain confidential business information.
- 123. Nothing in this Consent Decree shall limit the authority of EPA to conduct tests and inspections at Duke's facilities under Section 114 of the Act, 42 U.S.C. § 7414, or any other applicable federal or state laws, regulations, or permits.

XVII. NOTICES

124. Unless otherwise provided herein, whenever notifications, submissions, or communications are required by this Consent Decree, they shall be made in writing and addressed as follows:

As to the United States:

Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice P.O. Box 7611, Ben Franklin Station Washington, DC 20044-7611 DJ# 90-5-2-1-06965

and

Director, Air Enforcement Division
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
Ariel Rios South, Room 1117
1200 Pennsylvania Avenue, N.W.
Washington, DC 20004

and

Air Enforcement & Compliance Assurance Branch U.S. EPA Region V 77 W. Jackson St. Mail Code AE17J Chicago, IL 60604

As to the State of Connecticut:

Office of the Attorney General Environmental Department P.O. Box 120 Hartford, Connecticut 06141-0120

As to the State of New Jersey:

Kevin P. Auerbacher Section Chief Environmental Enforcement Section R.J. Hughes Justice Complex 25 Market Street P.O. Box 093 Trenton, New Jersey 08625-0093

As to the State of New York:

Joseph M. Kowalczyk Assistant Attorney General Environmental Protection New York State Office of the Attorney General The Capitol Albany, New York 12224

As to the Citizen Plaintiffs:

Tim Maloney Senior Policy Director Hoosier Environmental Council 3951 N. Meridian St. Suite 100 Indianapolis, IN 46208 317-685-8800 ext. 115 812-369-8677 (cell) tmaloney@hecweb.org

Trent A. Dougherty, Esq.
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(617) 624-0230 (fax)
aweeks@catf.us

Keith Guthrie Attorney at Law 13242 South 600 East Elizabethtown IN 47232 812-579-5926 kgmail@comcast.net

As to Duke:

Vice President – Environmental Health and Safety Duke Energy Corporation 526 South Church Street Charlotte, North Carolina 28202 704 382-8451 Mitchell.Griggs@duke-energy.com

and

Chief Legal Officer
Duke Energy Corporation
526 South Church Street
Charlotte, North Carolina 28202
704 382-2204
Marc.Manly@duke-energy.com

- 125. All notifications, communications, or submissions made pursuant to this Section shall be sent as follows: (a) by overnight mail or overnight delivery service to the United States; (b) by electronic mail to all Plaintiffs, if practicable, but if not practicable, then by overnight mail or overnight delivery service to the States and Citizen Plaintiffs, and (c) by certified mail or registered mail, return receipt requested with a copy by electronic mail to Duke. All notifications, communications, and transmissions sent by overnight delivery service shall be deemed submitted on the date they are delivered to the delivery service.
- 126. Any Party may change either the notice recipient or the address for providing notices to it by serving all other Parties with a notice setting forth such new notice recipient or address.

XVIII. SALES OR TRANSFERS OF OPERATIONAL OR OWNERSHIP INTERESTS

127. If Duke proposes to sell or transfer an Operational or Ownership Interest to an entity unrelated to Duke ("Third Party"), it shall advise the Third Party in writing of

the existence of this Consent Decree prior to such sale or transfer, and shall send a copy of such written notification to the Plaintiffs pursuant to Section XVII (Notices) of this Consent Decree at least sixty (60) Days before such proposed sale or transfer.

- 128. No sale or transfer of an Operational or Ownership Interest shall take place before the Third Party and Plaintiffs have executed, and the Court has approved, a modification pursuant to Section XXI (Modification) of this Consent Decree making the Third Party a party to this Consent Decree and jointly and severally liable with Duke for all the requirements of this Consent Decree that may be applicable to the transferred or purchased Interests.
- 129. This Consent Decree shall not be construed to impede the transfer of any Interests between Duke and any Third Party so long as the requirements of this Consent Decree are met. This Consent Decree shall not be construed to prohibit a contractual allocation as between Duke and any Third Party of the burdens of compliance with this Consent Decree, provided that both Duke and such Third Party shall remain jointly and severally liable for the obligations of the Consent Decree applicable to the transferred or purchased Interests.
- 130. Notwithstanding Paragraph 129, if the Plaintiffs agree, the Plaintiffs,
 Duke, and the Third Party that has become a party to this Consent Decree pursuant to
 Paragraph 128, may execute a modification that relieves Duke of liability under this
 Consent Decree for, and makes the Third Party liable for, all obligations and liabilities
 applicable to the purchased or transferred Interests. Notwithstanding the foregoing,
 however, Duke may not assign, and may not be released from, any obligation under this
 Consent Decree that is not specific to the purchased or transferred Interests, including the

obligations set forth in Section VIII (Environmental Mitigation Projects). Duke may propose and the Plaintiffs may agree to restrict the scope of the joint and several liability of any purchaser or transferee for any obligations of this Consent Decree that are not specific to the transferred or purchased Interests, to the extent such obligations may be adequately separated in an enforceable manner.

131. Paragraphs 127-130 of this Consent Decree do not apply if an Interest is sold or transferred solely as collateral security in order to consummate a financing arrangement (not including a sale-leaseback), so long as Duke: (a) remains the operator (as that term is used and interpreted under the Clean Air Act) of the subject Unit(s); (b) remains subject to and liable for all obligations and liabilities of this Consent Decree; and (c) supplies Plaintiffs with the following certification within thirty (30) Days of the sale or transfer:

Certification of Change in Ownership Interest Solely for Purpose of Consummating Financing. We, the Chief Executive Officer and General Counsel of Duke Energy ("Duke"), hereby jointly certify under Title 18 U.S.C. Section 1001, on our own behalf and on behalf of Duke, that any change in Duke's Ownership Interest in any Unit at the Gallagher Plant that is caused by the sale or transfer as collateral security of such Ownership Interest in such Unit(s) pursuant to the financing agreement consummated on [insert applicable date] between Duke and [insert applicable entity]: a) is made solely for the purpose of providing collateral security in order to consummate a financing arrangement; b) does not impair Duke's ability, legally or otherwise, to comply timely with all terms and provisions of the Consent Decree entered in *United States*, et al. v. Cinergy Corp., et al., Civil Action No. IP99-1693; c) does not affect Duke's operational control of any Unit covered by that Consent Decree in a manner that is inconsistent with Duke's performance of its obligations under the Consent Decree; and d) in no way affects the status of Duke's obligations or liabilities under that Consent Decree."

XIX. EFFECTIVE DATE

132. The effective date of this Consent Decree shall be the Date of Entry.

XX. RETENTION OF JURISDICTION

133. The Court shall retain jurisdiction of this case after the Date of Entry of this Consent Decree to enforce compliance with the terms and conditions of this Consent Decree and to take any action necessary or appropriate for the interpretation, construction, execution, or modification of the Consent Decree, or for adjudication of disputes. During the term of this Consent Decree, any Party to this Consent Decree may apply to the Court for any relief necessary to construe or effectuate this Consent Decree.

XXI. MODIFICATION

134. The terms of this Consent Decree may be modified only by a subsequent written agreement signed by the Plaintiffs and Duke. Where the modification constitutes a material change to any term of this Consent Decree, it shall be effective only upon approval by the Court

XXII. GENERAL PROVISIONS

- 135. Monitoring Provisions.
- a. <u>30-Day Rolling Average Emission Rates</u>. For purposes of
 demonstrating compliance with the 30-Day Rolling Average Emission Rate for a Unit,
 Duke shall install and use CEMS in accordance with Appendix B of this Consent Decree.
- b. <u>Annual SO₂ Tonnage Limitations</u>. For purposes of demonstrating compliance with the Annual SO₂ Tonnage Limitations specified in Paragraph 47, for calendar years 2009-2010 Duke shall use continuous emission monitoring systems in accordance with 40 C.F.R Part 75. For purposes of demonstrating compliance with the Annual SO₂ Tonnage Limitation specified in Paragraph 47, for calendar year 2011 and each year thereafter until the Units have been Repowered or Retired in accordance with

Paragraph 49, Duke shall calculate the total annual number of tons of SO₂ from Gallagher Unit 1 and Unit 3 using data from the CEMS installed in accordance with Appendix B and apportioned heat input data derived from the flow rate monitors and CO₂ monitors in the common stacks of Units 1-2 and Units 3-4 that are installed and certified pursuant to 40 C.F.R. Part 75. The equations for determining the total annual number of tons of SO₂ from Gallagher Unit 1 and Unit 3 are set forth in Section III of Appendix B. Duke shall use the data substitution procedures of 40 C.F.R. § 75.33(b) (for SO₂) and § 75.35 (for CO₂) for any missing data period for the duct CEMS required by this Consent Decree.

- 136. Nothing in this Consent Decree shall be construed as an obligation for Duke to operate Gallagher Units 1, 2, 3, or 4. However, even if Duke is not operating Gallagher Units 1, 2, 3, or 4, it shall still comply with all Consent Decree requirements pertaining to such Units.
- 137. If Duke seeks to obtain rate recovery for the work that is required by this Consent Decree, the Plaintiffs shall take no position regarding the appropriateness of such request.
- 138. This Consent Decree is not a permit. Compliance with the terms of this Consent Decree does not guarantee compliance with all applicable federal, state, or local laws or regulations. The limitations and requirements set forth herein do not relieve Duke from any obligation to comply with other state and federal requirements under any applicable laws.
- 139. This Consent Decree does not apply to any claim(s) of alleged criminal liability.

- 140. In any subsequent administrative or judicial action initiated by any of the Plaintiffs for injunctive relief or civil penalties relating to the Gallagher Plant, Duke shall not assert any defense or claim based upon principles of waiver, res judicata, collateral estoppel, issue preclusion, claim preclusion, or claim splitting, or any other defense based upon the contention that the claims raised by any of the Plaintiffs in the subsequent proceeding were brought, or should have been brought, in the instant case; provided, however, that nothing in this Paragraph affects the validity of Paragraph 76.
- 141. Except as specifically provided by this Consent Decree, nothing in this Consent Decree shall relieve Duke of its obligation to comply with all applicable federal, state, and local laws and regulations. Subject to the provisions in Section IX (Resolution of Civil Claims Against Duke), nothing contained in this Consent Decree shall be construed to prevent or limit the rights of the Plaintiffs to obtain penalties or injunctive relief under the Act or other federal, state, or local statutes, regulations, or permits.
- 142. Nothing in this Consent Decree is intended to, or shall, alter or waive any applicable law (including but not limited to any defenses, entitlements, challenges, or clarifications related to the Credible Evidence Rule, 62 Fed. Reg. 8314 (Feb. 24, 1997)) concerning the use of data for any purpose under the Act generated either by the reference methods specified herein or otherwise.
- 143. Each limit and/or other requirement established by or under this Consent Decree is a separate, independent requirement.
- 144. Performance standards, emissions limits, and other quantitative standards set by or under this Consent Decree must be met to the number of significant digits in which the standard or limit is expressed. For example, an Emission Rate of 1.10 is not

met if the actual Emission Rate is 1.11. Duke shall round the fourth significant digit to the nearest third significant digit. For example, if an actual Emission Rate is 1.104, that shall be reported as 1.10, and shall be in compliance with an Emission Rate of 1.10, and if an actual Emission Rate is 1.105, that shall be reported as 1.11, and shall not be in compliance with an Emission Rate of 1.10. Duke shall report data to the number of significant digits in which the standard or limit is expressed.

- 145. This Consent Decree does not limit, enlarge, or affect the rights of anyParty to this Consent Decree as against any third parties.
- agreement and understanding among the Parties with respect to the settlement embodied in this Consent Decree, and supersedes all prior agreements and understandings among the Parties related to the subject matter herein. No document, representation, inducement, agreement, understanding, or promise constitutes any part of this Consent Decree or the settlement it represents, nor shall they be used in construing the terms of this Consent Decree.
- 147. Except as provided below, each Party to this action shall bear its own costs and attorneys' fees. Duke shall reimburse the Citizen Plaintiffs' attorneys' fees and costs, pursuant to 42 U.S.C. § 7604(d), in the amount of \$150,000 within thirty (30) Days of the Date of Entry of this Consent Decree. Payment instructions shall be provided to Duke by the Citizen Plaintiffs within ten (10) days after the Date of Lodging.

XXIII. SIGNATORIES AND SERVICE

- 148. Each undersigned representative of the Parties certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind to this document the Party he or she represents.
- 149. This Consent Decree may be signed in counterparts, and such counterpart signature pages shall be given full force and effect.

XXIV. PUBLIC COMMENT

States and the entry of this Consent Decree is subject to the procedures of 28 C.F.R. § 50.7, which provides for notice of lodging of this Consent Decree in the Federal Register, an opportunity for public comment, and the right of the United States to withdraw or withhold consent if the comments disclose facts or considerations which indicate that the Consent Decree is inappropriate, improper, or inadequate. Duke shall not oppose entry of this Consent Decree by this Court or challenge any provision of this Consent Decree unless the United States has notified Duke, in writing, that the United States no longer supports entry of the Consent Decree.

XXV. CONDITIONAL TERMINATION OF ENFORCEMENT UNDER DECREE

- 151. <u>Termination as to Completed Tasks.</u> As soon as Duke completes a requirement of this Consent Decree that is not ongoing or recurring, Duke may, by motion to this Court, seek termination of the provision or provisions of this Consent Decree that imposed the requirement.
- 152. <u>Conditional Termination of Enforcement Through the Consent Decree.</u>

 Subject to the provisions of Paragraph 153, after Duke:

- a. has, for a period of three (3) years (i) successfully Repowered or Retired Gallagher Unit 1 and Unit 3 pursuant to Paragraph 49, and (ii) has successfully installed and commenced Continuous Operation of DSI at Gallagher Unit 2 and Unit 4 pursuant to Paragraphs 50 and 51; and
- b. has obtained final permits (i) as required by Paragraphs 111, 115, and 118 of this Consent Decree; (ii) that cover all Units in this Consent Decree; and (iii) that include as enforceable permit terms all Unit-specific and Gallagher Plant-specific performance, operational, maintenance, and control technology requirements established by this Consent Decree, the SO₂ Allowance Surrender requirements, and other requirements specified in this Consent Decree; then Duke may so certify these facts to the United States and this Court. If the United States does not object in writing with specific reasons within forty-five (45) Days of receipt of Duke's certification, then, for any Consent Decree violations that occur after the filing of notice, the Plaintiffs shall pursue enforcement through the applicable permit(s) and not through this Consent Decree.
- Paragraph 152, if enforcement of a provision in this Consent Decree cannot be pursued by Plaintiffs under the applicable permit(s) issued pursuant to the Clean Air Act or its implementing regulations ("CAA Permit"), or if a Consent Decree requirement was intended to be part of a CAA Permit and did not become or remain part of such permit, then such requirement may be enforced under the terms of this Consent Decree at any time.

XXVI. FINAL JUDGEMENT

154. Upon approval and entry of this Consent Decree by this Court, this					
Consent Decree shall constitute a final judgment among the Parties as to claims					
addressed by this Consent Decree, pursuant to Section IX (Resolution of Claims).					
SO ORDERED, THIS DAY OF, 2009.					
HONORABLE LARRY J. McKINNEY, JUDGE UNITED STATES DISTRICT COURT					
SOUTHERN DISTRICT OF INDIANA					

APPENDIX A ENVIRONMENTAL MITIGATION PROJECTS

In compliance with and in addition to the requirements in Section VIII of this Consent Decree (Environmental Mitigation Projects), Duke shall comply with the requirements of this Appendix to ensure that the benefits of the \$5,250,000 in federally directed Environmental Mitigation Projects ("Projects") are achieved.

I. Forest Service Mitigation

- A. Within forty-five (45) days from the Date of Entry, Duke shall pay to the United States Forest Service the sum of \$250,000 to be used in accordance with 16 U.S.C. § 579c, for the improvement, protection, or rehabilitation of lands under the administration of the Forest Service. The Forest Service Project(s) will focus on one or more of the following areas alleged by Plaintiffs in the underlying action to have been injured by emissions from the Gallagher Plant: Hoosier National Forest, Pisgah National Forest, Nanatahala National Forest, Cherokee National Forest, Jefferson National Forest, and Daniel Boone National Forest.
- B. Payment of the amount specified in the preceding paragraph shall be made to the Forest Service pursuant to payment instructions provided to Duke before or after the Date of Lodging. Notwithstanding Section I.A of this Appendix, payment of funds by Duke is not due until ten (10) days after receipt of payment instructions, or forty-five (45) days after the Date of Entry, whichever is later.
- C. Upon payment of the amount specified in Section I.A of this Appendix, Duke shall have no further responsibilities regarding the implementation of any Projects selected by the Forest Service in connection with this provision of the Consent Decree.

II. Additional Environmental Mitigation Projects

A. Within one hundred and twenty (120) days of the Date of Entry, as further described below, Duke shall submit proposed Project(s) plan(s) to EPA for review and approval pursuant to Section XI of the Consent Decree (Review and Approval of Submittals) for completing the remaining \$5 million in federally directed Projects over a period of not more than five (5) years from the Date of Entry, except as provided below. The Parties agree, subject to the requirements of this Appendix, that Duke may in its discretion decide which of the Projects specified in Sections III, IV, and V to propose for United States approval. Duke may, at its election, consolidate the plans required by this Appendix into a single plan.

APPENDIX A ENVIRONMENTAL MITIGATION PROJECTS

- B. The Parties agree that Duke is entitled to spread its payments for Environmental Mitigation Projects over the five-year period commencing upon the Date of Entry. Duke is not, however, precluded from accelerating payments to better effectuate a proposed mitigation plan, provided that Duke shall not be entitled to any reduction in the nominal amount of the required payments by virtue of the early expenditures. EPA shall determine prior to approval that all projects are consistent with federal law.
- C. All proposed Project plans shall include the following:
 - 1. A plan for implementing the Project;
 - 2. A summary-level budget for the Project;
 - 3. A time-line for implementation of the Project; and
 - 4. A description of the anticipated environmental benefits of the Project including an estimate of emission reductions (e.g., SO₂, NO_x, PM, CO₂) expected to be realized.
- D. Upon approval of the plan(s) required by this Appendix by the United States, Duke shall complete the approved Project(s) according to the approved plan(s). Nothing in this Consent Decree shall be interpreted to prohibit Duke from completing the Project(s) ahead of schedule.
- E. Duke shall spend no less than a total of \$5 million in Project Dollars on one or more of the Projects specified in Section III, IV, and V of this Appendix, in accordance with the approved plan(s) for such Project(s).
- F. Commencing with the first progress report due pursuant to Section X (Periodic Reporting) of the Consent Decree, and continuing annually thereafter until completion of the Project(s), Duke will include in the progress report information describing the progress of the Project and the Project Dollars expended on the Project.
- G. In accordance with the requirements of Paragraph 84, within sixty (60) days following the completion of each Project, Duke shall submit to the United States for approval (with a courtesy copy to the States and Citizen Plaintiffs), a report that documents:
 - 1. The date the Project was completed;
 - 2. The results of implementation of the Project, including the estimated emission reductions or other environmental benefits achieved; and
 - 3. The Project Dollars incurred by Duke in implementing the Project.

APPENDIX A ENVIRONMENTAL MITIGATION PROJECTS

- III. Acquisition and Restoration of Ecologically Significant Areas in Indiana, Kentucky, Ohio, Pennsylvania, West Virginia, or Virginia
 - A. Duke may submit a plan to EPA for acquisition and/or restoration of ecologically significant areas in Indiana, Kentucky, Ohio, Pennsylvania, West Virginia, or Virginia ("Land Acquisition and Restoration").
 - B. In addition to the requirements of Section II.C of this Appendix, the proposed plan shall:
 - 1. Describe the proposed Land Acquisition and Restoration projects in sufficient detail to allow the reader to ascertain how each proposed action meets the requirements set out below. For purposes of this Appendix and Section VIII of this Consent Decree (Environmental Mitigation Projects), land acquisition means purchase of interests in land, including fee ownership, easements, or other restrictions that run with the land that provide for perpetual protection of the acquired land. Restoration may include, by way of illustration, direct reforestation (particularly of tree species that may be affected by acidic deposition) and soil enhancement. Any restoration action must also incorporate the acquisition of an interest in the restored lands sufficient to ensure perpetual protection of the restored land. Any proposal for acquisition of land must identify fully all owners of the interests in the land. Every proposal for acquisition of land must identify the ultimate holder of the interests to be acquired and provide a basis for concluding that the proposed holder of title is appropriate for long-term protection of the ecological or environmental benefits sought to be achieved through the acquisition.
 - 2. Describe generally the ecological significance of the area to be acquired or restored. In particular, identify the environmental/ecological benefits expected as a result of the proposed action. In proposing areas for acquisition and restoration, Duke shall focus on those areas that are in most need of conservation action or that promise the greatest conservation return on investment.
 - 3. Describe the expected cost of the Land Acquisition and Restoration, including the fair market value of any areas to be acquired.
 - 4. Identify any person or entity other than Duke that will be involved in the

APPENDIX A ENVIRONMENTAL MITIGATION PROJECTS

land acquisition or restoration action. Duke shall describe the third-party's role in the action and the basis for asserting that such entity is able and suited to perform the intended role. For purposes of this Section of the Appendix, third-parties shall only include non-profits; federal, state, and local agencies; or universities. Any proposed third-party must be legally authorized to perform the proposed action or to receive Project Dollars.

5. Include a schedule for completing and funding each portion of the project.

IV. Hybrid Fleet Project

- A. Duke may submit a plan for a hybrid and/or electric fleet project to reduce emissions from Duke's fleet of motor vehicles. Duke has a substantial fleet of motor vehicles in the states where it operates, including vehicles in Indiana, Kentucky, and Ohio. These motor vehicles are generally powered by conventional diesel or gasoline engines and include vehicles such as diesel "bucket" trucks. The use of hybrid engine technologies in Duke's motor vehicles, such as diesel-electric engines, will improve fuel efficiency and reduce emissions of NO_X, PM, VOCs, and other air pollutants.
 - 1. As part of the plan for the Hybrid Fleet Project, Duke may elect to spend Project Dollars on the replacement of conventional motor vehicles in its fleet with newly manufactured hybrid and/or electric vehicles.
 - 2. In addition to the requirements of Section II.C of this Appendix, the proposed plan for the Hybrid Fleet Project shall:
 - a. Propose the replacement of convention diesel engines in bucket trucks or other mobile sources with hybrid or electric engines, and/or propose the replacement of portions of Duke's fleet (including cars, vans, and pickup trucks) in Indiana, Ohio, and/or Kentucky with hybrid and/or electric vehicles. For purposes of this subsection of this Appendix, "hybrid and/or electric vehicle" means a vehicle that can generate and/or utilize electric power to reduce the vehicle's consumption of diesel or gasoline fuel. Any such vehicle proposed for inclusion in the Hybrid Fleet Project shall meet all applicable engine standards, certifications, and/or verifications.
 - b. Propose a method to account for the amount of Project Dollars that will be credited for each replacement made under subparagraph (a)

APPENDIX A ENVIRONMENTAL MITIGATION PROJECTS

above, taking into account the incremental cost of such engines or vehicles as compare to conventional engines or vehicles and potential savings associated with the replacement;

- c. Prioritize the replacement of diesel-powered vehicles in Duke's fleet.
- d. Certify that Duke will use the Hybrid Vehicles for their useful life (as defined in the proposed Plan).
- B. Notwithstanding any other provision of this Consent Decree, including this Appendix, Duke shall only receive credit toward Project Dollars for the incremental cost of hybrid and/or electric vehicles as compared to the cost of a newly manufactured, similar motor vehicle.

V. Markland Hydro Station Upgrade Project

- Duke may propose the Markland Hydroelectric Generation Station ("Markland A. Station") Upgrade Project. The Markland Station is an 81 MW gross capacity plant located on the site of a U.S. Army Corps of Engineers' lock and dam project along the Ohio River in Switzerland County, Indiana. The Markland Station was constructed in the 1960's. The Markland Station Upgrade Project is designed to significantly modernize the complete plant by replacing the three identical turbine runners with larger more efficient runners and spherical hub systems. Replacing the turbine runners with more advanced technology will provide additional capacity at the plant, while using existing water flow volume more efficiently. and at the same time improve the dissolved oxygen levels. Additional megawatt output will be achieved with a wider spherical discharge ring for each unit and modern hydraulically matched blade designs for the turbine runners. The modernization of the design of the units at Markland Station will allow for additional output using existing available renewable resources, and is expected to increase the gross generating capacity by as much as 16 megawatts. However, a specific increase in megawatt output is not guaranteed. The uprating of the megawatt capacity of the Markland Station's three turbine generators is expected to offset fossil fuel generation, thereby reducing emissions of SO₂, NO_X, PM, and other air pollutants.
- B. This Project shall use \$5 million in Project Dollars. These Project Dollars will act as seed funding for the entire Project, which is expected to cost significantly more. For purposes of this Consent Decree, this Project includes the work necessary to increase the output of the dam, not other work that may be necessary

APPENDIX A ENVIRONMENTAL MITIGATION PROJECTS

to maintain the existing equipment or output. However, other such work may be performed by Duke along with the work required by this Project, in which case Duke shall not count its expenditures for any other such work as Project Dollars. The total expected cost of the Project work required to increase the output of the dam is expected to be on the order of several tens of millions of dollars.

- C. Notwithstanding Paragraph 69 of this Consent Decree, nothing in this Consent Decree or Appendix shall prevent Duke from using the Markland Station Upgrade Project to satisfy capacity reserve or other similar requirements that it may have, including but not limited to obligations imposed by a regional transmission operator such as the Midwest Independent Transmission System Operator. Furthermore, for purposes of the last clause of Paragraph 69 of the Consent Decree only, (*i.e.*, "Duke will not use any Project, or portion thereof, to satisfy any obligations that it may have under other applicable requirements of law as of the date of approval of the Project"), the Project shall be construed as including the equipment and/or work funded by the expenditure of up to \$5 million in Project Dollars only.
- D. Notwithstanding any other provision of the Consent Decree or this Appendix, the cost of the Markland Station Upgrade Project shall be deemed to satisfy up to \$5 million of the federally directed Environmental Mitigation Projects specified in this Appendix, provided that Duke completes the Project within seven (7) years from the Date of Entry of this Consent Decree.

APPENDIX B

MONITORING REQUIREMENTS AND EMISSION LIMITATION CALCULATIONS

I. Monitoring Requirements

- 1. Duke shall install CEMS as defined in Paragraph 5 of the Consent Decree at each of the Gallagher Units 1 through 4. The CEMS shall include at least one SO₂ pollutant concentration monitor and one diluent monitor (CO₂) at each of the Gallagher Units 1 through 4. The SO₂ and diluent monitors shall be installed in the outlet ductwork of the baghouses for each Unit. Duke shall continue the use and operation of the Part 75 continuous emissions monitors in the two common stacks at the Gallagher Facility as required by 40 C.F. R Part 75.
- 2. Duke represents that it believes it would be unable to certify flow rate monitors pursuant to 40 C.F.R. Part 75 in the outlet ductwork of the baghouses of each Unit prior to the common stacks.
- 3. Duke shall comply with the following requirements for purposes of monitoring Unit-specific SO₂ emission rates from Gallagher Units 1 through 4:
 - a. Duke shall install, calibrate, certify and maintain the CEMS required by this Appendix pursuant to the procedures specified in 40 C.F.R. Part 60, Appendix B, Performance Specification 2 for SO₂. Duke shall certify the CEMS in accordance with Performance Specification 2. Seven day drift tests shall be conducted in accordance with Performance Specification 2 at loads of at least 50% capacity, and the relative accuracy test audit ("RATA") shall be conducted at a single load of at least 80% capacity. Duke shall conduct a performance evaluation to certify such CEMS by no later than December 1, 2010. Duke shall provide the United States with a copy of the written results of the performance evaluation certification tests pursuant to Section X (Periodic Reporting) within 30 Days of completion of such tests.
 - b. Duke shall perform daily zero and span checks in accordance with 40 C.F.R. § 60.13(d) and shall operate the CEMS in accordance with 40 C.F.R. 60.13(e).
 - c. Duke shall perform, and comply with, the Quality Assurance Procedures of 40 C.F.R. Part 60, Appendix F, including all annual and quarterly testing. Duke shall conduct each RATA at the load specified in Paragraph 3.a, above.

- d. Duke shall determine the SO₂ emission rate in lb/mmBTU as provided in 40 C.F.R. § 60.46(d) and 40 C.F.R. Part 60, Appendix A, Method 19.
- e. "Diluent capping" (i.e., 5% CO₂) will be applied to the SO₂ emission rate for any hours where the measured CO₂ concentration is less than 5% following the procedures in 40 C.F.R. Part 75, Appendix F, Section 3.3.4.1.
- f. Results of quality assurance testing, data gathered by the CEMS, and the resultant 30-day Rolling Average Emission Rates for Gallagher Units 1-4 are not required to be reported in the quarterly reports submitted to EPA's Clean Air Markets Division for purposes of 40 C.F.R. Part 75. Results will be maintained at the facility and available for inspection, and the 30-day Rolling Average Emission Rate will be reported in accordance with the requirements of the Consent Decree and Appendix B. Equivalent data retention and reporting requirements will be incorporated into the applicable permits for these Units.
- g. Missing Data Substitution of 40 C.F.R § 75.33(b) for (SO₂) and § 75.35 (for CO₂) will be implemented as required by Paragraph 135 of the Consent Decree.

II. Calculation of 30-Day Rolling Average Emission Rate

1. Outlet emission rates shall be calculated using the methodology specified in 40 C.F.R. Part 60 Appendix A, Method 19. Outlet emission rates will be based on the average of the valid recorded values calculated at each Unit, and calculated as follows:

Emission rate (lb $SO_2/mmBtu$) = 1.660 x $10^{-7} * SO_2$ (in ppm) * Fc * 100 / CO_2 (in %)

2. The electronic data system must calculate the SO₂ and CO₂ values required by the equation in Section II, Paragraph 1 on an hourly basis as follows: The CEMS shall collect data once a second and such one-second readings shall be used to develop sixty-second averages which shall then be used to develop one-hour averages. Prior to the calculation of the SO₂ emission rate, hourly SO₂ and CO₂ readings will be rounded to the nearest tenth (<u>i.e.</u>, 0.1 ppm or 0.1 % CO₂) and the resulting SO₂ emission rate will be rounded to the nearest thousandth (<u>i.e.</u>, 0.001 lb/mmBTU) as provided in the Consent Decree. Duke must retain all sixty-second average SO₂ and CO₂ readings in accordance with 40 C.F.R. § 60.7(f).

3. From these hourly SO₂ emission rates, Duke shall comply with Paragraph 5 of the Consent Decree to calculate the applicable 30-Day Rolling Average Emission Rate for each Unit.

III. Calculation of Annual Tons of SO₂ Emissions for Compliance With The Annual SO₂ Tonnage Limitation for Gallagher Unit 1 and Unit 3

The equations for determining the annual number of tons of SO₂ from Gallagher Unit 1 and Unit 3 shall be as follows:

a. From 40 C.F.R. Part 75, Appendix F, equation F-15 (already calculated and reported under Part 75):

Stack total heat input mmBTU/hr = Volumetric Flow scfh x (1/Fc) * % CO₂ / 100

b. From 40 C.F.R. Part 75, Appendix F, Equation F-21a (already calculated and reported under Part 75):

Unit level heat input = Stack total heat input x (TOL_{cs} / TOL_{unit}) x (($MW_{unit} x TOL_{unit}$) / (sum of all ($MW_{unit} x TOL_{unit}$))

c. From 40 C.F.R. Part 75, Appendix F, Equation F-24a (adapt the equation by substituting SO₂ lb/mmBTU from the duct SO₂ CEMS for NO_x lb/mmBTU in the equation. Use unit level heat input in the equation):

SO₂ lb/hr = duct SO₂ lb/mmBTU x unit level heat input mmBTU/hr

d. From 40 C.F.R. Part 75, Appendix F, Equation F-24 (adapt the equation by substituting SO_2 lb/hr, from Equation F-24a, for NO_x lb/hr):

 $SO_2 lb = SO_2 lb/hr \times TOL_{unit}$

e. To calculate tons of SO_2 :

Total SO_2 tons = sum of hourly SO_2 lb values / 2000

UNITED STATES DISTRICT COURT EASTERN DISTRICT OF KENTUCKY CENTRAL DIVISION LEXINGTON

UNITED STATES OF AMERICA)
Plaintiff,)
v.	Civil Action No. 04-34-KSF
EAST KENTUCKY POWER COOPERATIVE, INC.,)))
Defendant.)
)

CONSENT DECREE

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WHEREAS, the United States of America ("the United States"), on behalf of the United States Environmental Protection Agency ("EPA"), filed a Complaint against East Kentucky Power Cooperative, Inc. ("EKPC") pursuant to Sections 113(b) and 167 of the Clean Air Act (the "Act"), 42 U.S.C. §§ 7413(b) and 7477, for injunctive relief and civil penalties for alleged violations of:

- (a) the Prevention of Significant Deterioration provisions in Part C of Subchapter I of the Act, 42 U.S.C. §§ 7470-92;
- (b) the New Source Performance Standards ("NSPS") 42 U.S.C. § 7411;
- (c) Title V of the Act, 42 U.S.C. § 7661 *et seq.*;
- (d) the federally-enforceable State Implementation Plan ("SIP") developed by the Commonwealth of Kentucky; and

WHEREAS, in its Complaint, Plaintiff alleges, *inter alia*, that EKPC failed to obtain the necessary permits and install the controls necessary under the Act to reduce its sulfur dioxide, nitrogen oxides, and/or particulate matter emissions, and that EKPC violated various operating permit conditions;

WHEREAS, the Complaint alleges claims upon which relief can be granted against EKPC under Sections 113 and 167 of the Act, 42 U.S.C. §§ 7413 and 7477, and 28 U.S.C. § 1355;

WHEREAS, EKPC, a rural electric cooperative based in Winchester, Kentucky, has answered the Complaint filed by the United States;

WHEREAS EKPC has denied and continues to deny the violations alleged in the NOVs and the Complaint; maintains that it has been and remains in compliance with the Act and is not liable for civil penalties or injunctive relief; and states that it is agreeing to the obligations

imposed by this Decree solely to avoid the costs and uncertainties of litigation and to improve the environment;

WHEREAS, EPA provided EKPC and the Commonwealth of Kentucky with actual notices of violations pertaining to EKPC's alleged violations, in accordance with Section 113(a)(1) and (b) of the Act, 42 U.S.C. § 7413(a)(1) and (b);

WHEREAS, the Parties anticipate that the installation and operation of pollution control equipment pursuant to this Consent Decree will achieve significant reductions in SO₂, NO_x and PM emissions and thereby improve air quality;

WHEREAS, the United States and EKPC have agreed, and the Court by entering this Consent Decree finds: that this Consent Decree has been negotiated in good faith and at arms length; that this settlement is fair, reasonable, consistent with the goals of the Act, in the best interest of the Parties and in the public interest; and that entry of this Consent Decree without further litigation is the most appropriate means of resolving this matter;

and

WHEREAS, the United States and EKPC have consented to entry of this Consent Decree without trial of any issue;

NOW, THEREFORE, without any admission of fact or law, and without any admission of the violations alleged in the Complaint, notices of violations and otherwise; it is hereby ORDERED, ADJUDGED, AND DECREED as follows:

I. JURISDICTION AND VENUE

1. This Court has jurisdiction over this action, the subject matter herein, and the Parties consenting hereto, pursuant to 28 U.S.C. §§ 1331, 1345, and 1355, and Sections 113 and 167 of the Act, 42 U.S.C. §§ 7413 and 7477. Venue is proper under Section 113(b) of the Act,

42 U.S.C. § 7413(b), and under 28 U.S.C. § 1391(b) and (c). Solely for the purposes of this Consent Decree and the underlying Complaint, EKPC waives all objections and defenses that it may have to the Court's jurisdiction over this action, to the Court's jurisdiction over EKPC, and to venue in this District. EKPC shall not challenge the terms of this Consent Decree or this Court's jurisdiction to enter and enforce this Consent Decree. For purposes of the Complaint filed by the United States in this matter and resolved by the Consent Decree, and for purposes of entry and enforcement of this Consent Decree, EKPC waives any defense or objection based on standing. Except as expressly provided for herein, this Consent Decree shall not create any rights in any party other than the United States and EKPC. Except as provided in Section XXVI (Public Comment) of this Consent Decree, the Parties consent to entry of this Consent Decree without further notice.

II. APPLICABILITY

- 2. Upon entry, the provisions of this Consent Decree shall apply to and be binding upon the United States and EKPC, its successors and assigns, and EKPC's officers, employees, and agents solely in their capacities as such.
- 3. EKPC shall provide a copy of this Consent Decree to all vendors, suppliers, consultants, contractors, agents, and any other company or other organization retained to perform any of the work required by this Consent Decree. Notwithstanding any retention of contractors, subcontractors, or agents to perform any work required under this Consent Decree, EKPC shall be responsible for ensuring that all work is performed in accordance with the requirements of this Consent Decree. In any action to enforce this Consent Decree, EKPC shall not assert as a defense the failure of its officers, directors, employees, servants, agents, or contractors to take actions necessary to comply with this Consent Decree, unless EKPC establishes that such failure resulted from a Force Majeure Event, as defined in Paragraph 143 of this Consent Decree.

III. DEFINITIONS

- 4. A "1-Hour Average NO_x Emission Rate" for a gas-fired, electric generating unit shall be expressed as the average concentration in parts per million ("ppm") by dry volume, corrected to 15% O₂, as averaged over one (1) hour. In determining the 1-Hour Average NO_x Emission Rate, EKPC shall use CEMS in accordance with the applicable reference methods specified in 40 C.F.R. Part 60 to calculate emissions for each 15 minute interval within each clock hour, except as provided in this Paragraph. Compliance with the 1-Hour Average NO_x Emission Rate shall be shown by averaging all 15-minute CEMS interval readings within a clock hour, except that any 15-minute CEMS interval that contains any part of a Start-up or Shut Down shall not be included in the calculation of that one-hour average. A minimum of two 15-minute CEMS interval readings within a clock hour, not including Start-up or Shut-Down intervals, is required to determine compliance with the 1-Hour Average NO_x Emission Rate. All emissions recorded by CEMS shall be reported in one hour averages.
- 5. A "30-Day Rolling Average Emission Rate" for a Unit or "Combined 30-Day Rolling Average Emission Rate" for the Spurlock Plant shall be expressed as lb/mmBTU and calculated in accordance with the following procedure: first, sum the total pounds of the pollutant in question emitted from the Unit (in the case of a 30-Day Rolling Average Emission Rate) or the Spurlock Plant (in the case of a Combined 30-Day Rolling Average Emission Rate) during an Operating Day and the previous twenty-nine (29) Operating Days; second, sum the total heat input to the Unit (in the case of a 30-Day Rolling Average Emission Rate) or the Spurlock Plant (in the case of a Combined 30-Day Rolling Average Emission Rate) in mmBTU during the Operating Day and the previous twenty-nine (29) Operating Days; and third, divide the total number of pounds of the pollutant emitted during the thirty (30) Operating Days by the total heat input during the thirty (30) Operating Days. A new 30-Day Rolling Average Emission Rate shall be calculated for each new Operating Day. A new Combined 30-Day Rolling

Average Emission Rate shall be calculated for each new Operating Day during which both Spurlock 1 and Spurlock 2 fire Fossil Fuel. Each 30-Day Rolling Average Emission Rate and Combined 30-Day Rolling Average Emission Rate shall include all emissions that occur during all periods of start-up, shutdown and Malfunction within an Operating Day, except as follows:

- a. For emissions of NO_x from Spurlock 1 only, EKPC shall include all emissions commencing from the time Spurlock 1 is synchronized with a utility electric distribution system through the time that Spurlock 1 ceases to combust fossil fuel and the fire is out in the boiler;
- Emissions of NO_x that occur during the fifth and subsequent Cold Start Up b. Period(s) that occur in any 30-day period shall be excluded from the calculation of the 30-Day Rolling Average Emission Rate and Combined 30-Day Rolling Average Emission Rate if inclusion of such emissions would result in a violation of any applicable 30-Day Rolling Average Emission Rate or Combined 30-Day Rolling Average Emission Rate, and if EKPC has installed, operated and maintained the SCR in question in accordance with manufacturers' specifications and good engineering practices. A "Cold Start Up Period" occurs whenever there has been no fire in the boiler of a Unit (no combustion of any fossil fuel) for a period of six hours or more. The emissions to be excluded during the fifth and subsequent Cold Start Up Period(s) shall be the less of (1) those NO_x emissions emitted during the eight hour period commencing when the Unit is synchronized with a utility electric distribution system and concluding eight hours later or (2) those emitted prior to the time that the flue gas has achieved the minimum SCR operational temperature as specified by the catalyst manufacturer;
- c. For Cold Start Up Periods that occur at Spurlock 1 prior to April 1, 2008, emissions of NO_x that occur during the first and second Cold Start Up Period(s)

- that occur in any 30-day period shall also be excluded from the calculation of the 30-Day Rolling Average Emission Rate and Combined 30-Day Rolling Average Emission Rate under the same terms and conditions as provided in Subparagraph b; and
- d. Emissions that occur during a period of Malfunction shall be excluded from the calculation of the 30-Day Rolling Average Emission Rate and Combined 30-Day Rolling Average Emission Rate if EKPC provides notice of the Malfunction to EPA and takes all reasonable measures to minimize the duration of such Malfunction and prevent the recurrence of such Malfunctions in the future, in accordance with Paragraph 152 (Malfunction Events) of this Consent Decree.
- 6. "30-Day Rolling Average SO₂ Removal Efficiency" means the percent reduction in the mass of SO₂ achieved by a Unit's pollution control device over a 30-Operating Day period. This percent reduction shall be calculated by subtracting the outlet 30-Day Rolling Average Emission Rate from the inlet 30-Day Rolling Average Emission Rate, dividing that difference by the inlet 30-Day Rolling Average Emission Rate, and then multiplying by 100. In the event the 30-Day Rolling Average SO₂ Removal Efficiency does not meet the requirements of this consent decree, a 30-Day Rolling Average SO₂ emission rate of 0.100 lb/mmBTU or less shall satisfy the removal efficiency requirement. A new 30-Day Rolling Average SO₂ Removal Efficiency shall be calculated for each new Operating Day. EKPC may exclude Malfunctions from the calculation of a 30-Day Rolling Average SO₂ Removal Efficiency only to the extent that such Malfunctions have been excluded from the underlying 30-Day Rolling Average Emission Rates.

- 7. "Boiler Island" means a Unit's (A) fuel combustion system (including bunker, coal pulverizers, crusher, stoker, and fuel burners); (B) combustion air system; (C) steam generating system (firebox, boiler tubes, and walls); and (D) draft system (excluding the stack), all as further described in "Interpretation of Reconstruction," by John B. Rasnic, U.S. EPA (November 25, 1986) and attachments thereto.
- 8. "Capital Expenditure" means all capital expenditures, as defined by Generally Accepted Accounting Principles ("GAAP"), excluding the cost of installing or upgrading pollution control devices.
- 9. "CEMS" or "Continuous Emission Monitoring System" means, for obligations involving NO_x and SO_2 under this Consent Decree, the devices defined in 40 C.F.R. § 72.2 and installed and maintained as required by 40 C.F.R. Part 75.
- 10. "Clean Air Act" or "Act" means the federal Clean Air Act, 42 U.S.C. §§7401-7671q, and its implementing regulations.
- 11. "Consent Decree" or "Decree" means this Consent Decree and the Appendix hereto, which is incorporated into this Consent Decree.
- 12. "Cooper Plant" means the John Sherman Cooper Power Station located near Somerset, Kentucky, consisting of the following coal-fired Units: Unit 1 (124 MW) ("Cooper 1") and Unit 2 (240 MW) ("Cooper 2").
- 13. "Dale Plant" means Unit 3 (80 MW) ("Dale 3") and Unit 4 (80 MW) ("Dale 4") (and shall exclude Units 1 and 2) of the William C. Dale Power Station, located near Winchester, Kentucky.

- 14. "EKPC System" means, collectively, the Spurlock Plant, Cooper Plant, and Dale Plant.
 - 15. "EKPC System Unit" means a unit included in the EKPC System.
- 16. "Emission Rate" means the number of pounds of pollutant emitted per million BTU of heat input ("lb/mmBTU") or the average concentration of pollutant in parts per million by dry volume ("ppm") corrected to 15% O₂, measured in accordance with this Consent Decree.
 - 17. "EPA" means the United States Environmental Protection Agency.
- 18. "Flue Gas Desulfurization System," or "FGD," means a pollution control device that employs flue gas desulfurization technology for the reduction of sulfur dioxide.
- 19. "Fossil Fuel" means any hydrocarbon fuel, including coal, petroleum coke, petroleum oil, or natural gas.
- 20. "Improved Unit" means, in the case of NO_x, an EKPC System Unit scheduled to begin year-round operation of SCR technology pursuant to Paragraph 52, or, following EKPC's election pursuant to Paragraph 50, scheduled to be retired or equipped with SCR (or equivalent NO_x control technology approved pursuant to Paragraph 54). In the case of SO₂, "Improved Unit" means an EKPC System Unit scheduled to be equipped with an FGD pursuant to Paragraph 64 (or equivalent SO₂ control technology approved pursuant to Paragraph 66) or, following EKPC's election pursuant to Paragraph 50, scheduled to be retired or equipped with FGD (or equivalent SO₂ control technology approved pursuant to Paragraph 66). Following EKPC's election pursuant to Paragraph 50, either, but not both, of (1) Cooper Unit 2, or (2) Dale Units 3 and 4, may be considered "Improved Units." Neither (1) Cooper Unit 2 nor (2) Dale

Units 3 and 4 shall be considered an "Improved Unit" unless and until an election is made pursuant to Paragraph 50.

- 21. "lb/mmBTU" means one pound of a pollutant per million British thermal units of heat input.
 - 22. "Malfunction" means malfunction as that term is defined under 40 C.F.R.§ 60.2.
 - 23. "MCR" means maximum continuous rating.
 - 24. "MW" means a megawatt or one million Watts.
- 25. "National Ambient Air Quality Standards" or "NAAQS" means national ambient air quality standards that are promulgated pursuant to Section 109 of the Act, 42 U.S.C. § 7409.
- 26. "New Units" means the following coal-fired circulating fluidized bed ("CFB") Units that commenced operation after the filing of the Complaint in this action and/or commence operation after entry of this Consent Decree and are owned all or in part by EKPC: Spurlock Unit 3 (305 MW), Spurlock Unit 4 (315 MW), Smith Unit 1 (315 MW) and Smith Unit 2 (315 MW).
- 27. "NO_x" means oxides of nitrogen, measured in accordance with the provisions of this Consent Decree.
- 28. "Nonattainment NSR" means the nonattainment area New Source Review program under Part D of Subchapter I of the Act, 42 U.S.C. §§ 7501-7515, 40 C.F.R. Part 51.
- 29. "NSPS" means New Source Performance Standards within the meaning of Part A of Subchapter I, of the Clean Air Act, 42 U.S.C. § 7411, 40 C.F.R. Part 60.

- 30. "Operating Day" means any calendar day on which a Unit fires Fossil Fuel.
- 31. "Other Unit" means any EKPC System Unit that is not an Improved Unit for the pollutant in question.
- 32. "Ownership Interest" means all or part of EKPC's legal or equitable interest in any EKPC System Unit.
- 33. "Parties" means EKPC and the United States of America, and "Party" means either one of the two named "Parties."
 - 34. "Permitting State" means the Commonwealth of Kentucky.
 - 35. "Plaintiff" means the United States of America.
- 36. "Pollution Control Upgrade Analysis" means the technical study, analysis, review, and selection of control technology recommendations (including an emission rate or removal efficiency) identical to that which would be performed in connection with an application for a federal PSD permit, taking into account the characteristics of the existing facility. Except as otherwise provided in this Consent Decree, such study, analysis, review, and selection of recommendations shall be carried out in accordance with applicable federal and state regulations and guidance describing the process and analysis for determining Best Available Control Technology (BACT), as that term is defined in 40 C.F.R. §52.21(b)(12), including, without limitation, the December 1, 1987 EPA Memorandum from J. Craig Potter, Assistant Administrator for Air and Radiation, regarding Improving New Source Review (NSR) Implementation. Nothing in this Decree shall be construed either to: (A) alter the force and effect of statements known as or characterized as "guidance" or (B) permit the process or result

of a "Pollution Control Upgrade Analysis" to be considered BACT for any purpose under the Act.

- 37. "PM" means particulate matter, measured in accordance with the provisions of this Consent Decree.
- 38. "PM CEMS," "Mercury CEMS," "PM Continuous Emission Monitoring System," or "Mercury Continuous Emission Monitoring System" means, as specified in Section VII.C (PM and Mercury Monitoring) of this Consent Decree, the equipment that samples, analyzes, measures, and provides, by readings taken at frequent intervals, an electronic or paper record of PM or Mercury emissions.
- 39. "PM Control Device" means an electrostatic precipitator ("ESP") or a baghouse ("BH") or any other device which reduces emissions of particulate matter (PM).
- 40. "PM Emission Rate" means the number of pounds of PM emitted per million BTU of heat input (lb/mmBTU), as measured in annual (or biennial) stack tests in accordance with the reference method set forth in 40 C.F.R. Part 60, App. A, Method 5 (filterable portion only).
- 41. "PSD" means Prevention of Significant Deterioration within the meaning of Part C of Subchapter I of the Clean Air Act, 42 U.S.C. §§ 7470 7492 and 40 C.F.R. Part 52.
- 42. "Re-power" shall mean either (1) the replacement of an existing pulverized coal boiler through the construction of a new circulating fluidized bed ("CFB") boiler or other clean coal technology of equivalent environmental performance that at a minimum achieves and maintains a 30-Day Rolling Average Emission Rate not greater than 0.100 lb/mmBTU for SO₂ or a 30-Day Rolling Average SO₂ Removal Efficiency of at least ninety-five percent (95%); a 30-

Day Rolling Average Emission Rate not greater than 0.070 lb/mmBTU for NO_x, and a PM Emission Rate not greater than 0.015 lb/mmBTU; or (2) the modification of a Unit, or removal and replacement of Unit components, such that the modified or replaced Unit generates electricity through the use of new combined cycle combustion turbine technology fueled by natural gas containing no more than 0.5 grains of sulfur per 100 standard cubic feet of natural gas, and at a minimum achieves and maintains a 1-Hour Average NO_x Emission Rate not greater than 2.0 ppm.

- 43. "Selective Catalytic Reduction System" or "SCR" means a pollution control device that employs selective catalytic reduction technology for the reduction of NO_x emissions.
- 44. "SO₂" means sulfur dioxide, measured in accordance with the provisions of this Consent Decree.
- 45. "SO₂ Allowance" means "allowance" as defined at 42 U.S.C. § 7651a(3): "an authorization, allocated to an affected unit by the Administrator [of EPA] under [Subchapter IV of the Act], to emit, during or after a specified calendar year, one ton of sulfur dioxide."
- 46. "Spurlock Plant" means the Spurlock Power Station located near Maysville, Kentucky, consisting of the following coal-fired cogeneration Units: Unit 1 (344 MW) ("Spurlock 1") and Unit 2 (555 MW) ("Spurlock 2"). Spurlock 1 and 2 are each configured to supply thermal energy to an adjacent box manufacturing plant.
- 47. "System-Wide 12-Month Rolling Tonnage" means the sum of the tons of the pollutant in question emitted from the EKPC System in the most recent complete month and the previous eleven (11) months. A new System-Wide 12-Month Rolling Tonnage shall be calculated for each new complete month in accordance with the provisions of this Consent

Decree. The calculation of each System-Wide 12-Month Rolling Tonnage shall include the pollutants emitted during periods of startup, shutdown, and Malfunction within each calendar month, except as otherwise provided by the Force Majeure provisions of this Consent Decree.

- 48. "Title V Permit" means the permit required of EKPC's major sources under Subchapter V of the Act, 42 U.S.C. §§ 7661-7661e.
- 49. "Unit" means, solely for the purposes of this Consent Decree, collectively, the coal pulverizer, stationary equipment that feeds coal to the boiler, the boiler that produces steam for the steam turbine, the steam turbine, the generator, the equipment necessary to operate the generator, steam turbine and boiler, and all ancillary equipment, including pollution control equipment and systems necessary for the production of electricity.

IV. ELECTION TO EITHER INSTALL EMISSION CONTROLS AT COOPER 2 OR RETIRE OR RE-POWER DALE 3 AND 4

No later than December 31, 2009, EKPC shall elect in writing to Plaintiff to either (1) install and continuously operate NO_x emission controls at Cooper 2 by December 31, 2012, and SO₂ emissions controls by June 30, 2012, as required in Paragraphs 53 and 65, or (2) retire and permanently cease to operate Dale 3 and 4 by December 31, 2012. Should EKPC retire and cease to operate Dale 3 and 4 pursuant to Option (2), EKPC may resume operation of such Units only if EKPC first Re-powers the Units pursuant to Paragraph 42 of this Decree, commences commercial operation of such Re-powered Units by May 31, 2014, and thereafter continues to operate in compliance with the rates set forth in Paragraph 42. Should EKPC choose to Re-power Dale Units 3 and 4, EKPC shall timely apply for a preconstruction permit from the Permitting State under 401 Ky. Admin. Reg. 51:017 prior to commencing such Re-powering. In applying for such permit EKPC shall seek, as part of the permit, provisions requiring Emission Rates no greater than those set forth in Paragraph 42.

V. NO_x EMISSION REDUCTIONS AND CONTROLS

A. NO_x Emission Controls

- 51. Beginning 60 days after entry of this Consent decree, and continuing until December 31, 2012, EKPC shall operate year-round the SCR technology on Spurlock 1 and Spurlock 2 to achieve and maintain the Emission Rates required by this Paragraph. EKPC shall operate year-round the SCR technology on Spurlock 1 so as to achieve and maintain a 30-Day Rolling Average Emission Rate for NO_x not greater than 0.120 lb/mmBTU. EKPC shall operate year-round the SCR technology on Spurlock 2 so as to achieve and maintain a 30-Day Rolling Average Emission Rate for NO_x not greater than 0.100 lb/mmBTU. During periods when both Spurlock 1 and Spurlock 2 are operating, EKPC shall operate the SCR technology on both Spurlock 1 and 2 so as to achieve and maintain a Combined 30-Day Rolling Average Emission Rate for those two Units for NO_x not greater than 0.100 lb/mmBTU.
- 52. Beginning on January 1, 2013, and continuing thereafter, EKPC shall operate year-round the SCR technology on Spurlock 1 and 2 so as to achieve and maintain a NO_x 30-Day Rolling Average Emission Rate not greater than 0.100 lb/mmBTU for each Unit.
- 53. Pursuant to Paragraph 50, if EKPC elects to install and continuously operate emission controls at Cooper 2, then beginning on December 31, 2012, EKPC shall install and commence continuous operation of year-round SCR technology on Cooper 2 (or equivalent NO_x control technology approved pursuant to Paragraph 54) so as to achieve, and thereafter maintain, a NO_x 30-Day Rolling Average Emission Rate not greater than 0.080 lb/mmBTU.
- 54. With prior written notice to and written approval from EPA, EKPC may, in lieu of installing and operating an SCR at Cooper 2, install and operate equivalent NO_x control technology so long as such equivalent NO_x control technology is designed for at least a 90%

removal efficiency for NO_x and achieves and thereafter maintains a 30-Day Rolling Average Emission Rate no less stringent than 0.080 lb/mmBTU NO_x.

- 55. In accordance with the dates prescribed in Paragraphs 51, 52, and 53, EKPC shall continuously operate each SCR (or equivalent NO_x control technology approved pursuant to Paragraph 54) at all times that the Unit it serves is in operation, consistent with the technological limitations, manufacturers' specifications, and good engineering and maintenance practices for the SCR or equivalent technology, for minimizing emissions to the extent practicable.
- 56. Beginning 30 days from entry of this Consent Decree, EKPC shall also operate low NO_x burners ("LNB") on all of the units within the EKPC System and over-fire air on Spurlock Unit 2 at all times that the units are in operation.
 - B. System-Wide NO_x Emission Limits
- 57. EKPC shall comply with the following System-Wide 12-Month Rolling Tonnage limitations for NO_x, which apply to all EKPC System Units collectively:

For the 12-Month Period Commencing on the Date Specified Below, and Each 12-Month Period Thereafter:	System-wide 12-Month Rolling Tonnage Limitation for NO_x
January 1, 2008	11,500 tons
January 1, 2013	8,500 tons
January 1, 2015	8,000 tons

58. The system-wide annual emissions limits for NO_x set forth in Paragraph 57 shall apply prospectively from the specified date on which a 12-month period commences, that is compliance with the cap shall first be determined 12 months following the commencement date

specified above, and shall end on the date that the subsequent system-wide limit, if any, takes effect. EKPC may not use NO_x Allowances to comply with these system-wide limitations.

- C. <u>Use of NO_x Allowances</u>
- 59. Except as provided in this Consent Decree, EKPC shall not sell or trade any NO_x Allowances allocated to the EKPC System that would otherwise be available for sale or trade as a result of the actions taken by EKPC to comply with the requirements of this Consent Decree.
- 60. Except as provided in this Consent Decree, NO_x Allowances allocated to the EKPC System may be used by EKPC only to meet its own federal and/or State Clean Air Act regulatory requirements for any EKPC System Unit or New Unit.
- 61. Provided that EKPC is in compliance with the system-wide NO_x emission limitations of this Consent Decree, nothing in this Consent Decree shall preclude EKPC from selling or transferring NO_x Allowances allocated to the EKPC System that become available for sale or trade as a result of:
 - a. activities that reduce NO_x emissions at any EKPC System Unit prior to the date of entry of this Consent Decree;
 - b. the installation and operation of any NO_x pollution control technology or technique that is not otherwise required under this Consent Decree;
 - c. achievement and maintenance of NO_x emission rates below both (1) a NO_x

 30-Day Rolling Average Emission Rate of 0.100 lb/mmBTU (for Spurlock 1 and
 2) or 0.080 lb/mmBTU (for Cooper 2) and (2) the NO_x Combined 30-Day Rolling

 Average Emission Rate of 0.100 lb/mmBTU established by this Consent Decree;

 provided, however, that any achievement and maintenance of NO_x emission rates

- resulting from the use of Subparagraph 5.c shall not be sold, traded or used by EKPC;
- d. permanent shutdown or repowering of any EKPC System Unit not otherwise required by this Consent Decree;
- e. a fuel change at a Unit that results in an emission reduction, provided that the
 emission reduction is made enforceable through modification of this Consent
 Decree; or
- f. other emission reduction measures that are agreed to by the Parties and made enforceable through modification of this Consent Decree,

so long as EKPC timely reports the generation of such surplus NO_x Allowances in accordance with Section XII (Periodic Reporting) of this Consent Decree. EKPC shall be allowed to sell or transfer NO_x Allowances equal to the NO_x emissions reductions achieved for any given year by any of the actions specified in Subparagraphs 61.b. through 61.f. only to the extent that the total NO_x emissions from all EKPC System Units are below the System-Wide 12-Month Rolling Tonnage limitation for that year.

62. EKPC may not purchase or otherwise obtain NO_x Allowances from another source for purposes of complying with the requirements of this Consent Decree. However, nothing in this Consent Decree shall prevent EKPC from purchasing or otherwise obtaining NO_x Allowances from another source for purposes of complying with state or federal Clean Air Act requirements to the extent otherwise allowed by law.

D. General NO_x Provisions

63. In determining Emission Rates for NO_x , EKPC shall use CEMS in accordance with the procedures specified in 40 C.F.R. Part 75.

VI. SO₂ EMISSION REDUCTIONS AND CONTROLS

A. <u>SO₂ Emission Controls</u>

1. New FGD Installations

64. EKPC shall install and commence continuous operation of an FGD (or equivalent SO₂ control technology approved pursuant to Paragraph 66) on the following Units within the EKPC System so as to achieve, by the dates specified below, and thereafter maintain, a 30-Day Rolling Average Removal Efficiency for SO₂ of at least ninety-five percent (95%) or a 30-Day Rolling Average SO₂ Emission Rate of no greater than 0.100 lb/mmBTU:

Unit	Date by which EKPC must install and commence continuous operation of an FGD (or equivalent SO ₂ control technology approved pursuant to Paragraph 66)	Date by which EKPC's FGD Must Achieve and Maintain 30-Day Rolling Average Removal Efficiency or Emission Rate for SO ₂
Spurlock 2	October 1, 2008	January 1, 2009
Spurlock 1	June 30, 2011	June 30, 2011

- 65. Pursuant to Paragraph 50, if EKPC elects to install and continuously operate emission controls at Cooper 2, then beginning on June 30, 2012, EKPC shall install and commence continuous operation of FGD technology (or equivalent SO₂ control technology approved pursuant to Paragraph 66) on Cooper 2 so as to achieve, and thereafter maintain, a 30-day Rolling Average SO₂ Removal Efficiency of at least ninety-five percent (95%) for Cooper 2 or a 30-Day Rolling Average SO₂ Emission Rate of no greater than 0.100 lb/mmBTU.
- 66. With prior written notice to and written approval from EPA, EKPC may, in lieu of installing and operating an FGD at any Unit specified in Paragraph 64 and 65, install and operate equivalent SO₂ control technology so long as such equivalent SO₂ control technology achieves and maintains a 30-Day Rolling Average SO₂ Removal Efficiency of at least ninety-

five percent (95%) or a 30-Day Rolling Average SO₂ Emission Rate of no greater than 0.100 lb/mmBTU.

2. <u>Continuous Operation of SO₂ Controls</u>

- 67. EKPC shall continuously operate each FGD (or equivalent SO₂ control technology approved pursuant to Paragraph 66) covered under this Consent Decree at all times that the Unit it serves is in operation, consistent with the technological limitations, manufacturers' specifications, and good engineering and maintenance practices for the FGD or equivalent technology, for minimizing emissions to the extent practicable.
 - B. System-Wide SO₂ Emission Limits
- 68. EKPC shall comply with the following System-Wide 12-Month Rolling Tonnage limitations for SO₂, which apply to all EKPC System Units collectively:

For the 12-Month Period Commencing on the Date Specified Below, and Each 12-Month Period Thereafter:	System-Wide 12-Month Rolling Tonnage Limitation for SO ₂
October 1, 2008	57,000 tons
July 1, 2011	40,000 tons
January 1, 2013	28,000 tons

69. Each of the system-wide annual emission limits for SO₂ set forth in Paragraph 68 shall apply prospectively from the specified date on which a 12-month period commences, that is compliance with the cap shall first be determined 12 months following the commencement date specified above, and shall end on the date that the subsequent system-wide limit, if any, takes effect. EKPC shall not use SO₂ allowances or credits to comply with these system-wide limitations.

- C. <u>Surrender of SO₂ Allowances</u>
- 70. For purposes of this Subsection, the "surrender of allowances" means permanently surrendering allowances from the accounts administered by EPA for all units in the EKPC System, so that such allowances can never be used to meet any compliance requirement under the Clean Air Act, the Kentucky SIP, or this Consent Decree.
- 71. EKPC may use any SO₂ Allowances allocated by EPA to the EKPC System only to meet its own federal and/or State Clean Air Act regulatory requirements for any EKPC System Unit or New Unit. EKPC shall not sell or transfer any allocated EKPC System SO₂ Allowances to a third party, except as provided in Paragraphs 72, 73, and 76 below.
- 72. For each calendar year beginning with calendar year 2008, EKPC shall surrender to EPA, or transfer to a non-profit third party selected by EKPC for surrender, SO₂ Allowances allocated to EKPC System Units that are surplus to its Clean Air Act SO₂ Allowance-holding requirements for the EKPC System Units and New Units, collectively, for that year. EKPC shall make such surrender annually, within forty-five (45) days of EKPC's receipt from EPA of the Annual Deduction Reports for SO₂. Any surrender need not include the specific SO₂ Allowances that were allocated to EKPC System Units, so long as EKPC surrenders SO₂ Allowances that are from the same year or an earlier year and that are equal to the number required to be surrendered under this Paragraph 72.
- 73. If any allowances are transferred directly to a non-profit third party, EKPC shall include a description of such transfer in the next report submitted to EPA pursuant to Section XII (Periodic Reporting) of this Consent Decree. Such report shall: (i) provide the identity of the non-profit third-party recipient(s) of the SO₂ Allowances and a listing of the serial numbers of the transferred SO₂ Allowances; and (ii) include a certification by the third-party recipient(s) stating that the recipient(s) will not sell, trade, or otherwise exchange any of the allowances and

will not use any of the SO₂ Allowances to meet any obligation imposed by any environmental law. No later than the third periodic report due after the transfer of any SO₂ Allowances, EKPC shall include a statement that the third-party recipient(s) surrendered the SO₂ Allowances for permanent surrender to EPA in accordance with the provisions of Paragraph 74 within one (1) year after EKPC transferred the SO₂ Allowances to them. EKPC shall not have complied with the SO₂ Allowance surrender requirements of this Paragraph 73 until all third-party recipient(s) shall have actually surrendered the transferred SO₂ Allowances to EPA.

- 74. For all SO₂ Allowances surrendered to EPA, EKPC or the third-party recipient(s) (as the case may be) shall first submit an SO₂ Allowance transfer request form to EPA's Office of Air and Radiation's Clean Air Markets Division directing the transfer of such SO₂ Allowances to the EPA Enforcement Surrender Account or to any other EPA account that EPA may direct in writing. As part of submitting these transfer requests, EKPC or the third-party recipient(s) shall irrevocably authorize the transfer of these SO₂ Allowances and identify by name of account and any applicable serial or other identification numbers or station names the source and location of the SO₂ Allowances being surrendered.
- 75. The requirements in Paragraphs 71, 72, 73, 74, and 76 of this Decree pertaining to EKPC's use and retirement of SO₂ Allowances are permanent injunctions not subject to any termination provision of this Decree. These provisions shall survive any termination of this Decree in whole or in part.
- 76. Provided that EKPC is in compliance with the system-wide SO₂ emissions limitations of this Consent Decree, nothing in this Consent Decree shall preclude EKPC from banking, selling or transferring SO₂ Allowances allocated to the EKPC System that become available for sale or trade as a result of:

- a. activities that reduce SO₂ emissions at any EKPC System Unit prior to the date of entry of this Consent Decree;
- b. the installation and operation of any SO₂ pollution control technology or technique that is not otherwise required under this Consent Decree;
- c. achievement and maintenance of a 30-Day Rolling Average SO₂ Removal Efficiency at an Improved Unit that is below the applicable 30-Day Rolling Average SO₂ Removal Efficiency limit specified in Paragraphs 64 and 65;
- d. permanent shutdown or repowering of any EKPC System Unit not otherwise required by the Consent Decree;
- e. a fuel change at a Unit that results in an emission reduction, provided that the emission reduction is made enforceable through modification of this Consent Decree; or
- f. other emission reduction measures that are agreed to by the Parties and made enforceable through modification of this Consent Decree,

so long as EKPC timely reports the generation of such surplus SO₂ Allowances in accordance with Section XII (Periodic Reporting) of this Consent Decree. EKPC shall be allowed to bank, sell or transfer SO₂ Allowances equal to the SO₂ emissions reductions achieved for any given year by any of the actions specified in Subparagraphs 76.b. through 76.f. only to the extent that the total SO₂ emissions from all EKPC System Units are below the System-Wide 12-Month Rolling Tonnage limitation for that year.

77. Nothing in this Consent Decree shall prevent EKPC from purchasing or otherwise obtaining SO₂ Allowances from another source for purposes of complying with state or federal Clean Air Act requirements to the extent otherwise allowed by law.

D. Fuel Limitations

78. EKPC shall not burn coal having a sulfur content greater than any amount authorized by regulation or State permit at any EKPC System Unit.

E. General SO₂ Provisions

- 79. In determining Emission Rates for SO₂, EKPC shall use CEMS in accordance with the procedures specified in 40 C.F.R. Part 75.
- 80. For Units that are required to be equipped with SO₂ control equipment and that are subject to the percent removal efficiency requirements of this Consent Decree, the outlet SO₂ Emission Rate and the inlet SO₂ Emission Rate shall be determined based on the data generated in accordance with 40 C.F.R. Part 75.15 (1999) (using SO₂ CEMS data from both the inlet and outlet of the control device).

VII. PM AND MERCURY EMISSION REDUCTIONS AND CONTROLS

- A. <u>Optimization of PM Emission Controls</u>
- 81. Within ninety (90) days after entry of this Consent Decree and continuing thereafter, EKPC shall continuously operate each PM control device on its EKPC System Units to maximize PM emission reductions, consistent with manufacturers' specifications, the operational design and maintenance limitations of the Units and good engineering practices. Specifically, EKPC shall, at a minimum: (a) energize each section of the ESP for each Unit, regardless of whether that action is needed to comply with opacity limits; (b) maintain the energy or power levels delivered to the ESPs for each Unit to achieve the greatest possible

removal of PM; (c) make best efforts to expeditiously repair and return to service transformer-rectifier sets when they fail; and (d) inspect for, and schedule for repair, any openings in ESP casings and ductwork to minimize air leakage. Within two hundred seventy (270) days after entry of this Consent Decree and continuing thereafter, EKPC shall also optimize the plate-cleaning and discharge-electrode-cleaning systems for the ESPs at each EKPC System Unit by varying the cycle time, cycle frequency, rapper-vibrator intensity, and number of strikes per cleaning event, of these systems to minimize PM emissions.

B. <u>Upgrade of Existing PM Emission Controls</u>

- 82. Within 365 days of lodging of this Consent Decree, EKPC shall demonstrate that each of the EKPC System Units can achieve and maintain a PM Emission Rate of no greater than 0.030 lb/mmBTU in accordance with Paragraph 87. In the alternative and in lieu of demonstrating compliance with the PM Emission Rate applicable under this Paragraph 82, EKPC may elect to undertake an upgrade of the existing PM emissions control equipment for any such Unit based on a PM Pollution Control Upgrade Analysis for that Unit. The preparation, submission, and implementation of such PM Pollution Control Upgrade Analysis shall be undertaken and completed in accordance with the compliance schedules and procedures specified in Paragraph 84.
- 83. <u>Demonstration and Compliance with PM Emission Limit</u>. If EKPC demonstrates by the applicable date set forth in Paragraph 82 that a Unit can achieve and maintain a PM Emission Rate of no greater than 0.030 lb/mmBTU, EKPC shall thereafter operate that Unit to maximize PM emission reductions, consistent with the Unit's operational design and safety requirements, and shall achieve and maintain a PM Emission Rate no greater than 0.030 lb/mmBTU.

- 84. PM Emission Control Upgrade. For each EKPC System Unit for which EKPC does not elect to meet a PM Emission Rate of 0.030 lb/mmBTU, EKPC shall prepare, submit, and implement a PM Pollution Control Upgrade Analysis in accordance with this Paragraph 84. Such PM Pollution Control Upgrade Analysis shall include proposed upgrades to the PM pollution control device and a proposed alternate PM Emission Rate that the Unit shall meet upon completion of such upgrade. For each Unit for which such a PM Pollution Control Upgrade Analysis is required, EKPC shall deliver such PM Pollution Control Upgrade Analysis to EPA for approval pursuant to Section XIII (Review and Approval of Submittals) of this Consent Decree within 180 days of the date on which the particular EKPC System Unit is unable to make the demonstration required by Paragraph 83.
 - a. In conducting the PM Pollution Control Upgrade Analysis for any Unit, EKPC need not consider any of the following PM control measures:
 - i. the complete replacement of the existing ESP with a new ESP, FGD, or baghouse, or
 - ii. the upgrade of the existing ESP controls through the installation of a supplemental PM Control Device, through the refurbishment of existing PM Control Devices, or through other measures, if the costs of such upgrade are equal to or greater than the costs of a replacement ESP, FGD, or baghouse (on a total dollar-per-ton-of-pollutant-removed basis).

With each PM Pollution Control Upgrade Analysis delivered to EPA, EKPC shall simultaneously deliver all documents that support or were considered in preparing such PM Pollution Control Upgrade Analysis. EKPC shall retain a qualified

- contractor to assist in the performance and completion of each PM Pollution Control Upgrade Analysis.
- b. Beginning one (1) year after EPA approval of the recommendation(s) made in a PM Pollution Control Upgrade Analysis for a Unit, EKPC shall not operate that Unit unless all equipment called for in the recommendation(s) of the Pollution Control Upgrade Analysis has been installed. An installation period longer than one year may be allowed if EKPC makes such a request in the PM Pollution Control Upgrade Analysis and EPA determines such additional time is necessary due to factors such as the magnitude of the PM control project or the need to address reliability concerns that could result from multiple EKPC System Unit outages. Upon installation of all equipment recommended under an approved PM Pollution Control Upgrade Analysis, EKPC shall operate such equipment in compliance with the recommendation(s) of the approved PM Pollution Control Upgrade Analysis, including compliance with any PM Emission Rate specified by the recommendation(s).
- 85. EKPC shall continuously operate each ESP in the EKPC System at all times that the Unit it serves is combusting Fossil Fuel, in compliance with manufacturers' specifications, the operational design and maintenance limitations of the Unit, and good engineering practices.

C. PM and Mercury Monitoring

1. PM Stack Tests

86. Beginning in calendar year 2008, and continuing annually thereafter, EKPC shall conduct a PM performance test on each EKPC System Unit. The annual stack test requirement imposed on each EKPC System Unit by this Paragraph 86 may be satisfied by stack tests conducted by EKPC as required by its permits from the Kentucky Natural Resources and

Environmental Protection Cabinet for any year that such stack tests are required under the permits. EKPC may perform biennial rather than annual testing provided that (a) two of the most recently completed test results from tests conducted in accordance with 40 C.F.R. Part 60, Appendix A-1, Method 5 demonstrate that the PM emissions are equal to or less than 0.015 lb/mmBTU, or (b) the Unit is equipped with a PM CEMS in accordance with Paragraphs 88 through 95. EKPC shall perform annual rather than biennial testing the year immediately following any test result demonstrating that the particulate matter emissions are greater than 0.015 lb/mmBTU, unless the Unit is equipped with a PM CEMS in accordance with Paragraphs 88 through 95.

87. The reference and monitoring methods and procedures for determining compliance with PM Emission Rates shall be those specified in 40 C.F.R. Part 60, Appendix A-1, Method 5. Use of any particular method shall conform to the EPA requirements specified in 40 C.F.R. Part 60, Appendix A and 40 C.F.R. § 60.48a (b) and (e), or any federally approved method contained in the Kentucky SIP. EKPC shall calculate the PM Emission Rates from the stack test results in accordance with 40 C.F.R. § 60.8(f). The results of each PM stack test shall be submitted to EPA within 30 days of completion of each test.

2. PM CEMS

88. EKPC shall install and operate PM CEMS in accordance with Paragraphs 89 through 95. Operation of such PM CEMS shall be in accordance with 40 C.F.R. Part 60, App. B, Performance Specification 11, and App. F Procedure 2. Each PM CEMS shall comprise a continuous particle mass monitor measuring PM concentration, directly or indirectly, on an hourly average basis and a diluent monitor used to convert the concentration to units of lb/mmBTU. EKPC shall maintain, in an electronic database, the hourly average emission

values of all PM CEMS in lb/mmBTU. EKPC shall use reasonable efforts to keep each PM CEMS running and producing data whenever any Unit served by the PM CEMS is operating.

- 89. No later than six (6) months after entry of this Consent Decree, EKPC shall submit to EPA for review and approval pursuant to Section XIII (Review and Approval of Submittals) of this Consent Decree a plan for the installation and certification of each PM CEMS.
- 90. EKPC shall install, certify, and operate PM CEMS on two (2) Units, stacks or common stacks in accordance with the following schedule:

Stack	Deadline to Commence Operation of PM CEMS	
Spurlock 2	10/1/08	
Cooper 1	12/31/12	

- 91. No later than one hundred twenty (120) days prior to the deadline to commence operation of each PM CEMS, EKPC shall submit to EPA for review and approval pursuant to Section XIII (Review and Approval of Submittals) of this Consent Decree a proposed Quality Assurance/Quality Control ("QA/QC") protocol that shall be followed in calibrating such PM CEMS. Following EPA's approval of the protocol, EKPC shall thereafter operate each PM CEMS in accordance with the approved protocol.
- 92. In developing both the plan for installation and certification of the PM CEMS and the QA/QC protocol, EKPC shall use the criteria set forth in 40 C.F.R. Part 60, App. B, Performance Specification 11, and App. F Procedure 2. EKPC shall include in its QA/QC protocol a description of any periods in which it proposes that the PM CEMS may not be in operation in accordance with Performance Specification 11.

- 93. No later than ninety (90) days after EKPC begins operation of the PM CEMS, EKPC shall conduct tests of each PM CEMS to demonstrate compliance with the PM CEMS installation and certification plan submitted to and approved by EPA in accordance with Paragraph 89.
- 94. EKPC shall operate the PM CEMS for at least two (2) years on each of the Units specified in Paragraph 90. After two (2) years of operation, EKPC may attempt to demonstrate that it is infeasible to continue operating PM CEMS. As part of that demonstration, EKPC shall submit an alternative PM monitoring plan for review and approval by the United States. The plan shall explain the basis for stopping operation of the PM CEMS and propose an alternative-monitoring plan. If the United States disapproves the alternative PM monitoring plan, or if the United States rejects EKPC's claim that it is infeasible to continue operating PM CEMS, such disagreement is subject to Section XVI (Dispute Resolution).
- 95. Operation of a PM CEMS shall be considered no longer feasible if (a) the PM CEMS cannot be kept in proper condition for sufficient periods of time to produce reliable, adequate, or useful data consistent with the QA/QC protocol; or (b) EKPC demonstrates that recurring, chronic, or unusual equipment adjustment or servicing needs in relation to other types of continuous emission monitors cannot be resolved through reasonable expenditures of resources. If EPA determines that operation is no longer feasible, EKPC shall be entitled to discontinue operation of and remove the PM CEMS.

3. <u>Mercury CEMS</u>

96. EKPC shall install and operate Mercury CEMS in accordance with Paragraphs 97 through 102. The Mercury CEMS shall continuously measure mercury emission concentration, directly or indirectly, on an hourly average basis, in units of pounds per trillion BTU ("lb/TBTU"). EKPC shall maintain, in an electronic database, the hourly average emission

values of all Mercury CEMS in lb/TBTU. EKPC shall use reasonable efforts to keep each Mercury CEMS running and producing data whenever any Unit served by the Mercury CEMS is operating.

- 97. No later than six (6) months after entry of this Consent Decree, EKPC shall submit to EPA for review and approval pursuant to Section XIII (Review and Approval of Submittals) of this Consent Decree a plan for the installation and certification of the Mercury CEMS.
- 98. EKPC shall install, certify, and operate the Mercury CEMS on the following Unit in accordance with the following schedule:

Unit	Deadline to Commence Operation of Mercury CEMS	
Spurlock 1 or 2	10/1/08	

No later than six (6) months after entry of this Consent Decree, EKPC may submit to EPA for review and approval an alternative Unit on which to install the Mercury CEMS required by this Paragraph 98.

- 99. No later than one hundred twenty (120) days prior to the deadline to commence operation of each Mercury CEMS, EKPC shall submit to EPA for review and approval pursuant to Section XIII (Review and Approval of Submittals) of this Consent Decree a proposed QA/QC protocol that shall be followed in calibrating such Mercury CEMS. Following EPA's approval of the protocol, EKPC shall thereafter operate the Mercury CEMS in accordance with the approved protocol.
- 100. No later than ninety (90) days after EKPC begins operation of the Mercury CEMS, EKPC shall conduct tests of the Mercury CEMS to demonstrate compliance with the

Mercury CEMS installation and certification plan submitted to and approved by EPA in accordance with Paragraph 97.

- 101. EKPC shall operate the Mercury CEMS for at least two (2) years on the Unit specified in Paragraph 98. After two (2) years of operation, EKPC may attempt to demonstrate that it is infeasible to continue operating Mercury CEMS. As part of that demonstration, EKPC shall submit an alternative Mercury monitoring plan for review and approval by the United States. The plan shall explain the basis for stopping operation of the Mercury CEMS and propose an alternative-monitoring plan. If the EPA disapproves the alternative Mercury monitoring plan, or if the EPA rejects EKPC's claim that it is infeasible to continue operating Mercury CEMS, such disagreement is subject to Section XVI (Dispute Resolution).
- 102. Operation of a Mercury CEMS shall be considered no longer feasible if (a) the Mercury CEMS cannot be kept in proper condition for sufficient periods of time to produce reliable, adequate, or useful data consistent with the QA/QC protocol; or (b) EKPC demonstrates that recurring, chronic, or unusual equipment adjustment or servicing needs in relation to other types of continuous emission monitors cannot be resolved through reasonable expenditures of resources. If EPA determines that operation is no longer feasible, EKPC shall be entitled to discontinue operation of and remove the Mercury CEMS.

4. PM and Mercury Reporting

103. Following the installation of each PM and Mercury CEMS, EKPC shall begin and continue to report to EPA, pursuant to Section XII (Periodic Reporting), the data recorded by the PM and Mercury CEMS, expressed in lb/mmBTU and lb/TBTU, respectively, on a 3-hour, 24-hour, 30-day, and 365-day rolling average basis in electronic format, as required in Paragraphs 88 and 96.

D. <u>General PM Provisions</u>

104. Although stack testing shall be used to determine compliance with the PM Emission Rate established by this Consent Decree, data from the PM CEMS shall be used, at a minimum, to monitor progress in reducing PM emissions. Nothing in this Consent Decree is intended to, or shall, alter or waive any applicable law (including any defenses, entitlements, challenges, or clarifications related to the Credible Evidence Rule, 62 Fed. Reg. 8315 (Feb. 27, 1997)) concerning the use of data for any purpose under the Act, generated either by the reference methods specified herein or otherwise.

VIII. PROHIBITION ON NETTING CREDITS OR OFFSETS FROM REQUIRED CONTROLS

- 105. Emission reductions generated by EKPC to comply with the requirements of this Consent Decree shall not be considered as a creditable contemporaneous emission decrease for the purpose of obtaining a netting credit under the Clean Air Act's Nonattainment NSR and PSD programs.
- 106. The limitations on the generation and use of netting credits or offsets set forth in the previous Paragraph 105 do not apply to emission reductions achieved by EKPC System Units that are greater than those required under this Consent Decree. For purposes of this Paragraph 106, emission reductions from an EKPC System Unit are greater than those required under this Consent Decree if they result from EKPC compliance with federally-enforceable emission limits that are more stringent than those limits imposed on EKPC System Units under this Consent Decree and under applicable provisions of the Clean Air Act or the Kentucky SIP.
- 107. Nothing in this Consent Decree is intended to preclude the emission reductions generated under this Consent Decree from being considered by the Commonwealth of Kentucky or EPA as creditable contemporaneous emission decreases for the purpose of attainment

demonstrations submitted pursuant to § 110 of the Act, 42 U.S.C. § 7410, or in determining impacts on NAAQS, PSD increment, or air quality related values, including visibility, in a Class I area.

IX. ENVIRONMENTAL PROJECTS

- Appendix A in compliance with the approved plans and schedules for such Project and other terms of this Consent Decree. EKPC shall submit plans for the Project to the United States for review and approval pursuant to Section XIII (Review and Approval of Submittals) of this Consent Decree in accordance with the schedules set forth in Appendix A. EKPC shall maintain, and present to the United States, upon request, all documents to substantiate the cost of the Project and shall provide these documents to the United States within thirty (30) days of a request by the United States for the documents.
- 109. All plans and reports prepared by EKPC pursuant to the requirements of this Section of the Consent Decree shall be publicly available without charge.
- 110. EKPC shall certify, as part of each plan submitted to the United States for any Project, that EKPC is not otherwise required by law to perform the Project described in the plan, that EKPC is unaware of any other person who is required by law to perform the Project, and that EKPC will not use any Project, or portion thereof, to satisfy any obligations that it may have under other applicable requirements of law, including any applicable renewable portfolio standards.
- 111. EKPC shall use good faith efforts to secure as much benefit as possible for the Project, consistent with the applicable requirements and limits of this Consent Decree.

- 112. If EKPC elects (where such an election is allowed) to undertake a Project by contributing funds to another person or instrumentality that will carry out the Project, that person or instrumentality must in writing: (a) identify its legal authority for accepting such funding; and (b) identify its legal authority to conduct the Project for which EKPC contributes the funds. Regardless of whether EKPC elected (where such election is allowed) to undertake a Project by itself or to do so by contributing funds to another person or instrumentality that will carry out the Project, EKPC acknowledges that it will receive credit for the expenditure of such funds only if EKPC demonstrates that the funds have been actually spent by either EKPC or by the person or instrumentality receiving them (or, in the case of internal costs, have actually been incurred by EKPC), and that such expenditures met all requirements of this Consent Decree.
- 113. Within sixty (60) days following the completion of the Project required under this Consent Decree, EKPC shall submit to the United States a report that documents the date that the Project was completed, EKPC's results of implementing the Project, including the emission reductions or other environmental benefits achieved, and the costs incurred by EKPC in implementing the Project.
- 114. EKPC shall not financially benefit to a greater extent than any other member of the general public from the sale or transfer of technology obtained in the course of implementing any Project.
- 115. Beginning one (1) year after entry of this Consent Decree, EKPC shall provide the United States with semi-annual updates concerning the progress of each Project.

X. CIVIL PENALTY

116. Within thirty (30) calendar days after entry of this Consent Decree, EKPC shall pay to the United States a civil penalty in the amount of \$750,000. The civil penalty shall be

paid by Electronic Funds Transfer ("EFT") to the United States Department of Justice, in accordance with current EFT procedures, referencing USAO File Number 2007Z00290 and 2004V00107 and DOJ Case Number 90-5-2-1-08085 and the civil action case name and case number of this action. The costs of such EFT shall be EKPC's responsibility. Payment shall be made in accordance with instructions provided to EKPC by the Financial Litigation Unit of the U.S. Attorney's Office for the Eastern District of Kentucky, Lexington Division. Any funds received after 2:00 p.m. EDT shall be credited on the next business day. At the time of payment, EKPC shall provide notice of payment, referencing the USAO File Number, the DOJ Case Number, and the civil action case name and case number, to the Department of Justice and to EPA in accordance with Section XIX (Notices) of this Consent Decree.

- 117. Failure to timely pay the civil penalty shall subject EKPC to interest accruing from the date payment is due until the date payment is made at the rate prescribed by 28 U.S.C. § 1961, and shall render EKPC liable for all charges, costs, fees, and penalties established by law for the benefit of a creditor or of the United States in securing payment.
- 118. Payments made pursuant to this Section are penalties within the meaning of Section 162(f) of the Internal Revenue Code, 26 U.S.C. § 162(f), and are not tax-deductible expenditures for purposes of federal law.

XI. RESOLUTION OF CLAIMS

- A. <u>RESOLUTION OF U.S. CIVIL CLAIMS</u>
- 119. <u>Claims Based on Modifications Occurring Before the Lodging of Decree.</u>

Entry of this Decree shall resolve all civil claims of the United States under either:

- a. Parts C or D of Subchapter I of the Clean Air Act,
- b. Section 111 of the Clean Air Act and 40 C.F.R. Section 60.14,

- c. Sections 502(a) and 504(a) of the Clean Air Act, but only to the extent that such claims are either (i) based on EKPC's failure to obtain an operating permit that reflects applicable requirements imposed under Parts C or D of Subchapter I, or Section 111, of the Clean Air Act; or (ii) EKPC's operation of Spurlock 2 at a heat input above that listed in the 1982 Spurlock Operating Permit No. 0-82-270 and 1999 Spurlock Title V permit V-97-050,
- d. 401 KAR 51:017 and all relevant prior versions of these regulations,
- e. 401 KAR 52:020 and all relevant prior versions of these regulations, but only to the extent that such claims are based on either (i) EKPC's failure to obtain an operating permit that reflects applicable requirements imposed under 401 KAR 51:017, or (ii) EKPC's operation of Spurlock 2 at a heat input above that listed in the 1982 Spurlock Operating Permit No. 0-82-270 and 1999 Spurlock Title V permit V-97-050,

that arose from any modifications that commenced at any EKPC System Unit prior to the date of lodging of this Decree, including but not limited to those modifications alleged in the Complaint in this civil action.

120. Claims Based on Modifications After the Lodging of Decree.

Entry of this Decree also shall resolve all civil claims of the United States for pollutants regulated under Parts C or D of Subchapter I of the Clean Air Act, and under regulations promulgated thereunder as of the date of lodging of this Decree, where such claims are based on a modification completed before December 31, 2015 and:

- a. commenced at any EKPC System Unit after lodging of this Decree; or
- b. that this Consent Decree expressly directs EKPC to undertake.

The term "modification" as used in this Paragraph 120 shall have the meaning that term is given under the Clean Air Act statute as it existed on the date of lodging of this Decree.

121. <u>Reopener</u>. The resolution of the civil claims of the United States provided by this Subsection is subject to the provisions of Section B of this Section.

B. PURSUIT OF U.S. CIVIL CLAIMS OTHERWISE RESOLVED

- Paragraph 57 (System-wide NO_x Rolling Tonnage Limits); Paragraph 68 (System-wide SO₂ Rolling Tonnage Limits); or Paragraph 78 (Fuel Limitations); exceeds any 30-Day Rolling Average Emission Rate or 30-Day Rolling Average SO₂ Removal Efficiency for more than 60 consecutive days, or fails by more than ninety days to complete installation or upgrade and commence operation of any emission control device required pursuant to Paragraphs 51, 52, 53, 64, or 65; or fails by more than ninety days to retire and permanently cease to operate or Repower EKPC System Units pursuant to Paragraph 50, then the United States may pursue any claim at any EKPC System Unit that is otherwise covered by the resolution of claims under Subsection A of this Section, subject to (a) and (b) below.
 - a. For any claims based on modifications undertaken at an Other Unit (any EKPC System Unit that is not an Improved Unit for the pollutant in question), claims may be pursued only where the modification(s) on which such claim is based was commenced within the five (5) years preceding the violation or failure specified in this Paragraph 122.
 - b. For any claims based on modifications undertaken at an Improved Unit, claims may be pursued only where the modification(s) on which such claim is based was commenced (i) after lodging of the Consent Decree and (ii) within the five years preceding the violation or failure specified in this Paragraph 122.

- Unit. Solely with respect to Improved Units, the United States may also pursue claims arising from a modification (or collection of modifications) at an Improved Unit that are otherwise covered by the resolution of claims under Subsection A of this Section, if the modification (or collection of modifications) at the Improved Unit on which such claims are based (i) was commenced after lodging of this Consent Decree, and (ii) individually (or collectively) increased the maximum hourly emission rate of that Unit for NO_x or SO₂ (as measured by 40 C.F.R. § 60.14 (b) and (h)) by more than ten percent (10%).
- 124. Additional Bases for Pursuing Resolved Claims for Modifications at an Other Unit. Solely with respect to Other Units, the United States may also pursue claims arising from a modification (or collection of modifications) at an Other Unit that are otherwise covered by the resolution of claims under Subsection (a) of this Section, if the modification (or collection of modifications) at the Other Unit on which the claim is based was commenced within the five (5) years preceding any of the following events:
 - a. a modification (or collection of modifications) at such Other Unit commenced after lodging of this Consent Decree increases the maximum hourly emission rate for such Other Unit for the relevant pollutant (NO_x or SO_2) (as measured by 40 C.F.R. § 60.14(b) and (h));
 - b. the aggregate of all Capital Expenditures made at such Other Unit exceed \$125/KW on the Unit's Boiler Island (based on the generating capacities identified in Paragraph 12 or 13) during either of the following periods: the date of lodging of this Decree through December 31, 2010; January 1, 2011 through December 31, 2015. (Capital Expenditures shall be measured in calendar year

- 2004 constant dollars, as adjusted by the McGraw-Hill Engineering News-Record Construction Cost Index); or
- c. a modification (or collection of modifications) at such Other Unit commenced after lodging of this Consent Decree results in an emissions increase of NO_x and/or SO_2 at such Other Unit, and such increase:
 - presents, by itself, or in combination with other emissions or sources, "an imminent and substantial endangerment" within the meaning of Section 303 of the Act, 42 U.S.C. §7603;
 - ii. causes or contributes to violation of a NAAQS in any Air Quality ControlArea that is in attainment with that NAAQS;
 - iii. causes or contributes to violation of a PSD increment; or
 - iv. causes or contributes to any adverse impact on any formally-recognized air quality and related values in any Class I area.
- d. Solely for purposes of Paragraph 124, Subparagraph (c), the determination of whether there was an emissions increase must take into account any emissions changes relevant to the modeling domain that have occurred or will occur under this Decree at other EKPC System Units. In addition, an emissions increase shall not be deemed to have occurred at an Other Unit unless the annual emissions of the relevant pollutant (NO_x or SO₂) from the plant at which such modification(s) occurred exceed the annual emissions from that plant for calendar year 2003.
- e. The introduction of any new or changed NAAQS shall not, standing alone, provide the showing needed under Paragraph 124, Subparagraphs (c)(ii) or

(c)(iii), to pursue any claim for a modification at an Other Unit resolved under Subsection A of this Section.

XII. PERIODIC REPORTING

- 125. Within one hundred eighty (180) days after each date established by Paragraphs 51, 52, 53, 64 and 65 of this Consent Decree for EKPC to achieve and maintain a certain Emission Rate or 30-Day Rolling Average SO₂ Removal Efficiency at any EKPC System Unit, EKPC shall conduct a performance test that demonstrates compliance with the Emission Rate or Removal Efficiency required by this Consent Decree. Within forty-five (45) days of each such performance test, EKPC shall submit the results of the performance test to EPA at the addresses specified in Section XIX (Notices) of this Consent Decree.
- 126. Beginning thirty (30) days after the end of the first full calendar quarter following the entry of this Consent Decree, continuing on a semi-annual basis until December 31, 2015, and in addition to any other express reporting requirement in this Consent Decree, EKPC shall submit to EPA a progress report.
 - 127. The progress report shall contain the following information:
 - a. all information necessary to determine compliance with this Consent Decree;
 - all information relating to emission allowances and credits that EKPC claims to have generated in accordance with Paragraphs 61 or 76 by compliance beyond the requirements of this Consent Decree; and
 - c. all information indicating that the installation and commencement of operation for a pollution control device may be delayed, including the nature and cause of the delay, and any steps taken by EKPC to mitigate such delay.

- 128. In any periodic progress report submitted pursuant to this Section, EKPC may incorporate by reference information previously submitted under its Title V permitting requirements, provided that EKPC attaches the Title V permit report and provides a specific reference to the provisions of the Title V permit report that are responsive to the information required in the periodic progress report.
- 129. In addition to the progress reports required pursuant to this Section, EKPC shall provide a written report to EPA of any violation of the requirements of this Consent Decree, including exceedances of the Unit-specific 30-Day Rolling Average Emission Rates, Unit-specific 30-Day Rolling Average SO₂ Removal Efficiencies, Combined 30-Day Rolling Average Emission Rate, 1-Hour Average NO_x Emission Rate, and System-Wide 12-Month Rolling Tonnage limitations, within ten (10) business days of when EKPC knew or should have known of any such violation. In this report, EKPC shall explain the cause or causes of the violation and all measures taken or to be taken by EKPC to prevent such violations in the future.
- 130. Each EKPC report shall be signed by EKPC's Environmental Manager, or, in his or her absence, the Vice President for Generation and Transmission Operations, or higher ranking official, and shall contain the following certification:

This information was prepared either by me or under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my evaluation, or the direction and my inquiry of the person(s) who manage the system, or the person(s) directly responsible for gathering the information, I hereby certify under penalty of law that, to the best of my knowledge and belief, this information is true, accurate, and complete. I understand that there are significant penalties for submitting false, inaccurate, or incomplete information to the United States.

131. If any allowances are surrendered to any third party pursuant to Section VI.C (Surrender of SO₂ Allowances) of this Consent Decree, the third party's certification pursuant to Paragraph 73 shall be signed by a managing officer of the third party and shall contain the following language:

I certify under penalty of law that,_____ [name of third party] will not sell, trade, or otherwise exchange any of the allowances and will not use any of the allowances to meet any obligation imposed by any environmental law. I understand that there are significant penalties for submitting false, inaccurate, or incomplete information to the United States.

XIII. REVIEW AND APPROVAL OF SUBMITTALS

- a document is required to be submitted for review or approval pursuant to this Consent Decree. EPA may approve the submittal or decline to approve it and provide written comments. Within sixty (60) days of receiving written comments from EPA, EKPC shall either: (a) revise the submittal consistent with the written comments and provide the revised submittal for final approval to EPA; or (b) submit the matter for dispute resolution, including the period of informal negotiations, under Section XVI (Dispute Resolution) of this Consent Decree.
- 133. Upon receipt of EPA's final approval of the submittal, or upon completion of the submittal pursuant to dispute resolution, EKPC shall implement the approved submittal in accordance with the schedule specified therein.

XIV. STIPULATED PENALTIES

134. For any failure by EKPC to comply with the terms of this Consent Decree, and subject to the provisions of Sections XV (Force Majeure) and XVI (Dispute Resolution), EKPC

shall pay, within thirty (30) days after receipt of written demand to EKPC by the United States, the following stipulated penalties to the United States:

Consent Decree Violation	Stipulated Penalty (Per day per violation, unless otherwise specified)
a. Failure to pay the civil penalty as specified in Section X (Civil Penalty) of this Consent Decree	\$10,000
b. Failure to comply with any applicable Combined 30-Day Rolling Average Emission Rate for NO _x , 30-Day Rolling Average Emission Rate for NO _x or SO ₂ , 30-Day Rolling Average SO ₂ Removal Efficiency, or Emission Rate for PM, where the violation is less than 5% in excess of the limits set forth in this Consent Decree	\$2,500
c. Failure to comply with any applicable Combined 30-Day Rolling Average Emission Rate for NO _x , 30-Day Rolling Average Emission Rate for NO _x or SO ₂ , 30-Day Rolling Average SO ₂ Removal Efficiency, or Emission Rate for PM, where the violation is equal to or greater than 5% but less than 10% in excess of the limits set forth in this Consent Decree	\$5,000
d. Failure to comply with any applicable Combined 30- Day Rolling Average Emission Rate for NO _x , 30-Day Rolling Average Emission Rate for NO _x or SO ₂ , 30-Day Rolling Average SO ₂ Removal Efficiency, or Emission Rate for PM, where the violation is equal to or greater than 10% in excess of the limits set forth in this Consent Decree	\$10,000
e. Failure to comply with any 1-Hour Average NO _x Emission Rate, where the violation is equal to or less than 3 ppm.	\$1000 per violation
f. Failure to comply with any 1-Hour Average NO _x Emission Rate, where the violation is greater than 3 ppm.	\$5000 per violation
g. Reserved.	Reserved.
h. Failure to comply with the System-wide 12-Month Rolling SO_2 and NO_x Tonnage Limits	\$5,000 per ton per month for the first 100 tons over the limit, and \$10,000 per ton per month for each additional ton over the limit
i. Failure to install, commence operation, or continue operation of the NO _x , SO ₂ , and PM pollution control devices on any Unit, or failure to retire a Unit	\$10,000 during the first 30 days, \$27,500 thereafter
j. Failure to comply with the fuel limitations at a unit, as required by Paragraph 78	\$10,000

k. Failure to install or operate CEMS as required in Paragraphs 88 through 102	\$1,000
1. Failure to conduct annual or biennial stack tests of PM emissions, as required in Paragraph 86	\$1,000
m. Failure to apply for any permit required by Section XVII	\$1,000
n. Failure to timely submit, modify, or implement, as approved, the reports, plans, studies, analyses, protocols, or other submittals required by this Consent Decree	\$750 during the first ten days, \$1,000 thereafter
o. Using, selling, or transferring SO ₂ Allowances, except as permitted by Paragraphs 71, 72, and 76	the surrender, pursuant to the procedures set forth in Paragraphs 70, 73, and 74 of this Consent Decree, of SO ₂ Allowances in an amount equal to four times the number of SO ₂ Allowances used, sold, or transferred in violation of this Consent Decree
p. Using, selling or transferring NO _x Allowances except as permitted by Paragraphs 59, 60 and 61	the surrender of NO _x Allowances in an amount equal to four times the number of NO _x Allowances used, sold, or transferred in violation of this Consent Decree
q. Failure to surrender an SO ₂ Allowance as required by Paragraph 72	(a) \$27,500 plus (b) \$1,000 per SO ₂ Allowance
r. Failure to demonstrate the third-party surrender of an SO ₂ Allowance in accordance with Paragraph 73	\$2,500
s. Failure to undertake and complete any of the	\$1,000 during the first 30 days, \$5,000 thereafter
Environmental Projects in compliance with Section IX (Environmental Projects) of this Consent Decree	\$5,000 thereafter
	\$1,000

135. Violation of an Emission Rate or removal efficiency that is based on a 30-Day Rolling Average is a violation on every day on which the average is based. Violation of

System-Wide 12-Month Rolling Tonnage limitations is a violation each month on which the average is based.

- 136. Where a violation of a 30-Day Rolling Average Emission Rate or 30-Day Rolling Average SO₂ Removal Efficiency (for the same pollutant and from the same source) recurs within periods of less than thirty (30) days, EKPC shall not pay a daily stipulated penalty for any day of the recurrence for which a stipulated penalty has already been paid.
- 137. All stipulated penalties shall begin to accrue on the day after the performance is due or on the day a violation occurs, whichever is applicable, and shall continue to accrue until performance is satisfactorily completed or until the violation ceases. Nothing in this Consent Decree shall prevent the simultaneous accrual of separate stipulated penalties for separate violations of this Consent Decree.
- 138. EKPC shall pay all stipulated penalties to the United States within thirty (30) days of receipt of written demand to EKPC from the United States, and shall continue to make such payments every thirty (30) days thereafter until the violation(s) no longer continues, unless EKPC elects within 20 days of receipt of written demand to EKPC from the United States to dispute the accrual of stipulated penalties in accordance with the provisions in Section XVI (Dispute Resolution) of this Consent Decree.
- 139. Stipulated penalties shall continue to accrue as provided in accordance with Paragraph 137 during any dispute, with interest on accrued stipulated penalties payable and calculated at the rate established by the Secretary of the Treasury, pursuant to 28 U.S.C. § 1961, but need not be paid until the following:
 - a. If the dispute is resolved by agreement, or by a decision of Plaintiffs pursuant to Section XVI (Dispute Resolution) of this Consent Decree that is not appealed to

the Court, accrued stipulated penalties agreed or determined to be owing, together with accrued interest, shall be paid within thirty (30) days of the effective date of the agreement or of the receipt of EPA's decision;

- b. If the dispute is appealed to the Court and Plaintiffs prevail in whole or in part, EKPC shall, within sixty (60) days of receipt of the Court's decision or order, pay all accrued stipulated penalties determined by the Court to be owing, together with accrued interest, except as provided in Subparagraph 139.c.;
- c. If the Court's decision is appealed by either Party, EKPC shall, within fifteen (15) days of receipt of the final appellate court decision, pay all accrued stipulated penalties determined to be owing, together with accrued interest.

For purposes of this Paragraph, the accrued stipulated penalties agreed by the Parties, or determined by the Plaintiffs through Dispute Resolution, to be owing may be less than the stipulated penalty amounts set forth in Paragraph 134.

- 140. All stipulated penalties shall be paid in the manner set forth in Section X (Civil Penalty) of this Consent Decree.
- 141. Should EKPC fail to pay stipulated penalties in compliance with the terms of this Consent Decree, the United States shall be entitled to collect interest on such penalties, as provided for in 28 U.S.C. § 1961.
- 142. The stipulated penalties provided for in this Consent Decree shall be in addition to any other rights, remedies, or sanctions available to the United States by reason of EKPC's failure to comply with any requirement of this Consent Decree or applicable law, except that for any violation of the Act for which this Consent Decree provides for payment of a stipulated

penalty, EKPC shall be allowed a credit for stipulated penalties paid against any statutory penalties also imposed for such violation.

XV. FORCE MAJEURE

- 143. For purposes of this Consent Decree, a "Force Majeure Event" shall mean an event that has been or will be caused by circumstances beyond the control of EKPC, its contractors, or any entity controlled by EKPC that delays compliance with any provision of this Consent Decree or otherwise causes a violation of any provision of this Consent Decree despite EKPC's best efforts to fulfill the obligation. "Best efforts to fulfill the obligation" include using best efforts to anticipate any potential Force Majeure Event and to address the effects of any such event (a) as it is occurring and (b) after it has occurred, such that the delay or violation is minimized to the greatest extent possible.
- 144. Notice of Force Majeure Events. If any event occurs or has occurred that may delay compliance with or otherwise cause a violation of any obligation under this Consent Decree, as to which EKPC intends to assert a claim of Force Majeure, EKPC shall notify the United States in writing as soon as practicable, but in no event later than twenty-one (21) days following the date that the event occurred. In this notice, EKPC shall reference this Paragraph 144 of this Consent Decree and describe the anticipated length of time that the delay or violation may persist, the cause or causes of the delay or violation, all measures taken or to be taken by EKPC to prevent or minimize the delay or violation, the schedule by which EKPC proposes to implement those measures, and EKPC's rationale for attributing a delay or violation to a Force Majeure Event. EKPC shall adopt all reasonable measures to avoid or minimize such delays or violations. EKPC shall be deemed to know of any circumstance which EKPC, its contractors, or any entity controlled by EKPC knew.

- 145. <u>Failure to Give Notice</u>. If EKPC fails to comply with the notice requirements of this Section, the Plaintiff may void EKPC's claim for Force Majeure as to the specific event for which EKPC has failed to comply with such notice requirement.
- 146. <u>Plaintiff's Response</u>. The Plaintiff shall notify EKPC in writing regarding EKPC's claim of Force Majeure within twenty (20) business days of receipt of the notice provided under Paragraph 144. If the Plaintiff agrees that a delay in performance has been or will be caused by a Force Majeure Event, the Parties shall stipulate to an extension of deadline(s) for performance of the affected compliance requirement(s) by a period equal to the delay actually caused by the event. In such circumstances, an appropriate modification shall be made pursuant to Section XXIII (Modification) of this Consent Decree.
- 147. <u>Disagreement</u>. If the Plaintiff does not accept EKPC's claim of Force Majeure, or if the Parties cannot agree on the length of the delay actually caused by the Force Majeure Event, the matter shall be resolved in accordance with Section XVI (Dispute Resolution) of this Consent Decree.
- Burden of Proof. In any dispute regarding Force Majeure, EKPC shall bear the burden of proving that any delay in performance or any other violation of any requirement of this Consent Decree was caused by or will be caused by a Force Majeure Event. EKPC shall also bear the burden of proving that EKPC gave the notice required by this Section and the burden of proving the anticipated duration and extent of any delay(s) attributable to a Force Majeure Event. An extension of one compliance date based on a particular event may, but will not necessarily, result in an extension of a subsequent compliance date.

- 149. <u>Events Excluded</u>. Unanticipated or increased costs or expenses associated with the performance of EKPC's obligations under this Consent Decree shall not constitute a Force Majeure Event.
- 150. Potential Force Majeure Events. The Parties agree that, depending upon the circumstances related to an event and EKPC's response to such circumstances, the kinds of events listed below are among those that could qualify as Force Majeure Events within the meaning of this Section: construction, labor, or equipment delays; Malfunction of a Unit or emission control device; natural gas supply interruption; acts of God; acts of war or terrorism; and orders by a government official, government agency, or other regulatory body acting under and authorized by applicable law that directs EKPC to supply electricity in response to a systemwide (state-wide or regional) emergency. Depending upon the circumstances and EKPC's response to such circumstances, failure of a permitting authority or the Kentucky Public Service Commission to issue a necessary permit or order with sufficient time for EKPC to achieve compliance with the requirements of this Consent Decree may constitute a Force Majeure Event where the failure of the authority to act is beyond the control of EKPC and EKPC has taken all steps available to it to obtain the necessary permit or order, including, but not limited to: submitting a complete application or request; responding to requests for additional information by the authority in a timely fashion; and accepting lawful terms and conditions after expeditiously exhausting any legal rights to appeal terms and conditions imposed by the authority.
- 151. As part of the resolution of any matter submitted to this Court under Section XVI (Dispute Resolution) of this Consent Decree regarding a claim of Force Majeure, the Parties by agreement, or this Court by order, may in appropriate circumstances extend or modify the schedule for completion of work under this Consent Decree to account for the delay in the work

that occurred as a result of any delay agreed to by the United States or approved by the Court. EKPC shall be liable for stipulated penalties for its failure thereafter to complete the work in accordance with the extended or modified schedule.

- 152. <u>Malfunction Events</u>. If EKPC intends to exclude a period of Malfunction, as defined in Paragraph 22, from the calculation of any 30-Day Rolling Average Emission Rate, Combined 30-Day Rolling Average Emission Rate, or 30-Day Rolling Average SO₂ Removal Efficiency, EKPC shall notify the United States in writing as soon as practicable, but in no event later than twenty one (21) days following the date the Malfunction occurs.
 - a. In this notice, EKPC shall describe the anticipated length of time that the Malfunction may persist, the cause or causes of the Malfunction, all measures taken or to be taken by EKPC to minimize the duration of the Malfunction, and the schedule by which EKPC proposes to implement those measures. EKPC shall adopt all reasonable measures to minimize the duration of such Malfunctions, and to prevent the recurrence of such Malfunctions in the future.
 - b. A Malfunction, as defined in Paragraph 22 of this Consent Decree, does not constitute a Force Majeure Event unless the Malfunction also meets the definition of a Force Majeure Event, as provided in this Section. Conversely, a period of Malfunction may be excluded by EKPC from the calculations of emission rates and removal efficiencies, as allowed under this Paragraph, regardless of whether the Malfunction constitutes a Force Majeure Event.

XVI. DISPUTE RESOLUTION

- 153. The dispute resolution procedure provided by this Section shall be available to resolve all disputes arising under this Consent Decree, provided that the Party invoking such procedure has first made a good faith attempt to resolve the matter with the other Party.
- 154. The dispute resolution procedure required herein shall be invoked by one Party giving written notice to the other Party advising of a dispute pursuant to this Section. The notice shall describe the nature of the dispute and shall state the noticing Party's position with regard to such dispute. The Party receiving such a notice shall acknowledge receipt of the notice, and the Parties in dispute shall expeditiously schedule a meeting to discuss the dispute informally not later than fourteen (14) days following receipt of such notice.
- 155. Disputes submitted to dispute resolution under this Section shall, in the first instance, be the subject of informal negotiations among the disputing Parties. Such period of informal negotiations shall not extend beyond thirty (30) calendar days from the date of the first meeting among the disputing Parties' representatives unless they agree in writing to shorten or extend this period. During the informal negotiations period, the disputing Parties may also submit their dispute to a mutually-agreed-upon alternative dispute resolution (ADR) forum if the Parties agree that the ADR activities can be completed within the 30-day informal negotiations period (or such longer period as the Parties may agree to in writing).
- 156. If the disputing Parties are unable to reach agreement during the informal negotiation period, the EPA shall provide EKPC with a written summary of their position regarding the dispute. The written position provided by EPA shall be considered binding unless, within forty-five (45) calendar days thereafter, EKPC seeks judicial resolution of the dispute by filing a petition with this Court. The EPA may respond to the petition within forty-five (45) calendar days of filing.

- 157. Where the nature of the dispute is such that a more timely resolution of the issue is required, the time periods set out in this Section may be shortened upon motion of one of the Parties to the dispute.
- 158. This Court shall not draw any inferences nor establish any presumptions adverse to any disputing Party as a result of invocation of this Section or the disputing Parties' inability to reach agreement.
- 159. As part of the resolution of any dispute under this Section, in appropriate circumstances the disputing Parties may agree, or this Court may order, an extension or modification of the schedule for the completion of the activities required under this Consent Decree to account for the delay that occurred as a result of dispute resolution. EKPC shall be liable for stipulated penalties for its failure thereafter to complete the work in accordance with the extended or modified schedule, provided that EKPC shall not be precluded from asserting that a Force Majeure Event has caused or may cause a delay in complying with the extended or modified schedule.
- 160. The Court shall decide all disputes pursuant to applicable principles of law for resolving such disputes. In their initial filings with the Court under Paragraph 156, the disputing Parties shall state their respective positions as to the applicable standard of law for resolving the particular dispute.

XVII. PERMITS

161. Unless expressly stated otherwise in this Consent Decree, in any instance where otherwise applicable law or this Consent Decree requires EKPC to secure a permit to authorize construction or operation of any device, including all preconstruction, construction, and operating permits required under state law, EKPC shall make such application in a timely

manner. EPA will use its best efforts to expeditiously review all permit applications submitted by EKPC in order to meet the requirements of this Consent Decree.

- 162. Notwithstanding Paragraph 161, nothing in this Consent Decree shall be construed to require EKPC to apply for or obtain a PSD or Nonattainment NSR permit for physical changes in, or changes in the method of operation of, any EKPC System Unit that would give rise to claims resolved by Section XI (Resolution of Claims) of this Consent Decree.
- 163. When permits are required as described in Paragraph 161, EKPC shall complete and submit applications for such permits to the appropriate authorities to allow sufficient time for all legally required processing and review of the permit request, including requests for additional information by the permitting authorities. Any failure by EKPC to submit a timely permit application for any EKPC System Unit shall bar any use by EKPC of Section XV (Force Majeure) of this Consent Decree, where a Force Majeure claim is based on permitting delays.
- 164. Notwithstanding the reference to Title V or other federally enforceable permits in this Consent Decree, the enforcement of such permits shall be in accordance with their own terms and the Act. The Title V or other federally enforceable permits shall not be enforceable under this Consent Decree, although any term or limit established by or under this Consent Decree shall be enforceable under this Consent Decree regardless of whether such term has or will become part of a Title V or other federally enforceable permit, subject to the terms of Section XXVII (Conditional Termination of Enforcement Under Decree) of this Consent Decree.
- 165. Within one hundred eighty (180) days after entry of this Consent Decree, EKPC shall apply for amendment of its Title V permit for the Spurlock Plant to incorporate an MCR of 5600 mmBTU/hr for Spurlock Unit 2. EPA will use its best efforts to expeditiously review such

application submitted by EKPC and will not object to amendment of EKPC's Title V permit for the Spurlock Plant to specify an MCR of 5600 mmBTU/hr for Spurlock Unit 2.

- shall amend any applicable Title V permit application, or apply for amendments of its Title V permits, to include a schedule for all Unit-specific performance, operational, maintenance, and control technology requirements established by this Consent Decree including, but not limited to, emission rates, removal efficiencies, fuel limitations, tonnage limitations, and the requirement in Paragraph 72 pertaining to the surrender of SO₂ Allowances.
- 167. Within one (1) year from the commencement of operation of each pollution control device to be installed, upgraded, or operated on an Improved Unit under this Consent Decree, EKPC shall apply to include the requirements and limitations enumerated in this Consent Decree in either a federally enforceable operating permit issued under the Kentucky SIP or amendments to the Kentucky SIP. The permit or SIP amendment shall require compliance with the following: (a) any applicable 30-Day Rolling Average Emission Rate, 1-Hour Average NO_x Emission Rate, or 30-Day Rolling Average SO₂ Removal Efficiency, (b) the allowance surrender requirements set forth in this Consent Decree, and (c) any applicable tonnage limitations set forth in this Consent Decree.
- operating permit issued under the Kentucky SIP for each plant in the EKPC System to include a provision, which shall be identical for each permit, that contains the allowance surrender requirements and the System-Wide 12-Month Rolling Tonnage limitations set forth in this Consent Decree; or (b) apply for amendments to the Kentucky SIP to include such requirements and limitations. If EKPC elects to apply for a federally enforceable permit, or if EKPC applies to amend the Kentucky SIP on a plant-specific basis, then EKPC shall include a provision in

each such application that makes violation of the allowance surrender requirements and System-Wide 12-Month Rolling Tonnage limitations a violation of each permit, or plant-specific Kentucky SIP provision, for each plant in the EKPC System to which such requirements apply.

- 169. For each EKPC System Unit, EKPC shall provide EPA with a copy of each application for a permit to address or comply with any provision of this Consent Decree, as well as a copy of any permit proposed as a result of such application, to allow for timely participation in any public comment opportunity.
- 170. If EKPC sells or transfers to an entity unrelated to EKPC ("Third Party Purchaser") part or all of its Ownership Interest in a EKPC System Unit covered under this Consent Decree, EKPC shall comply with the requirements of Paragraphs 166 through 168 with regard to that Unit prior to any such sale or transfer unless, following any such sale or transfer, EKPC remains the holder of the Title V or other federally enforceable permit for such facility.

XVIII. INFORMATION COLLECTION AND RETENTION

- 171. Any authorized representative of the United States or Permitting State Agency, including their attorneys, contractors, and consultants, upon presentation of credentials, shall have a right of entry upon the premises of any facility in the EKPC System at any reasonable time for the purpose of:
 - a. monitoring the progress of activities required under this Consent Decree;
 - b. verifying any data or information submitted to the United States in accordance with the terms of this Consent Decree;
 - c. obtaining samples and, upon request, splits of any samples taken by EKPC or its representatives, contractors, or consultants; and

- d. assessing EKPC's compliance with this Consent Decree.
- 172. EKPC shall retain, and instruct its contractors and agents to preserve, all non-identical copies of all records and documents (including records and documents in electronic form) now in its or its contractors' or agents' possession or control, and that directly relate to EKPC's performance of its obligations under this Consent Decree for the following periods: (a) until December 31, 2020 for records concerning modifications undertaken in accordance with Paragraph 120; and (b) until December 31, 2017 for all other records. This record retention requirement shall apply regardless of any corporate document retention policy to the contrary.
- 173. All information and documents submitted by EKPC pursuant to this Consent Decree shall be subject to any requests under applicable law providing public disclosure of documents unless (a) the information and documents are subject to legal privileges or protection or (b) EKPC claims and substantiates in accordance with 40 C.F.R. Part 2 that the information and documents contain confidential business information.
- 174. Nothing in this Consent Decree shall limit the authority of the EPA to conduct tests and inspections at EKPC's facilities under Section 114 of the Act, 42 U.S.C. § 7414, or any other applicable federal or state laws, regulations or permits.

XIX. NOTICES

175. Unless otherwise provided herein, whenever notifications, submissions, or communications are required by this Consent Decree, they shall be made in writing and addressed as follows:

As to the United States of America:

Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice P.O. Box 7611, Ben Franklin Station Washington, D.C. 20044-7611 DJ# 90-5-2-1-08085

and

Director, Air Enforcement Division Office of Enforcement and Compliance Assurance U.S. Environmental Protection Agency Ariel Rios Building [2242A] 1200 Pennsylvania Avenue, N.W. Washington, DC 20460

and

Regional Administrator U.S. EPA Region IV 61 Forsyth Street, S.W. Atlanta, Georgia 30303-8960

As to EKPC:

Environmental Manager East Kentucky Power Cooperative 4775 Lexington Road PO Box 707 Winchester, KY 40392-0707

and

General Counsel East Kentucky Power Cooperative 4775 Lexington Road PO Box 707 Winchester, KY 40392-0707

176. All notifications, communications or submissions made pursuant to this Section shall be sent either by: (a) overnight mail or delivery service; (b) certified or registered mail, return receipt requested; or (c) electronic transmission, unless the recipient is not able to review the transmission in electronic form. All notifications, communications and transmissions (a) sent

by overnight, certified or registered mail shall be deemed submitted on the date they are postmarked, or (b) sent by overnight delivery service shall be deemed submitted on the date they are delivered to the delivery service. All notifications, communications, and submissions made by electronic means shall be electronically signed and certified, and shall be deemed submitted on the date that EKPC receives written acknowledgment of receipt of such transmission.

177. Either Party may change either the notice recipient or the address for providing notices to it by serving the other Party with a notice setting forth such new notice recipient or address.

XX. SALES OR TRANSFERS OF OWNERSHIP INTERESTS

- 178. If EKPC proposes to sell or transfer an Ownership Interest to a Third Party Purchaser, it shall advise the Third Party Purchaser in writing of the existence of this Consent Decree prior to such sale or transfer, and shall send a copy of such written notification to the Plaintiff pursuant to Section XIX (Notices) of this Consent Decree at least sixty (60) days before such proposed sale or transfer.
- 179. No sale or transfer of an Ownership Interest shall take place before the Third Party Purchaser and EPA have executed, and the Court has approved, a modification pursuant to Section XXIII (Modification) of this Consent Decree making the Third Party Purchaser a party defendant to this Consent Decree and jointly and severally liable with EKPC for all the requirements of this Decree that may be applicable to the transferred or purchased Ownership Interests, except as provided in Paragraph 181.
- 180. This Consent Decree shall not be construed to impede the transfer of any Ownership Interests between EKPC and any Third Party Purchaser as long the requirements of this Consent Decree are met. This Consent Decree shall not be construed to prohibit a

contractual allocation – as between EKPC and any Third Party Purchaser of Ownership Interests – of the burdens of compliance with this Decree, provided that both EKPC and such Third Party Purchaser shall remain jointly and severally liable to EPA for the obligations of the Decree applicable to the transferred or purchased Ownership Interests, except as provided in Paragraph 181.

181. If EPA agrees, EPA, EKPC, and the Third Party Purchaser that has become a party defendant to this Consent Decree pursuant to Paragraph 179, may execute a modification that relieves EKPC of its liability under this Consent Decree for, and makes the Third Party Purchaser liable for, all obligations and liabilities applicable to the purchased or transferred Ownership Interests. Notwithstanding the foregoing, however, EKPC may not assign, and may not be released from, any obligation under this Consent Decree that is not specific to the purchased or transferred Ownership Interests, including the obligations set forth in Sections IX (Environmental Projects) and X (Civil Penalty). EKPC may propose and the EPA may agree to restrict the scope of joint and several liability of any purchaser or transferee for any obligations of this Consent Decree that are not specific to the transferred or purchased Ownership Interests, to the extent such obligations may be adequately separated in an enforceable manner.

XXI. EFFECTIVE DATE

182. The effective date of this Consent Decree shall be the date upon which this Consent Decree is entered by the Court.

XXII. RETENTION OF JURISDICTION

183. <u>Continuing Jurisdiction</u>. The Court shall retain jurisdiction of this case after entry of this Consent Decree to enforce compliance with the terms and conditions of this Consent Decree and to take any action necessary or appropriate for its interpretation, construction, execution, modification, or adjudication of disputes. During the term of this Consent Decree,

either Party to this Consent Decree may apply to the Court for any relief necessary to construe or effectuate this Consent Decree.

XXIII. MODIFICATION

184. The terms of this Consent Decree may be modified only by a subsequent written agreement signed by both Parties. Where the modification constitutes a material change to any term of this Decree, it shall be effective only upon approval by the Court.

XXIV. GENERAL PROVISIONS

- 185. This Consent Decree is not a permit. Compliance with the terms of this Consent Decree does not guarantee compliance with all applicable federal, state, or local laws or regulations. The emission rates set forth herein do not relieve EKPC from any obligation to comply with other state and federal requirements under the Clean Air Act, including EKPC's obligation to satisfy any state modeling requirements set forth in the Kentucky SIP.
 - 186. This Consent Decree does not apply to any claim(s) of alleged criminal liability.
- 187. In any subsequent administrative or judicial action initiated by the United States for injunctive relief or civil penalties relating to the facilities covered by this Consent Decree, EKPC shall not assert any defense or claim based upon principles of waiver, res judicata, collateral estoppel, issue preclusion, claim preclusion, or claim splitting, or any other defense based upon the contention that the claims raised by the United States in the subsequent proceeding were brought, or should have been brought, in the instant case; provided, however, that nothing in this Paragraph 187 is intended to affect the validity of Section XI (Resolution of Claims).
- 188. Except as specifically provided by this Consent Decree, nothing in this Consent Decree shall relieve EKPC of its obligation to comply with all applicable federal, state, and local

laws and regulations. Subject to the provisions in Section XI (Resolution of Claims), nothing contained in this Consent Decree shall be construed to prevent or limit the rights of the United States to obtain penalties or injunctive relief under the Act or other federal, state, or local statutes, regulations, or permits.

- 189. Every term expressly defined by this Consent Decree shall have the meaning given to that term by this Consent Decree and, except as otherwise provided in this Decree, every other term used in this Decree that is also a term under the Act or the regulations implementing the Act shall mean in this Decree what such term means under the Act or those implementing regulations.
- 190. Nothing in this Consent Decree is intended to, or shall, alter or waive any applicable law (including but not limited to any defenses, entitlements, challenges, or clarifications related to the Credible Evidence Rule, 62 Fed. Reg. 8315 (Feb. 27, 1997)) concerning the use of data for any purpose under the Act, generated either by the reference methods specified herein or otherwise.
- 191. Each limit and/or other requirement established by or under this Decree is a separate, independent requirement.
- 192. Performance standards, emissions limits, and other quantitative standards set by or under this Consent Decree must be met to the number of significant digits in which the standard or limit is expressed. For example, an Emission Rate of 0.100 is not met if the actual Emission Rate is 0.101. EKPC shall round the fourth significant digit to the nearest third significant digit, or the third significant digit to the nearest second significant digit, depending upon whether the limit is expressed to three or two significant digits. For example, if an actual Emission Rate is 0.1004, that shall be reported as 0.100, and shall be in compliance with an

Emission Rate of 0.100, and if an actual Emission Rate is 0.1005, that shall be reported as 0.101, and shall not be in compliance with an Emission Rate of 0.100. EKPC shall report data to the number of significant digits in which the standard or limit is expressed.

- 193. This Consent Decree does not limit, enlarge or affect the rights of either Party to this Consent Decree as against any third parties.
- 194. This Consent Decree constitutes the final, complete and exclusive agreement and understanding between the Parties with respect to the settlement embodied in this Consent Decree, and supercedes all prior agreements and understandings between the Parties related to the subject matter herein. No document, representation, inducement, agreement, understanding, or promise constitutes any part of this Decree or the settlement it represents, nor shall they be used in construing the terms of this Consent Decree.
 - 195. Each Party to this action shall bear its own costs and attorneys' fees.

XXV. SIGNATORIES AND SERVICE

- 196. Each undersigned representative of the Parties certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind to this document the Party he or she represents.
- 197. This Consent Decree may be signed in counterparts, and such counterpart signature pages shall be given full force and effect.
- 198. Each Party hereby agrees to accept service of process by mail with respect to all matters arising under or relating to this Consent Decree and to waive the formal service requirements set forth in Rule 4 of the Federal Rules of Civil Procedure and any applicable Local Rules of this Court including, but not limited to, service of a summons.

XXVI. PUBLIC COMMENT

199. The Parties agree and acknowledge that final approval by the United States and entry of this Consent Decree is subject to the procedures of 28 C.F.R. § 50.7, which provides for notice of the lodging of this Consent Decree in the Federal Register, an opportunity for public comment, and the right of the United States to withdraw or withhold consent if the comments disclose facts or considerations which indicate that the Consent Decree is inappropriate, improper or inadequate. EKPC shall not oppose entry of this Consent Decree by this Court or challenge any provision of this Consent Decree unless the United States has notified EKPC, in writing, that the United States no longer supports entry of the Consent Decree.

XXVII. CONDITIONAL TERMINATION OF ENFORCEMENT UNDER DECREE

- 200. <u>Termination as to Completed Tasks.</u> As soon as EKPC completes a construction project or any other requirement of this Consent Decree that is not ongoing or recurring, EKPC may, by motion to this Court, seek termination of the provision or provisions of this Consent Decree that imposed the requirement.
- 201. <u>Conditional Termination of Enforcement Through the Consent Decree</u>. After EKPC:
 - a. has successfully completed construction, and has maintained operation, of all pollution controls as required by this Consent Decree;
 - b. has obtained final Title V permits and has obtained federally enforceable permits or SIP amendments (i) as required by the terms of this Consent Decree; (ii) that cover all units in this Consent Decree; and (iii) that include as enforceable permit terms all of the unit performance and other requirements specified in Section XVII (Permits) of this Consent Decree; and

- c. certifies that the date is later than December 31, 2015; then EKPC may so certify these facts to the Plaintiff and this Court. If the Plaintiff does not object in writing with specific reasons within forty-five (45) days of receipt of EKPC's certification, then, for any Consent Decree violations that occur after EKPC's certification, the Plaintiff shall pursue enforcement of the requirements contained in the Title V or other federally enforceable permit through the permit and not through this Consent Decree.
- 202. Resort to Enforcement under this Consent Decree. Notwithstanding Paragraph 201, if enforcement of a provision in this Decree cannot be pursued by a Party under the applicable Title V permit, or if a Decree requirement was intended to be part of a Title V Permit and did not become or remain part of such permit, then such requirement may be enforced under the terms of this Decree at any time.

XXVIII. FINAL JUDGMENT

	203.	Upon approval and entry of this Consent Decree by the Court, this Consent						
Decre	e shall o	constitute a fin	al judgment in t	he above-capti	oned matter between the Plaint	iff and		
EKPO	Z.							
SO O	RDERE	D, THIS	_DAY OF		_, 2007.			
					RABLE KARL S. FORESTER ATES DISTRICT COURT JUD	OGE		

United States of America
v.
East Kentucky Power Cooperative, No. 04-34-KSF (E.D. Ky.)

FOR THE UNITED STATES OF AMERICA:

RONALD J. TENPAS

Acting Assistant Attorney General Environment and Natural Resources Division United States Department of Justice

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United States of America East Kentucky Power Cooperative, No. 04-34-KSF (E.D. Ky.)

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United States Department of Justice

United States of America v. East Kentucky Power Cooperative, No. 04-34-KSF (E.D. Ky.)

GRANTA Y. NAKAYAMA

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Office of Enforcement and Compliance Assurance
United States Environmental Protection Agency

ADAM M. KUSHNER

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Attorney Advisor
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Office of Enforcement and Compliance Assurance
United States Environmental Protection Agency

United States of America
v.
East Kentucky Power Cooperative, No. 04-34-KSF (E.D. Ky.)

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United States of America v. East Kentucky Power Cooperative, No. 04-34-KSF (E.D. Ky.)

FOR DEFENDANT EAST KENTUCKY POWER COOPERATIVE:

ROBERT MARSHALL
President & CEO
East Kentucky Power Cooperative

APPENDIX A - ENVIRONMENTAL PROJECTS REQUIREMENTS

In compliance with and in addition to the requirements in Section IX of the Consent Decree, EKPC shall comply with the requirements of this Appendix to ensure that the benefits of the Environmental Project is achieved.

- I. Spurlock Plant Wet Electrostatic Precipitator Project
- A. Within sixty days of entry of the Consent Decree, EKPC shall submit a plan to the Plaintiff for review and approval for the performance of the Spurlock Plant Wet Electrostatic Precipitators (WESP) Project. The project will result in the installation of WESPs that will control sulfuric acid emissions from Spurlock Units 1 and 2, with a goal of achieving an emissions rate no greater than 0.005 lbs sulfuric acid mist per mmBTU heat input. EKPC shall install and operate the Spurlock Unit 1 and 2 WESPs on the same schedule as is required for the Spurlock Unit 1 and 2 FGDs pursuant to Paragraph 64 of this Consent Decree. EKPC shall install, operate and maintain the WESPs in accordance with manufacturers' specifications and good engineering practices, so as to minimize emissions to the maximum extent practicable. For purposes of the Consent Decree, the expected \$47 million capital cost for construction and installation of the WESPs shall be deemed to satisfy the Environmental Projects requirements of Section IX upon commencement of operation of this control technology, provided that EKPC continues to operate the control technology for at least five (5) years.
- B. The proposed plan shall satisfy the following criteria:
 - 1. Describe how the work or project to be performed is consistent with the requirements of Section I.A, above.
 - 2. Include a general schedule and budget for completion of the construction of the WESPs, along with a plan for the submittal of periodic reports to the Plaintiff on the progress of the work through completion of the construction and operation of the WESPs.
 - 3. Require at a minimum that the WESPs be designed to achieve an emissions rate no greater than 0.020 lbs sulfuric acid mist per mmBTU heat input.
 - 4. Require that EKPC shall provide the Plaintiff, upon completion of the construction and continuing annually thereafter, with the results of annual stack tests performed pursuant to 40 C.F.R. Appendix A, Method 8. EKPC shall, in accordance with manufacturers' specifications and good engineering practices, operate the WESPs so as to minimize emissions to the maximum extent practicable and so as to meet the emission rate goal set forth in the proposed plan, and in any event shall demonstrate in such annual stack tests an emissions rate no greater than 0.020 lbs sulfuric acid mist per mmBTU heat input.
 - 5. Describe generally the expected environmental benefit for the project.
- C. Performance Upon approval of the plan by the Plaintiff, EKPC shall complete the Spurlock WESP Project according to the approved plan and schedule.

IN THE UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF INDIANA

UNITED STATES OF AMERICA,)
AND)
THE STATE OF INDIANA,)
PLAINTIFFS,)
v.) Civil Action No.:
HOOSIER ENERGY RURAL ELECTRIC COOPERATIVE, INC.)))
Defendant.)
) CONSENT DECREE

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APPENDIX A ENVIRONMENTAL MITIGATION PROJECTS				
APPENDIX B – MEROM EGD OPERATION				

WHEREAS, Plaintiff, the United States of America ("the United States"), on behalf of the United States Environmental Protection Agency ("EPA"), and Plaintiff, the State of Indiana, are concurrently filing a Complaint and Consent Decree for injunctive relief and civil penalties pursuant to Sections 113(b)(2) and 167 of the Clean Air Act (the "Act"), 42 U.S.C. §§ 7413(b)(2) and 7477, and 326 Indiana Administrative Code sections 2-2 and 2-7, alleging that Defendant, Hoosier Energy Rural Electric Cooperative, Inc. ("Hoosier") has undertaken construction projects at a major emitting facility in violation of the Prevention of Significant Deterioration ("PSD") provisions of Part C of Subchapter I of the Act, 42 U.S.C. §§ 7470-7492, and in violation of the federally approved and enforceable Indiana State Implementation Plan ("Indiana SIP");

WHEREAS, EPA issued a Notice of Violation and Finding of Violation ("NOV/FOV") to Hoosier with respect to such allegations on August 26, 2009;

WHEREAS, EPA provided Hoosier and the State of Indiana with actual notice pertaining to Hoosier's alleged violations, in accordance with Section 113(a)(1) and (b) of the Act, 42 U.S.C. § 7413(a)(1) and (b);

WHEREAS, in the Complaint, the United States and the State of Indiana (collectively "Plaintiffs") allege, *inter alia*, that Hoosier failed to obtain the necessary permits and install the controls necessary under the Act to reduce sulfur dioxide ("SO₂"), oxides of nitrogen ("NO_x"), and particulate matter ("PM"), and that Hoosier failed to obtain an operating permit under Title V of the Act that reflects applicable requirements imposed under Part C of Subchapter I of the Act for its Merom Generating Station ("Merom"), located in Sullivan County, Indiana;

WHEREAS, in the Complaint, the Plaintiffs allege claims upon which relief can be granted against Hoosier under Sections 113 and 167 of the Act, 42 U.S.C. §§ 7413 and 7477;

WHEREAS, the Plaintiffs and Hoosier (collectively, the "Parties") have agreed that settlement of this action is in the best interests of the Parties and in the public interest, and that entry of this Consent Decree without further litigation is the most appropriate means of resolving this matter;

WHEREAS, this Consent Decree requires Hoosier to, *inter alia*, upgrade Flue Gas

Desulfurization Systems ("FGDs") that were installed at Merom in 1982 and 1983 and upgrade

Selective Catalytic Reduction devices ("SCRs") that were installed at Merom in 2004;

WHEREAS, this Consent Decree provides Hoosier with an affirmative defense to stipulated penalties pursuant to Section XIV (Stipulated Penalties) based upon EPA's Excess Emissions Policies, including the policy titled "State Implementation Plans: Policy Regarding Excess Emissions During Malfunctions, Startup, and Shutdown," issued on September 20, 1999, which describes the conditions under which an owner or operator of a source, bearing the burden of proof, may avail itself of an affirmative defense in a civil or administrative action, other than a judicial action for injunctive relief, if the owner or operator of the source has emissions in excess of an applicable emission limitation due to malfunction, startup, or shutdown; and EPA will interpret the affirmative defense contained herein consistent with its Excess Emissions Policies;

WHEREAS, the Parties have agreed, and this Court by entering this Consent Decree finds, that this Consent Decree has been negotiated in good faith and at arm's length and that this Consent Decree is fair, reasonable, in the public interest, and consistent with the goals of the Act;

WHEREAS, Hoosier has cooperated in the resolution of this matter;

WHEREAS, Hoosier denies the violations alleged in the Complaint, and nothing herein shall constitute an admission of liability;

WHEREAS, Hoosier maintains that its agreement in this Consent Decree to install, correlate, maintain, and operate Particulate Matter Continuous Emissions Monitoring Systems ("PM CEMS") shall not prevent Hoosier in any future proceedings from challenging the relationship between the data generated from such PM CEMS, including the averaging period for which such data is reported pursuant to Paragraph 129, and the results of performance tests for PM (e.g., Method 5); and

WHEREAS, the Parties have consented to entry of this Consent Decree without trial of any issues;

NOW, THEREFORE, without any admission of fact or law, it is hereby ORDERED, ADJUDGED, AND DECREED as follows:

I. JURISDICTION AND VENUE

1. This Court has jurisdiction over this action, the subject matter herein, and the Parties consenting hereto, pursuant to 28 U.S.C. §§ 1331, 1345, 1355, and 1367, and pursuant to Sections 113 and 167 of the Act, 42 U.S.C. §§ 7413 and 7477. Venue is proper under Section 113(b) of the Act, 42 U.S.C. § 7413(b), and under 28 U.S.C. § 1391(b) and (c). Solely for the purposes of this Consent Decree and the underlying Complaint, and for no other purpose, Hoosier waives all objections and defenses that it may have to the Court's jurisdiction over this action, to the Court's jurisdiction over Hoosier, and to venue in this district. Hoosier consents to and shall not challenge entry of this Consent Decree or this Court's jurisdiction to enter and enforce this Consent Decree. Except as expressly provided for herein, this Consent Decree shall not create any rights in or obligations of any party other than the Parties to this Consent Decree. Except as provided in Section

XXVI (Public Comment) of this Consent Decree, the Parties consent to entry of this Consent Decree without further notice.

II. APPLICABILITY

- 2. Upon entry, the provisions of this Consent Decree shall apply to and be binding upon the Parties, their successors and assigns, and upon Hoosier's directors, officers, employees, servants, and agents solely in their capacities as such.
- 3. Hoosier shall provide a copy of this Consent Decree to all vendors, suppliers, consultants, contractors, agents, and any other company or other organization retained to perform any of the work required by this Consent Decree. Notwithstanding any retention of contractors, subcontractors, or agents to perform any work required under this Consent Decree, Hoosier shall be responsible for ensuring that all work is performed in accordance with the requirements of this Consent Decree. In any action to enforce this Consent Decree, Hoosier shall not assert as a defense the failure of its officers, directors, employees, servants, agents, or contractors to take actions necessary to comply with this Consent Decree, unless it is determined to be a Force Majeure Event as defined in Paragraph 178 of this Consent Decree.

III. <u>DEFINITIONS</u>

4. Every term expressly defined by this Section shall have the meaning given that term herein. Every other term used in this Consent Decree that is also a term used under the Act or in a federal regulation implementing the Act shall mean in this Consent Decree what such term means under the Act or those regulations.

- 5. A "1-Hour Average NOx Emission Rate" for a gas-fired, electric generating unit shall be expressed as the average concentration in parts per million (ppm) by dry volume, corrected to 15% O₂, as averaged over one (1) hour. In determining the 1-Hour Average NOx Emission Rate, Hoosier shall use CEMS in accordance with the procedures specified in 40 C.F.R. Part 60 to calculate emissions for each 15 minute interval within each clock hour, except as provided in this Paragraph. Compliance with the 1-Hour Average NO_x Emission Rate shall be demonstrated by averaging all 15-minute CEMS interval readings within a clock hour, except that any 15-minute CEMS interval that contains any part of a startup or shutdown shall not be included in the calculation of that 1-hour average. A minimum of two 15-minute CEMS interval readings within a clock hour, not including startup or shutdown intervals, is required to determine compliance with the 1-Hour Average NOx Emission Rate. All emissions recorded by CEMS shall be reported in 1-hour averages.
- 6. A "30-Day Rolling Average NO_x Emission Rate" for a Unit shall be expressed in lb/mmBTU and calculated in accordance with the following procedure: first, sum the total pounds of NO_x emitted from the Unit during the current Unit Operating Day and the previous twenty-nine (29) Unit Operating Days; second, sum the total heat input to the Unit in mmBTU during the current Unit Operating Day and the previous twenty-nine (29) Unit Operating Days; and third, divide the total number of pounds of NO_x emitted during the thirty (30) Unit Operating Days by the total heat input during the thirty (30) Unit Operating Days Rolling Average NO_x Emission Rate shall be calculated for each new Unit Operating Day. Each 30-Day Rolling Average NO_x

- Emission Rate shall include all emissions that occur during all periods within any Unit Operating Day, including emissions from startup, shutdown, and malfunction.
- 7. "Available" means, with regard to the coal necessary to achieve and maintain a 30-Day Rolling Average SO₂ Emission Rate of no greater than 2.00 lb/mmBTU as specified in Paragraph 85, such coal that: (1) is available for sale to Hoosier in a sufficient quantity to enable Hoosier to meet the emissions limitation in Paragraph 85; (2) is located at mines within 100 miles of Ratts; (3) has a low enough sulfur content to enable Hoosier to meet the emissions limitation in Paragraph 85; (4) meets the Ratts coal quality specifications for ash fusion, BTU content, moisture, ash content, grindability, percent fines, volatile matter, fixed carbon, and other environmental requirements; (5) is able to be transported to Ratts; and (6) is available at a cost which is no more than 20 percent higher than the delivered price per ton for the calendar year for 11,500 BTU/lb, 2.5 lb/ SO₂ coal transported out of the Illinois Basin by rail, as published in Platts Coal Outlook under the Weekly Price Survey for the relevant week.
- 8. A "30-Day Rolling Average SO₂ Removal Efficiency" means the percent reduction in the mass of SO₂ achieved by a Unit's FGD system over a thirty (30) Unit Operating Day period and shall be calculated as follows: step one, sum the total pounds of SO₂ emitted as measured at the outlet of the FGD system for the Unit during the current Unit Operating Day and the previous twenty-nine (29) Unit Operating Days as measured at the outlet of the FGD system for that Unit; step two, sum the total pounds of SO₂ delivered to the inlet of the FGD system for the Unit during the current Unit Operating Day and the previous twenty-nine (29) Unit Operating Days as measured at the inlet to the FGD system for that Unit (this shall be calculated by measuring the ratio of the lb/mmBTU

SO₂ inlet to the lb/mmBTU SO₂ outlet and multiplying the outlet pounds of SO₂ by that ratio); step three, subtract the outlet SO₂ emissions calculated in step one from the inlet SO₂ emissions calculated in step two; step four, divide the difference calculated in step three by the inlet SO₂ emissions calculated in step two; and step five, multiply the quotient calculated in step four by 100 to express the emission limit as a removal efficiency percentage. A new 30-Day Rolling Average SO₂ Removal Efficiency shall be calculated for each new Unit Operating Day. Each 30-Day Rolling Average SO₂ Removal Efficiency shall include all emissions that occur during all periods within any Unit Operating Day, including emissions from startup, shutdown, and malfunction.

- 9. A "30-Day Rolling Average SO₂ Emission Rate" for a Unit shall be expressed in lb/mmBTU and calculated in accordance with the following procedure: first, sum the total pounds of SO₂ emitted from the Unit during the current Unit Operating Day and the previous twenty-nine (29) Unit Operating Days; second, sum the total heat input to the Unit in mmBTU during the current Unit Operating Day and the previous twenty-nine (29) Unit Operating Days; and third, divide the total number of pounds of SO₂ emitted during the thirty (30) Unit Operating Days by the total heat input during the thirty (30) Unit Operating Days Rolling Average SO₂ Emission Rate shall be calculated for each new Unit Operating Day. Each 30-Day Rolling Average SO₂ Emission Rate shall include all emissions that occur during all periods within any Unit Operating Day, including emissions from startup, shutdown, and malfunction.
- 10. "Baghouse" means a full stream (fabric filter) particulate emissions control device.
- 11. "Biomass" means any organic matter that is available on a renewable basis from non-federal land, including: renewable plant material; waste material, including crop residue;

other vegetative waste material, including wood waste and wood residues; animal waste and byproducts; construction, food, and yard waste; and residues and byproducts from wood pulp or paper products facilities. Biomass is "available on a renewable basis" if it originates from forests that remain forests, or from croplands and/or grasslands that remain croplands and/or grasslands or revert to forests. Biomass "residues and byproducts from wood pulp or paper products facilities" includes byproducts, residues, and waste streams from agriculture, forestry, and related industries.

- 12. "Boiler Island" means a Unit's (a) fuel combustion system (including bunker, coal pulverizers, crusher, stoker, and fuel burners); (b) combustion air system; (c) steam generating system (firebox, boiler tubes, and walls); and (d) draft system (excluding the stack), all as further described in "Interpretation of Reconstruction," by John B. Rasnic, U.S. EPA (November 25, 1986) and attachments thereto.
- 13. "CEMS" or "Continuous Emission Monitoring System," means, for obligations involving the monitoring of NO_x and SO₂ emissions under this Consent Decree, the devices defined in 40 C.F.R. § 72.2, the inlet SO₂ lb/mmBTU monitors, and the computer system for recording, calculating, and storing data and equations required by this Consent Decree.
- 14. "Clean Air Act" or "Act" means the federal Clean Air Act, 42 U.S.C. §§ 7401-7671q, and its implementing regulations.
- 15. "Consent Decree" means this Consent Decree and the Appendices hereto, which are incorporated into the Consent Decree.
- 16. "Continuously Operate" or "Continuous Operation" means that when an SCR, SNCR,FGD, RI, ESP, Baghouse (if applicable), or Low NOx Burner Combustion System is

- used at a Unit, except as otherwise provided by Section XV (Force Majeure), it shall be operated at all times such Unit is in operation, consistent with the technological limitations, manufacturers' specifications, and good engineering and maintenance practices for such equipment and the Unit so as to minimize emissions to the greatest extent practicable.
- 17. "Date of Entry" means the date this Consent Decree is approved or signed by the United States District Court Judge.
- 18. "Date of Lodging" means the date this Consent Decree is filed for lodging with the Clerk of the Court for the United States District Court for the Southern District of Indiana.
- 19. "Day" means calendar day unless otherwise specified in this Consent Decree.
- 20. "Electrostatic Precipitator" or "ESP" means a device for removing particulate matter from combustion gases by imparting an electric charge to the particles and then attracting them to a metal plate or screen of opposite charge before the combustion gases are exhausted to the atmosphere.
- 21. "Emission Rate" for a given pollutant means the number of pounds of that pollutant emitted per million British thermal units of heat input (lb/mmBTU), measured in accordance with this Consent Decree.
- 22. "Environmental Mitigation Projects" or "Projects" means the projects set forth in Appendix A to this Consent Decree.
- 23. "EPA" means the United States Environmental Protection Agency.
- 24. "Flue Gas Desulfurization System" or "FGD" means a pollution control device that employs flue gas desulfurization technology, including an absorber utilizing lime, fly ash, or limestone slurry, for the reduction of SO₂ emissions.

- 25. "Fossil Fuel" means any hydrocarbon fuel, including coal, petroleum coke, petroleum oil, or natural gas.
- 26. "H₂SO₄" means sulfuric acid, measured in accordance with the provisions of this Consent Decree.
- 27. "H₂SO₄ Emission Rate" means the number of pounds of H₂SO₄ emitted per million BTU of heat input (lb/mmBTU), as measured in annual stack tests in accordance with Paragraph 116.
- 28. "Hoosier" or "Defendant" means Hoosier Energy Rural Electric Cooperative, Inc.
- 29. "Hoosier System" means the Merom and Ratts facilities as defined herein.
- 30. "IDEM" means the Indiana Department of Environmental Management.
- 31. "Indiana SIP" means the Indiana State Implementation Plan, and any amendments thereto, as approved by EPA pursuant to Section 110 of the Act, 42 U.S.C. § 7410.
- 32. "Low NO_x Combustion System" means burners and associated combustion air control equipment, including overfire air, for combusting pulverized coal, which control mixing characteristics of the pulverized coal and oxygen, lower the combustion rate, lower oxygen concentration and heat temperature during the initial phase of combustion, and thereby restrain the formation of NO_x created by both the nitrogen content of the pulverized coal and by heat.
- 33. "Merom" means Hoosier's Merom Generating Station consisting of two dry-bottom turbo-fired boilers designated as Unit 1 (547 Gross MW) and Unit 2 (547 Gross MW) and related equipment, which is located in Sullivan County, Indiana.
- 34. "Netting" shall mean the process of determining whether a particular physical change or change in the method of operation of a major stationary source results in a net emissions

- increase, as that term is defined at 40 C.F.R. § 52.21(b)(3)(i) and at 326 IAC 2-2-1(jj) of the Indiana SIP.
- 35. "NO_x" means oxides of nitrogen, measured in accordance with the provisions of this Consent Decree.
- 36. "NO_x Allowance" means an authorization to emit a specified amount of NO_x that is allocated or issued under an emissions trading or marketable permit program of any kind that has been established under the Clean Air Act or a state implementation plan.
- 37. "Nonattainment NSR" means the new source review program within the meaning of Part D of Subchapter I of the Act, 42 U.S.C. §§ 7501-7515, and the federal regulations codified at 40 C.F.R. Part 51, and the federally approved provisions of the Indiana SIP, 326 IAC 2-3.
- 38. "Operational or Ownership Interest" means part or all of Hoosier's legal or equitable operational or ownership interest in any Unit at Merom or Ratts.
- 39. "Parties" means the United States of America on behalf of EPA, the State of Indiana, including the Indiana Attorney General and the Indiana Department of Environmental Management, and Hoosier. "Party" means one of the named "Parties."
- 40. "PM" means total filterable particulate matter, measured in accordance with the provisions of this Consent Decree.
- 41. "PM CEMS" or "PM Continuous Emission Monitoring System" means, for obligations involving the monitoring of PM emissions under this Consent Decree, the equipment that samples, analyzes, measures, and provides, by readings taken at frequent intervals, an electronic and/or paper record of PM emissions.

- 42. "PM Emission Rate" means the number of pounds of PM emitted per million BTU of heat input (lb/mmBTU), as measured in annual stack tests in accordance with Paragraph 123.
- 43. "Plant-Wide 12-Month Rolling SO₂ Tonnage Limitation" at Ratts means the sum of the tons of SO₂ emitted from Ratts Unit 1 and Unit 2 in the most recent complete month and the previous eleven (11) months. A new Plant-Wide 12-Month Rolling SO₂ Tonnage Limitation shall be calculated for each new complete month in accordance with the provisions of this Consent Decree. Each Plant-Wide 12-Month Rolling SO₂ Tonnage Limitation shall include all emissions that occur during all periods of operation, including startup, shutdown, and malfunction.
- 44. "Prevention of Significant Deterioration" or "PSD" means the new source review program within the meaning of Part C of Subchapter I of the Clean Air Act, 42 U.S.C. §§ 7470-7492, the federal regulations codified at 40 C.F.R. Part 52, and the federally approved provisions of the Indiana SIP, 326 IAC 2-2.
- 45. "Project Dollars" means Hoosier's expenditures and payments incurred or made in carrying out the Environmental Mitigation Projects identified in Section IX (Environmental Mitigation Projects) of this Consent Decree to the extent that such expenditures or payments both: (a) comply with the requirements set forth in Section IX and Appendix A of this Consent Decree, and (b) constitute Hoosier's direct payments for such projects, or Hoosier's external costs for contractors, vendors, and equipment.
- 46. "Ratts" means Hoosier's Ratts Generating Station consisting of two dry-bottom wall-fired boilers designated as Unit 1 (132 MW) and Unit 2 (132 MW) and related equipment, which is located in Pike County, Indiana.

- 47. "Reagent Injection" or "RI" means an H₂SO₄ control system consisting of the injection of a reagent in the flue gas stream to react with the acid gases and reduce the outlet H₂SO₄ Emission Rate.
- 48. "Removal Efficiency" for a given pollutant means the percentage of that pollutant removed by the applicable emission control device, measured in accordance with the provisions of this Consent Decree.
- 49. "Repower" or "Repowered" means that a Unit is either Repowered to Biomass or Repowered to Natural Gas within the meaning of this Consent Decree.
- 50. "Repowered to Biomass" means, for purposes of this Consent Decree, a Unit at Ratts that is repowered to exclusively combust Biomass and that shall achieve and maintain the following emissions limitations: A 30-Day Rolling Average NO_x Emission Rate of no greater than 0.100 lb/mmBTU; a 30-Day Rolling Average SO₂ Emission Rate of no greater than 0.100 lb/mmBTU; and a PM Emission Rate of no greater than 0.015 lb/mmBTU.
- replacement of Unit components, such that the modified or replaced Unit generates electricity solely through the combustion of natural gas rather than coal and without the use of combustion turbine technology, where such natural gas contains no more than 0.5 grains of sulfur per 100 standard cubic feet of natural gas, and the Unit at a minimum achieves and maintains a 1-Hour Average NO_x Emission Rate of no greater than 4.5 ppm.
- 52. "Retire" means that Hoosier shall permanently shutdown and cease to operate the Unit such that the Unit cannot legally burn any fuel nor produce any steam for electricity production and that Hoosier shall comply with applicable state and federal requirements

- for permanently retiring a coal-fired electric generating unit, including removing the Unit from Indiana's air emissions inventory, and amending all applicable permits so as to reflect the permanent shutdown status of such Unit.
- 53. "SCR" or "Selective Catalytic Reduction" means a pollution control device for reducing NO_x emissions through the use of selective catalytic reduction technology.
- 54. "SNCR" or "Selective Non-Catalytic Reduction" means a pollution control device for the reduction of NO_x emissions through the use of selective non-catalytic reduction technology that utilizes ammonia or urea injection into the boiler.
- 55. "SO₂" means sulfur dioxide, measured in accordance with the provisions of this Consent Decree.
- 56. "SO₂ Allowance" means an authorization or credit to emit a specified amount of SO₂ that is allocated or issued under an emissions trading or marketable permit program of any kind that has been established under the Clean Air Act or the Indiana SIP.
- 57. "State" means the State of Indiana.
- 58. "Super-Compliant NO_x Allowance" means a NO_x Allowance attributable to reductions beyond the requirements of this Consent Decree, as described in Paragraph 79.
- 59. "Surrender" or "Surrender of Allowances" means, for purposes of SO2 or NOx Allowances, permanently surrendering allowances from the accounts administered by EPA and Indiana for all Units in the Hoosier System, so that such allowances can never be used thereafter to meet any compliance requirements under the Clean Air Act, a state implementation plan, or this Consent Decree.
- 60. "System-Wide Annual NO_x Tonnage Limitation" means the limitations, as specified in this Consent Decree, on the number of tons of NO_x that may be emitted from Merom

- Unit 1 and Unit 2 and Ratts Unit 1 and Unit 2, collectively, during the relevant calendar year (<u>i.e.</u>, January 1 through December 31), and shall include all emissions of NO_x during all periods of operations, including startup, shutdown, and malfunction.
- 61. "System-Wide Annual SO₂ Tonnage Limitation" means the limitations, as specified in this Consent Decree, on the number of tons of SO₂ that may be emitted from Merom Unit 1 and Unit 2 and Ratts Unit 1 and Unit 2, collectively, during the relevant calendar year (i.e., January 1 through December 31), and shall include all emissions of SO₂ during all periods of operations, including startup, shutdown, and malfunction.
- 62. "Title V Permit" means the permit required of Merom and Ratts under Subchapter V of the Act, 42 U.S.C. §§ 7661-7661e.
- 63. "Unit" means collectively, the coal pulverizer, stationary equipment that feeds coal to the boiler, the boiler that produces steam for the steam turbine, the steam turbine, the generator, the equipment necessary to operate the generator, steam turbine, and boiler, and all ancillary equipment, including pollution control equipment and systems necessary for production of electricity. An electric steam generating station may comprise one or more Units.
- 64. "Unit Operating Day" means, for Merom Unit 1, any Day on which Merom Unit 1 fires Fossil Fuel, and, for Merom Unit 2, any Day on which Merom Unit 2 fires Fossil Fuel, and for Ratts Unit 1, any Day on which Ratts Unit 1 fires Fossil Fuel, and, for Ratts Unit 2, any Day on which Ratts Unit 2 fires Fossil Fuel.

IV. NO_x EMISSION REDUCTIONS AND CONTROLS

- A. NO_x Emission Limitations and Control Requirements
- 1. Selective Non-Catalytic Reduction Installation, Operation, and Performance Requirements at Ratts Unit 1 and Unit 2
- 65. By no later than December 31, 2011, and continuing thereafter, Hoosier shall install and commence Continuous Operation of SNCRs at Ratts Unit 1 and Unit 2.
- 66. By no later than June 1, 2012, and continuing through December 30, 2014, Hoosier shall Continuously Operate the SNCRs at Ratts Unit 1 and Unit 2 so that each Unit achieves and maintains a 30-Day Rolling Average NO_x Emission Rate of no greater than 0.250 lb/mmBTU.
- 67. By no later than December 31, 2014, and continuing thereafter, Hoosier shall Continuously Operate the SNCRs at Ratts Unit 1 and Unit 2 so that each Unit achieves and maintains a 30-Day Rolling Average NO_x Emission Rate of no greater than 0.230 lb/mmBTU.

2. SCR Operation and Performance Requirements at Merom Unit 1 and Unit 2

- 68. By no later than the Date of Entry of this Consent Decree, Hoosier shall commence Continuous Operation of the SCRs at Merom Unit 1 and Unit 2.
- 69. By no later than December 31, 2010, and continuing thereafter, Hoosier shall Continuously Operate the SCRs at Merom Unit 1 and Unit 2 so that each Unit achieves and maintains a 30-Day Rolling Average NO_x Emission Rate of no greater than 0.120 lb/mmBTU.
- 70. By no later than December 31, 2012 for one Merom Unit and December 31, 2013 for the other Merom Unit, and continuing thereafter, Hoosier shall Continuously Operate the

SCRs at each Merom Unit so that each Unit achieves and maintains a 30-Day Rolling Average NO_x Emission Rate of no greater than 0.080 lb/mmBTU. During any 30-Day period used to calculate a 30-Day Rolling Average NO_x Emission Rate for Merom Unit 1 or Unit 2, if the dispatch of either Unit requires operation of such Unit(s) at a load level that results in flue gas temperature so low that it becomes technically infeasible to Continuously Operate the SCR despite Hoosier's best efforts to do so (including, but not limited to, maintaining minimum load operation which provides for achieving sufficient inlet temperatures for injection of ammonia to the SCR), Hoosier shall not be subject to stipulated penalties pursuant to Section XIV (Stipulated Penalties) for violating the Emission Rate required by this Paragraph provided that Hoosier's emissions do not exceed a 30-Day Rolling Average NO_x Emission Rate of 0.090 lb/mmBTU and Hoosier provides EPA with data and calculations to demonstrate that but for such low load operation, Hoosier would have achieved and maintained a 30-Day Rolling Average NO_x Emission Rate of no greater than 0.080 lb/mmBTU at such Unit(s).

3. System-Wide Annual NO_x Tonnage Limitation.

- 71. Beginning in calendar year 2011, and continuing through calendar year 2012, the Hoosier System, collectively, shall not exceed a System-Wide Annual NO_x Tonnage Limitation of 5,869 tons.
- 72. Beginning in calendar year 2013, and continuing through calendar year 2014, the Hoosier System, collectively, shall not exceed a System-Wide Annual NO_x Tonnage Limitation of 5,395 tons.

73. Beginning in calendar year 2015, and continuing each calendar year thereafter, the Hoosier System, collectively, shall not exceed a System-Wide Annual NO_x Tonnage Limitation of 4,800 tons.

B. Monitoring of NO_x Emissions

- 74. In determining a 30-Day Rolling Average NO_x Emission Rate, Hoosier shall use CEMS in accordance with the procedures of 40 C.F.R. Part 75, except that: (1) NO_x emissions data need not be bias adjusted; (2) for any CEMS with a span less than 100 parts per million ("ppm"), the calibration drift and out-of-control criteria in Procedure 1, section 4.3 of 40 C.F.R. Part 60, Appendix F shall apply in lieu of the specifications in 40 C.F.R. Part 75, Appendix B; (3) for any CEMS with a span less than or equal to 30 ppm the exemption from the 40 C.F.R. Part 75 linearity check will not apply and either the 40 C.F.R. Part 75 linearity check or the cylinder gas audit described in Procedure 1, section 5.1.2 of 40 C.F.R. Part 60, Appendix F shall be performed on a quarterly basis; and (4) for any Unit controlled by SCR, an annual relative accuracy test audit shall meet, at a minimum, a relative accuracy of less than 20% or an accuracy of less than 0.015 lb/mmBTU (expressed as the difference between the monitor mean and the reference value mean).
- 75. For purposes of calculating the System-Wide Annual NO_x Tonnage Limitation, Hoosier shall use CEMS in accordance with the procedures specified in 40 C.F.R. Part 75

C. Use and Surrender of NO_x Allowances

76. Except as may be necessary to comply with Section XIV (Stipulated Penalties), Hoosier shall not use NO_x Allowances to comply with any requirement of this Consent Decree, including by claiming compliance with any emission limitation required by this Consent

- Decree by using, tendering, or otherwise applying NO_x Allowances to offset any excess emissions.
- 88 Beginning in calendar year 2011, and continuing each calendar year thereafter, Hoosier shall Surrender all NO_x Allowances allocated to the Hoosier System for that calendar year that Hoosier does not need in order to meet its own federal and/or state Clean Air Act regulatory requirements for the Hoosier System Units. However, NO_x Allowances allocated to the Hoosier System may be used by Hoosier to meets its own federal and/or state Clean Air Act regulatory requirements for such Units. Nothing in this Consent Decree shall prevent Hoosier from purchasing or otherwise obtaining NO_x Allowances from another source for purposes of complying with federal and/or state Clean Air Act regulatory requirements to the extent otherwise allowed by law.
- 78. The requirements of this Consent Decree pertaining to Hoosier's use and Surrender of NO_x Allowances are permanent injunctions not subject to any termination provision of this Consent Decree.

D. <u>Super-Compliant NO_x Allowances</u>

- 79. Provided that Hoosier is in compliance with the applicable System-Wide Annual NO_x

 Tonnage Limitation specified for that year, nothing in this Consent Decree shall preclude Hoosier from selling, banking, or transferring NO_x Allowances allocated to Merom Unit 1 and Unit 2 and Ratts Unit 1 and Unit 2 that become available for sale or trade solely as a result of:
 - a. the installation and operation of any NO_x pollution control that is not otherwise required by, or necessary to maintain compliance with, any provision of this Consent Decree, and is not otherwise required by law;

- b. the use of SNCR prior to the date established by this Consent Decree; or

Hoosier shall timely report the generation of such Super-Compliant NO_x Allowances in accordance with Section XII (Periodic Reporting) of this Consent Decree.

E. Method for Surrender of NO_x Allowances

- 80. Hoosier shall Surrender, or transfer to a non-profit third-party selected by Hoosier for Surrender, all NO_x Allowances required to be Surrendered pursuant to Paragraph 77 by March 1 of the immediately following calendar year.
- 81. If any NO_x Allowances required to be Surrendered under this Consent Decree are transferred directly to a non-profit third-party, Hoosier shall include a description of such transfer in the next report submitted to EPA pursuant to Section XII (Periodic Reporting) of this Consent Decree. Such report shall: (a) identify the non-profit third-party recipient(s) of the NO_x Allowances and list the serial numbers of the transferred NO_x Allowances; and (b) include a certification by the third-party recipient(s) stating that the recipient(s) will not sell, trade, or otherwise exchange any of the NO_x Allowances and will not use any of the NO_x Allowances to meet any obligation imposed by any environmental law. No later than the third periodic report due after the transfer of any NO_x Allowances, Hoosier shall include a statement that the third-party recipient(s) Surrendered the NO_x Allowances for permanent Surrender to EPA in accordance with the provisions of Paragraph 82 within one (1) year after Hoosier transferred the NO_x Allowances to them. Hoosier shall not have complied with the NO_x Allowance Surrender requirements of this Paragraph until all third-party recipient(s) have actually Surrendered

- the transferred NO_x Allowances to EPA.
- 82. For all NO_x Allowances required to be Surrendered, Hoosier or the third-party recipient(s) (as the case may be) shall first submit a NO_x Allowance transfer request form to EPA's Office of Air and Radiation's Clean Air Markets Division directing the transfer of such NO_x Allowances to the EPA Enforcement Surrender Account or to any other EPA account that EPA may direct in writing. As part of submitting these transfer requests, Hoosier or the third-party recipient(s) shall irrevocably authorize the transfer of these NO_x Allowances and identify by name of account and any applicable serial or other identification numbers or station names the source and location of the NO_x Allowances being Surrendered.

V. <u>SO₂ EMISSION REDUCTIONS AND CONTROLS</u>

A. SO₂ Emission Limitations and Control Requirements

1. Limitations on SO₂ Emissions at Ratts

- 83. For the 12-month period commencing on January 1, 2011, and continuing through December 31, 2013, SO₂ emissions from Ratts Unit 1 and Unit 2, collectively, shall not exceed a Plant-Wide 12-Month Rolling SO₂ Tonnage Limitation of 14,000 tons.
- 84. For the period commencing on July 1, 2011 and continuing through September 30, 2011, each Unit at Ratts shall achieve and maintain a 30-Day Rolling Average SO₂ Emission Rate of no greater than 2.50 lb/mmBTU.
- 85. For the period commencing on July 1, 2012 and continuing through September 30, 2012, and each July 1 through September 30 thereafter, provided that coal is Available, each Unit at Ratts shall achieve and maintain a 30-Day Rolling Average SO₂ Emission Rate of no greater than 2.00 lb/mmBTU. If coal is not Available, then during such time periods,

- Hoosier shall achieve and maintain a 30-Day Rolling Average SO₂ Emission Rate of no greater than 2.50 lb/mmBTU.
- 86. For the 12-month period commencing on January 1, 2014, and continuing through either December 31, 2015 or December 31, 2016, pursuant to Paragraphs 88 and 89 below, SO₂ emissions from Ratts Unit 1 and Unit 2, collectively, shall not exceed a Plant-Wide 12-Month Rolling SO₂ Tonnage Limitation of 10,000 tons.
- 87. For Ratts Units 1 and 2, on or before January 1, 2015, Hoosier shall elect to (a) Retire, (b) Repower, or (c) continue to operate Ratts Unit 1 and/or Unit 2 as coal-fired Units.

 Hoosier shall provide Notice of such election pursuant to Section XIX (Notices).
- 88. If Hoosier elects to Retire or Repower Ratts Unit 1 and/or Unit 2, Hoosier shall Retire or Repower such Unit(s) by no later than January 1, 2017. If Hoosier Retires or Repowers only one of the Ratts Units and continues operation of the other Unit as a coal-fired Unit, then for the 12-month period commencing on January 1, 2017, and continuing thereafter, SO₂ emissions from Ratts shall not exceed a Plant-Wide 12-Month Rolling SO₂ Tonnage Limitation of 4,000 tons.
- 89. If Hoosier elects to continue to operate Ratts Unit 1 and Unit 2 as coal-fired Units, then for the 12-month period commencing on January 1, 2016, and continuing thereafter, SO₂ emissions from Ratts Unit 1 and Unit 2, collectively, shall not exceed a Plant-Wide 12-Month Rolling SO₂ Tonnage Limitation of 6,750 tons.

2. FGD Operation and Performance Requirements at Merom Unit 1 and Unit 2

90. By no later than thirty (30) Days from the Date of Entry of this Consent Decree, and continuing thereafter, Hoosier shall Continuously Operate the existing FGD on Merom Unit 1, which was installed in 1983, and the existing FGD on Merom Unit 2, which was

- installed in 1982, so as to achieve and maintain a 30-Day Rolling Average SO₂ Removal Efficiency of at least 90.0% with a goal of at least 94.0%. In addition, for the period from the Date of Entry of this Consent Decree until the FGDs are upgraded as required by Paragraphs 91 and 92, Hoosier shall operate the FGDs on Merom Unit 1 and Unit 2 consistent with Appendix B.
- 91. By no later than June 1, 2012 for one of the Merom Units, Hoosier shall upgrade the FGD such that the upgraded FGD is designed to meet a 30-Day Rolling Average SO₂ Removal Efficiency of at least 98.0%. Commencing on December 1, 2012, and continuing through December 30, 2014, Hoosier shall Continuously Operate the FGD at such Merom Unit to achieve and maintain a 30-Day Rolling Average SO₂ Emission Rate of no greater than 0.150 lb/mmBTU or a 30-Day Rolling Average SO₂ Removal Efficiency of at least 95.0%. Commencing on December 31, 2014, and continuing thereafter, Hoosier shall Continuously Operate the FGD at such Merom Unit to achieve and maintain a 30-Day Rolling Average SO₂ Emission Rate of no greater than 0.150 lb/mmBTU or a 30-Day Rolling Average SO₂ Removal Efficiency of at least 96.0%.
- 92. By no later than June 1, 2013 for the other Merom Unit (i.e., the Unit not upgraded pursuant to Paragraph 91, above), Hoosier shall upgrade the FGD such that the upgraded FGD is designed to meet a 30-Day Rolling Average SO₂ Removal Efficiency of at least 98.0%. Commencing on September 1, 2013, and continuing through December 30, 2015, Hoosier shall Continuously Operate the FGD at such Merom Unit to achieve and maintain a 30-Day Rolling Average SO₂ Emission Rate of no greater than 0.150 lb/mmBTU or a 30-Day Rolling Average SO₂ Removal Efficiency of at least 95.0%. Commencing on December 31, 2015, and continuing thereafter, Hoosier shall

- Continuously Operate the FGD at such Merom Unit to achieve and maintain a 30-Day Rolling Average SO₂ Emission Rate of no greater than 0.150 lb/mmBTU or a 30-Day Rolling Average SO₂ Removal Efficiency of at least 96.0%.
- 93. At any time after December 31, 2015 but before June 30, 2016, Hoosier may submit to EPA a proposed revision to the 30-Day Rolling Average SO₂ Removal Efficiency of at least 96.0% for either of the Merom Units. The petition must demonstrate, based upon all relevant information, that a 30-Day Rolling Average SO₂ Removal Efficiency of at least 96.0% cannot be achieved and maintained for the Unit in question even after taking all reasonable measures to achieve the designed level of performance of the FGD including, but not limited to, retention of qualified outside technical support to assist it in operating and optimizing the FGD in order to achieve the 96.0% 30-Day Rolling Average SO₂ Removal Efficiency for the Merom Units. Hoosier shall include in such proposal an alternate 30-Day Rolling Average SO₂ Removal Efficiency, but in no event may Hoosier propose a 30-Day Rolling Average SO₂ Removal Efficiency of less than 95.0%. Hoosier shall also submit all studies, reports, and/or recommendations from the contractor required by this Paragraph, evaluating each measure undertaken in an effort to meet the 96.0% 30-Day Rolling Average SO₂ Removal Efficiency requirement. Hoosier shall also deliver with each submission all pertinent documents and data that support or were considered in preparing such submission, as well as all data pertaining to the performance of the FGD in question since the Date of Entry of the Consent Decree and the operational history of the Unit, including the sulfur content of the coal burned at the Unit, since the Date of Entry of the Consent Decree. If EPA disapproves the proposed revision to the 30-Day Rolling Average SO₂ Removal Efficiency, such disagreement is subject to

Section XVI (Dispute Resolution). Provided that Hoosier is in compliance with a 95.0% 30-Day Rolling Average SO₂ Removal Efficiency, Hoosier shall not be subject to stipulated penalties pursuant to Section XIV (Stipulated Penalties) for violating the 96.0% 30-Day Rolling Average SO₂ Removal Efficiency required by this Paragraph until EPA issues its formal written summary of its position regarding any dispute pursuant to Paragraph 190. If EPA's formal written response pursuant to Paragraph 190 disapproves Hoosier's proposed revision of the 30-Day Rolling Average SO₂ Removal Efficiency, then Hoosier shall be subject to stipulated penalties pursuant to Section XIV (Stipulated Penalties) for any violation of the 96.0% 30-Day Rolling Average SO₂ Removal Efficiency from the date of disapproval forward.

3. System-Wide Annual SO₂ Tonnage Limitation.

- 94. Beginning in calendar year 2011, and continuing through calendar year 2012, the Hoosier System, collectively, shall not exceed a System-Wide Annual SO₂ Tonnage Limitation of 28,500 tons.
- 95. In calendar year 2013, the Hoosier System, collectively, shall not exceed a System-Wide Annual SO₂ Tonnage Limitation of 27,000 tons.
- 96. In calendar year 2014, the Hoosier System, collectively, shall not exceed a System-Wide Annual SO₂ Tonnage Limitation of 26,000 tons.
- 97. In calendar year 2015, and continuing through 2016 if Hoosier elects to Retire or Repower one of the Ratts Units, the Hoosier System, collectively, shall not exceed a System-Wide Annual SO₂ Tonnage Limitation of 19,889 tons.
- 98. If Hoosier does not elect to Retire or Repower one of the Ratts Units (i.e., Hoosier elects to operate both Ratts Units as coal-fired units pursuant to Paragraph 87, in calendar year

- 2016 and continuing each year thereafter, the Hoosier System, collectively, shall not exceed a System-Wide Annual SO₂ Tonnage Limitation of 18,750 tons.
- 99. If Hoosier elects to Retire or Repower one of the Ratts Units, then beginning in calendar year 2017, and continuing each year thereafter, the Hoosier System and the Repowered Ratts Unit, collectively, shall not exceed a System-Wide Annual SO₂ Tonnage Limitation of 15,500 tons.

B. Monitoring of SO₂ Emissions

- Average SO₂ Removal Efficiency, Hoosier shall use CEMS in accordance with the procedures of 40 C.F.R. Part 75, except that: (1) SO₂ emissions data need not be bias adjusted; (2) for any CEMS with a span less than 100 ppm, the calibration drift and out-of-control criteria in Procedure 1, section 4.3 of 40 C.F.R. Part 60, Appendix F shall apply in lieu of the specifications in 40 C.F.R. Part 75, Appendix B; (3) for any CEMS with a span less than or equal to 30 ppm the exemption from the 40 C.F.R. Part 75 linearity check will not apply and either the 40 C.F.R. Part 75 linearity check or the cylinder gas audit described in Procedure 1, section 5.1.2 of 40 C.F.R. Part 60, Appendix F shall be performed on a quarterly basis; and (4) for any Unit controlled by FGD, an annual relative accuracy test audit shall meet, at a minimum, a relative accuracy of less than 20% or an accuracy of less than 0.015 lb/mmBTU (expressed as the difference between the monitor mean and the reference value mean).
- 101. For purposes of calculating the System-Wide Annual SO₂ Tonnage Limitation and the Plant-Wide 12-Month Rolling SO₂ Tonnage Limitation at Ratts, Hoosier shall use CEMS in accordance with the procedures specified in 40 C.F.R. Part 75.

C. <u>Use and Surrender of SO₂ Allowances</u>

- 102. Except as may be necessary to comply with Section XIV (Stipulated Penalties), Hoosier shall not use SO₂ Allowances to comply with any requirement of this Consent Decree, including by claiming compliance with any emission limitation required by this Consent Decree by using, tendering, or otherwise applying SO₂ Allowances to offset any excess emissions.
- 103. Beginning in calendar year 2011, and continuing each calendar year thereafter, Hoosier shall Surrender all SO₂ Allowances allocated to Merom Unit 1 and Unit 2 and Ratts Unit 1 and Unit 2 for that calendar year that Hoosier does not need in order to meet its own federal and/or state Clean Air Act regulatory requirements for the Units. However, SO₂ Allowances allocated to Merom Unit 1 and Unit 2 and Ratts Unit 1 and Unit 2 may be used by Hoosier to meets its own federal and/or state Clean Air Act regulatory requirements for such Units.
- 104. Nothing in this Consent Decree shall prevent Hoosier from purchasing or otherwise obtaining SO₂ Allowances from another source for purposes of complying with federal and/or state Clean Air Act regulatory requirements to the extent otherwise allowed by law.
- 105. The requirements of this Consent Decree pertaining to Hoosier's use and Surrender of SO₂ Allowances are permanent injunctions not subject to any termination provision of this Consent Decree.

E. Method for Surrender of SO₂ Allowances.

106. Hoosier shall Surrender, or transfer to a non-profit third party selected by Hoosier for Surrender, all SO₂ Allowances required to be Surrendered pursuant to Paragraph 103

- within forty-five (45) Days from Hoosier's receipt of the annual deduction report for Merom or Ratts, whichever is later. Hoosier shall provide a copy of the annual deduction reports for Merom and Ratts to EPA in the next Periodic Report submitted pursuant to Section XII (Periodic Reporting) to demonstrate the date upon which Hoosier received such reports from EPA.
- 107. If any SO₂ Allowances required to be Surrendered under this Consent Decree are transferred directly to a non-profit third party, Hoosier shall include a description of such transfer in the next report submitted to EPA pursuant to Section XII (Periodic Reporting) of this Consent Decree. Such report shall: (i) identify the non-profit third party recipient(s) of the SO₂ Allowances and list the serial numbers of the transferred SO₂ Allowances; and (ii) include a certification by the non-profit third party recipient(s) stating that the recipient(s) will not sell, trade, or otherwise exchange any of the allowances and will not use any of the SO₂ Allowances to meet any obligation imposed by any environmental law. No later than the third periodic report due after the transfer of any SO₂ Allowances, Hoosier shall include a statement that the non-profit third party recipient(s) Surrendered the SO₂ Allowances for permanent Surrender to EPA in accordance with the provisions of Paragraph 108 within one (1) year after Hoosier transferred the SO₂ Allowances to them. Hoosier shall not have complied with the SO₂ Allowance Surrender requirements of this Paragraph until all third party recipient(s) have actually Surrendered the transferred SO₂ Allowances to EPA.
- 108. For all SO₂ Allowances required to be Surrendered, Hoosier or the third party recipient(s)

 (as the case may be) shall first submit an SO₂ Allowance transfer request form to EPA's

 Office of Air and Radiation's Clean Air Markets Division directing the transfer of such

SO₂ Allowances to the EPA Enforcement Surrender Account or to any other EPA account that EPA may direct in writing. As part of submitting these transfer requests, Hoosier or the third party recipient(s) shall irrevocably authorize the transfer of these SO₂ Allowances and identify – by name of account and any applicable serial or other identification numbers or station names – the source and location of the SO₂ Allowances being Surrendered.

VI. H₂SO₄ EMISSION REDUCTIONS AND CONTROLS

A. Reagent <u>Injection Installation, Operation, and Performance Requirements</u>

- 109. Commencing on June 1, 2011, and continuing thereafter, Hoosier shall Continuously

 Operate RI at Merom Unit 1 and Unit 2.
- 110. Commencing on June 1, 2012 for one Merom Unit and June 1, 2013 for the other Merom Unit, and continuing thereafter, Hoosier shall Continuously Operate RI at such Merom Unit so that the Unit achieves and maintains an H₂SO₄ Emission Rate of no greater than 0.007 lb/mmBTU.
- 111. The period from June 1, 2012 through May 30, 2013, shall comprise a demonstration period. During the demonstration period, Hoosier's failure to achieve and maintain the H₂SO₄ Emission Rate in Paragraph 110 shall not be deemed a violation of this Consent Decree, nor shall Hoosier be responsible for stipulated penalties pursuant to Section XIV (Stipulated Penalties). However, it shall be deemed a violation, and Hoosier shall be responsible for stipulated penalties, if either Merom Unit 1 or Unit 2 fails to Continuously Operate the RI system as required by Paragraph 109.
- 112. At any time before December 31, 2012, Hoosier may submit a petition to EPA for review and approval pursuant to Section XIII (Review and Approval of Submittals), for a

proposed revision to the H₂SO₄ Emission Rate for Merom Unit 1 and/or Unit 2. In such petition to revise the H₂SO₄ Emission Rate, Hoosier must demonstrate that it cannot maintain compliance with the applicable Emission Rate for the Unit(s) in question, considering all relevant information including, but not limited to: evaluation of different injection zones, different reagents, different reagent injection rates, and different SCR catalyst beds. Hoosier shall propose in such petition the lowest H₂SO₄ Emission Rate that the Unit(s) can achieve and maintain (which in no event shall be higher than 0.009 lb/mmBTU), and all pertinent information, documents, and data that support, or were considered in preparing, such alternative Emission Rate. If Hoosier avails itself of the petition process described in this Paragraph, Hoosier shall retain a qualified contractor to assist it in operating and optimizing the RI system in order to achieve the lowest H₂SO₄ Emission Rate for Merom Unit 1 and Unit 2, and identifying the lowest achievable H₂SO₄ Emission Rate based upon the relevant information described above in this Paragraph.

113. Following receipt of Hoosier's petition, EPA may either (a) determine that Hoosier failed to successfully demonstrate that Merom Unit 1 and/or Unit 2 could not achieve and maintain an H₂SO₄ Emission Rate of no greater than 0.007 lb/mmBTU, (b) approve the proposed alternative H₂SO₄ Emission Rate, or (c) establish a different H₂SO₄ Emission Rate than the one specified in either Paragraph 110, above, or proposed by Hoosier in its petition, based upon EPA's review of the information submitted in the petition as well as other available and relevant information. No later than thirty (30) Days following Hoosier's receipt of EPA's response to its petition, Hoosier shall achieve and maintain the H₂SO₄ Emission Rate either specified in Paragraph 110, above (if EPA determines that

Hoosier failed to demonstrate that it could not maintain compliance with the Emission Rate), or an alternative H₂SO₄ Emission Rate as approved by EPA in its response to Hoosier's petition, provided, however, that if EPA determines that Hoosier failed to demonstrate that it could not maintain compliance with the Emission Rate specified in Paragraph 110, Hoosier will not have to comply with such Emission Rate, but instead will have to comply with its proposed alternative H₂SO₄ Emission Rate which in no event will be higher than 0.009 lb/mmBTU, during the pendency of any dispute of EPA's determination by Hoosier. EPA reserves the right to require Hoosier to perform additional source testing before responding to Hoosier's petition.

114. If Hoosier does not submit a petition for a proposed revision to the H₂SO₄ Emission Rate on or before December 31, 2012, as specified in Paragraph 112, then the demonstration period shall end and it shall be deemed a violation, and Hoosier shall be responsible for stipulated penalties pursuant to Section XIV (Stipulated Penalties), if either Merom Unit 1 or Unit 2 exceed an H₂SO₄ Emission Rate of 0.007 lb/mmBTU commencing on January 1, 2014.

B. Monitoring of H₂SO₄ Emissions

- 115. Commencing in the calendar year this Consent Decree is entered, and continuing annually thereafter, Hoosier shall conduct a stack test for H₂SO₄ for Merom Units 1 and 2.
- 116. To determine compliance with the H₂SO₄ Emission Rate established in Paragraph 110 or an alternative H₂SO₄ Emission Rate as described in Paragraphs 112-113, Hoosier shall use the reference methods and procedures specified in 40 C.F.R. Part 60, Appendix A-4, Method 8 or an alternative reference method or procedure for H₂SO₄ (such as CTM-13)

requested by Hoosier and approved by EPA (in consultation with IDEM). The results of each test shall be reported in lb/mmBTU and consist of three separate runs each performed under representative operating conditions at high, mid and low load points, not including periods of startup, shutdown, or malfunction. At least 180 Days prior to conducting such H₂SO₄ testing, Hoosier shall submit a test protocol to EPA pursuant to Section XIII (Review and Approval of Submittals) identifying the unit operating loads proposed for the high, mid, and low load ranges and anticipated reagent injection rates and the basis for such rates. Hoosier shall calculate the H₂SO₄ Emission Rate from the stack test results in accordance with 40 C.F.R. § 60.8(f). The results of each H₂SO₄ stack test shall be submitted to EPA and IDEM within sixty (60) Days of completion of each test.

- 117. At all times that either Merom Unit 1 or Unit 2 is in operation, Hoosier shall maintain the reagent injection rate utilized during the last successfully demonstrated compliant stack test at the corresponding high, mid, or low load point. Hoosier shall maintain a daily log of the reagent injection rates maintained at each Merom Unit, including the following information: date, average daily unit load (MWg) operating hours for each Day, reagent injection flow rate (gallons per minute and tons per hour), and reagent injection density (if injecting liquid reagent).
- 118. When Hoosier submits the application for amendment to its Title V Permit pursuant to Paragraph 198, that application shall include a Compliance Assurance Monitoring ("CAM") plan, under 40 C.F.R. Part 64, for the H₂SO₄ Emission Rate in Paragraph 110. The reagent injection rate described in Paragraph 117 may be used in that CAM plan.

VII. PM EMISSION REDUCTIONS AND CONTROLS

A. Optimization of Existing ESPs

By no later than thirty (30) Days from the Date of Entry of this Consent Decree, and 119. continuing thereafter, Hoosier shall Continuously Operate the ESPs on Merom Unit 1 and Unit 2 and Ratts Unit 1 and Unit 2. Except as required during correlation testing under 40 C.F.R. Part 60, Appendix B, Performance Specification 11, and Quality Assurance Requirements under Appendix F, Procedure 2, as required by this Consent Decree, Hoosier shall, at a minimum, to the extent reasonably practicable: (a) fully energize each section of the ESP for each unit, and repair any failed ESP section at the next planned or unplanned Unit outage of sufficient length; (b) operate automatic control systems on each ESP to maximize PM collection efficiency; (c) maintain power levels delivered to the ESPs, consistent with manufacturers' specifications, the operational design of the Unit, and good engineering practices; (d) inspect for and repair during the next planned or unplanned Unit outage of sufficient length any openings in ESP casings, ductwork and expansion joints to minimize air leakage; and (e) optimize the plate-cleaning and discharge-electrode-cleaning systems for the ESPs at each Unit by varying the cycle time, cycle frequency, rapper-vibrator intensity, and number of strikes per cleaning event.

B. PM Emission Rate and Monitoring Requirements

120. Beginning June 1, 2012 for one Merom Unit and June 1, 2013 for the other Merom Unit, and continuing thereafter, Hoosier shall Continuously Operate the ESPs at the Merom Unit(s) so that each Unit achieves and maintains a PM Emission Rate of no greater than 0.030 lb/mmBTU; provided that, if Hoosier installs a Baghouse at Merom Unit 1 and/or Unit 2, then by no later than June 1, 2012 or June 1, 2013, as applicable, Hoosier shall

- Continuously Operate such Baghouse so that such Unit achieves and maintains a PM Emission Rate of no greater than 0.015 lb/mmBTU.
- Continuously Operate the ESPs at one Ratts Unit so that the Unit achieves and maintains a PM Emission Rate of no greater than 0.030 lb/mmBTU; provided that, if Hoosier installs a Baghouse at such Ratts Unit, then by no later than December 31, 2014, Hoosier shall Continuously Operate such Baghouse so that such Unit achieves and maintains a PM Emission Rate of no greater than 0.015 lb/mmBTU. If Hoosier does not elect to Retire or Repower one Ratts Unit pursuant to Paragraph 87, then by no later than December 31, 2015, and continuing thereafter, Hoosier shall Continuously Operate the ESPs at such other Ratts Unit so that the Unit achieves and maintains a PM Emission Rate of no greater than 0.030 lb/mmBTU; provided that, if Hoosier installs a Baghouse at such Ratts Unit, then by no later than December 31, 2015, Hoosier shall Continuously Operate such Baghouse so that such Unit achieves and maintains a PM Emission Rate of no greater than 0.015 lb/mmBTU.
- 122. Commencing in the calendar year this Consent Decree is entered, and continuing annually thereafter, Hoosier shall conduct a stack test for PM pursuant to Paragraph 123 for each Unit at Merom and Ratts.
- 123. To determine compliance with the PM Emission Rate established in Paragraphs 120 and 121, Hoosier shall use the applicable reference methods and procedures (filterable portion only) specified in its Clean Air Act permits and in the Indiana SIP. Each test shall consist of three separate runs performed under representative operating conditions not including periods of startup, shutdown, or malfunction. The sampling time for each run shall be at

- least 120 minutes and the volume of each run shall be 1.70 dry standard cubic meters (60 dry standard cubic feet). Hoosier shall calculate the PM Emission Rate from the stack test results in accordance with 40 C.F.R. § 60.8(f). The results of each PM stack test shall be submitted to EPA and IDEM within sixty (60) Days of completion of each test.
- 124. When Hoosier submits the application for amendment to its Title V Permit pursuant to Paragraph 198, that application shall include a Compliance Assurance Monitoring ("CAM") plan, under 40 C.F.R. Part 64, for the PM Emission Rate in Paragraphs 120 and 121. The PM CEMS required under Paragraph 125 may be used in that CAM plan.

C. PM CEMS

- 125. Hoosier shall install, correlate, maintain, and operate PM CEMS on Merom Unit 1 and Unit 2 as specified below. The PM CEMS shall comprise a continuous particle mass monitor measuring particulate matter concentration, directly or indirectly, on an hourly average basis and a diluent monitor used to convert the concentration to units expressed in lb/mmBTU. The PM CEMS installed at each Unit must be appropriate for the anticipated stack conditions and capable of measuring PM concentrations on an hourly average basis. Hoosier shall maintain, in an electronic database, the hourly average emission values of all PM CEMS in lb/mmBTU. Except for periods of monitor malfunction, maintenance, or repair, Hoosier shall continuously operate the PM CEMS at all times when the Unit it serves is operating.
- 126. By no later than December 31, 2010, Hoosier shall submit to EPA for review and approval pursuant to Section XIII (Review and Approval of Submittals) of this Consent Decree a plan for the installation and correlation of the PM CEMS for Merom Unit 1 and Unit 2.

- 127. By no later than August 31, 2011, Hoosier shall submit to EPA for review and approval pursuant to Section XIII (Review and Approval of Submittals) of this Consent Decree a proposed Quality Assurance/Quality Control ("QA/QC") protocol that shall be followed for such PM CEMS.
- 128. In developing both the plan for installation and correlation of the PM CEMS and the QA/QC protocol, Hoosier shall use the criteria set forth in 40 C.F.R. Part 60, Appendix B, Performance Specification 11, and Appendix F, Procedure 2. Following EPA's approval (in consultation with IDEM) of the plan described in Paragraph 126 and the QA/QC protocol described in Paragraph 127, Hoosier shall thereafter operate the PM CEMS in accordance with the approved plan and QA/QC protocol.
- 129. By no later than December 31, 2011, Hoosier shall install, correlate, maintain, and operate the PM CEMS at Merom Unit 1 and Unit 2, conduct performance specification tests on the PM CEMS, and demonstrate compliance with the PM CEMS installation and correlation plans submitted to and approved by EPA in accordance with Paragraphs 126 and 127. Hoosier shall report, pursuant to Section XII (Periodic Reporting), the data recorded by the PM CEMS, expressed in lb/mmBTU on a rolling average 3-hour basis in electronic format to EPA and identify in the report any PM concentrations measured by the PM CEMS that are greater than 125% of the highest PM concentration level used in the most recent correlation testing performed pursuant to Performance Specification 11 in 40 C.F.R. Part 60, Appendix B.

D. General PM Provisions

- 130. Although stack testing shall be used to determine compliance with the PM Emission Rate established by this Consent Decree, data from PM CEMS shall be used, at a minimum, to monitor progress in reducing PM emissions.
- 131. Nothing in this Consent Decree is intended to, or shall, alter or waive any applicable law (including but not limited to any defenses, entitlements, challenges, or clarifications related to the Credible Evidence Rule, 62 Fed. Reg. 8314 (Feb. 24, 1997)) concerning the use of data for any purpose under the Act.

VIII. PROHIBITION ON NETTING CREDITS OR OFFSETS

- 132. Emission reductions at Merom Unit 1 and Unit 2 and Ratts Unit 1 and Unit 2 that result from actions to be taken by Hoosier after the Date of Entry of this Consent Decree to comply with the requirements of this Consent Decree shall not be considered as a creditable contemporaneous emission decrease for the purpose of obtaining a Netting credit or offset under the Clean Air Act's Nonattainment NSR and PSD programs.
- 133. The limitations on the generation and use of Netting credits and offsets set forth in the previous Paragraph do not apply to emission reductions achieved at Merom Unit 1 and Unit 2 and Ratts Unit 1 and Unit 2 that are greater than those required under this Consent Decree. For purposes of this Paragraph, emission reductions at Merom Unit 1 and Unit 2 and Ratts Unit 1 and Unit 2 are greater than those required under this Consent Decree if they result from such Unit's compliance with federally-enforceable emission limits that are more stringent than those limits imposed on Merom Unit 1 and Unit 2 and Ratts Unit 1 and Unit 2 under this Consent Decree and under applicable provisions of the Clean Air Act or the Indiana SIP.

134. Nothing in this Consent Decree is intended to preclude the emission reductions generated under this Consent Decree from being considered by the State or EPA as creditable contemporaneous emission decreases for the purpose of attainment demonstrations submitted pursuant to § 110 of the Act, 42 U.S.C. § 7410, or in determining impacts on National Ambient Air Quality Standards, PSD increment, or air quality related values, including visibility, in a Class I area.

IX. ENVIRONMENTAL MITIGATION PROJECTS

- 135. Hoosier shall implement the Environmental Mitigation Projects ("Projects") described in Appendix A to this Consent Decree in compliance with the approved plans and schedules for such Projects and other terms of this Consent Decree. In implementing the Projects, Hoosier shall spend no less than \$5,000,000 in Project Dollars. Hoosier shall not include its own personnel costs in overseeing the implementation of the Projects as Project Dollars.
- 136. Hoosier shall maintain, and present to EPA upon request, all documents to substantiate the Project Dollars expended to implement the Projects described in Appendix A, and shall provide these documents to EPA within thirty (30) Days of a request for the documents.
- 137. All plans and reports prepared by Hoosier pursuant to the requirements of this Section IX of the Consent Decree and required to be submitted to EPA shall be publicly available from Hoosier without charge.
- 138. Hoosier shall certify, as part of each plan submitted to EPA for any Project, that Hoosier is not otherwise required by law to perform the Project described in the plan, that Hoosier is unaware of any other person who is required by law to perform the Project, and that

- Hoosier will not use any Project, or portion thereof, to satisfy any obligations that it may have under other applicable requirements of law, including any applicable renewable or energy efficiency portfolio standards.
- 139. Hoosier shall use good faith efforts to secure as much benefit as possible for the Project Dollars expended, consistent with the applicable requirements and limits of this Consent Decree.
- 140. If Hoosier elects (where such an election is allowed) to undertake a Project by contributing funds to another person or entity that will carry out the Project in lieu of Hoosier, but not including Hoosier's agents or contractors, that person or instrumentality must, in writing: (a) identify its legal authority for accepting such funding; and (b) identify its legal authority to conduct the Project for which Hoosier contributes the funds. Regardless of whether Hoosier elects (where such election is allowed) to undertake a Project by itself or to do so by contributing funds to another person or instrumentality that will carry out the Project, Hoosier acknowledges that it will receive credit for the expenditure of such funds as Project Dollars only if Hoosier demonstrates that the funds have been actually spent by either Hoosier or by the person or instrumentality receiving them, and that such expenditures met all requirements of this Consent Decree.
- 141. Hoosier shall comply with the reporting requirements described in Appendix A.
- 142. Within sixty (60) Days following the completion of each Project required under this

 Consent Decree (including any applicable periods of demonstration or testing), Hoosier
 shall submit to the United States a report that documents the date that the Project was
 completed, Hoosier's results of implementing the Project, including the emission

reductions or other environmental benefits achieved, and the Project Dollars expended by Hoosier in implementing the Project.

X. CIVIL PENALTY

- 143. Within thirty (30) Days after the Date of Entry of this Consent Decree, Hoosier shall pay to the United States and the State of Indiana a civil penalty in the amount of \$950,000.
 - a. The United States' portion of the civil penalty shall be paid as follows: Within thirty (30) Days after the Date of Entry of this Consent Decree, Hoosier shall pay a civil penalty to the United States in the amount of \$850,000 paid by Electronic Funds Transfer ("EFT") to the United States Department of Justice, in accordance with current EFT procedures, referencing USAO File Number 2010V00713 and DOJ Case Number 90-5-2-1-09864 and the civil action case name and case number of this action. The costs of such EFT shall be Hoosier's responsibility. Payment shall be made in accordance with instructions provided to Hoosier by the Financial Litigation Unit of the U.S. Attorney's Office for the Southern District of Indiana. Any funds received after 2:00 p.m. EDT shall be credited on the next business day. At the time of payment, Hoosier shall provide notice of payment, referencing the USAO File Number, the DOJ Case Number, and the civil action case name and case number, to the Department of Justice and to EPA in accordance with Section XIX (Notices) of this Consent Decree.
 - b. The State of Indiana's portion of the civil penalty shall be paid as follows: Within thirty (30) Days after the Date of Entry of this Consent Decree, Hoosier shall pay a civil penalty to the State of Indiana in the amount of \$100,000. Payment shall

be made by check made out to the "Environmental Management Special Fund" and shall be mailed to:

Indiana Department of Environmental Management Cashier – Mail Code 50-10C 100 North Senate Avenue Indianapolis, IN 46204-2251

At the time of payment, Hoosier shall also provide notice of payment, referencing the civil action case name and case number, to the State of Indiana in accordance with Section XIX (Notices) of this Consent Decree.

- 144. Failure to timely pay the civil penalty shall subject Hoosier to interest accruing from the date payment is due until the date payment is made at the rate prescribed by 28 U.S.C. § 1961, and shall render Hoosier liable for all charges, costs, fees, and penalties established by law for the benefit of a creditor or of the United States in securing payment.
- 145. Payments made pursuant to this Section are penalties within the meaning of Section 162(f) of the Internal Revenue Code, 26 U.S.C. § 162(f), and are not tax-deductible expenditures for purposes of federal law.

XI. RESOLUTION OF CIVIL CLAIMS AGAINST HOOSIER

A. Resolution of Plaintiffs' Civil Claims

146. Claims of the United States Based on Modifications Occurring Before the Date of

Lodging of this Consent Decree. Entry of this Consent Decree shall resolve all civil

claims of the United States against Hoosier that arose from any modifications

commenced at Merom Unit 1 and Unit 2 and Ratts Unit 1 and Unit 2, prior to the Date of

Lodging of this Consent Decree, including but not limited to those modifications alleged

in the NOV/FOV issued by EPA to Hoosier on August 26, 2009 and the Complaint filed

in this civil action, under any or all of: (a) Parts C or D of Subchapter I of the Clean Air Act, 42 U.S.C. §§ 7470-7492, 7501-7515, and the implementing Indiana SIP that EPA has approved and/or promulgated under Section 110 of the Act; (b) Standards of Performance for New Stationary Sources program, 42 U.S.C. § 7411 and 40 C.F.R. § 60.14; and (c) Title V of the Clean Air Act, 42 U.S.C. § 7661-7661f, but only to the extent that such claims are based on Hoosier's failure to obtain an operating permit that reflects applicable requirements imposed under Parts C or D of Subchapter I of the Clean Air Act. The claims resolved for purposes of this Paragraph under Parts C or D of Subchapter I of the Act shall not include claims based on carbon dioxide ("CO₂") even if CO₂ becomes regulated under Parts C or D of Subchapter I of the Act after the Date of Entry of this Consent Decree.

147. Claims of the State of Indiana Based on Modifications Occurring Before the Lodging of this Consent Decree. Entry of this Consent Decree shall resolve all civil claims of the State of Indiana under (a) Indiana regulations at 326 IAC 2-2 et seq. (PSD Requirements) and 326 IAC 2-3 et seq. (Emission Offset) including all versions of the Indiana major New Source Review program that existed at the time of the modifications alleged in the Complaint; and (b) Indiana statutes as they specifically apply to the programs implemented pursuant to Subchapter V of the Act and Indiana regulations at 326 IAC 2-7 et seq. (Part 70 Permit Program), that arose from any modification that commenced at Merom Unit 1 and Unit 2 and Ratts Unit 1 and Unit 2 prior to the Date of Lodging of this Consent Decree, including but not limited to those claims and modifications alleged in the Complaints filed in this civil action and those claims and modifications as asserted in the NOV/FOV issued by EPA to Hoosier on August 26, 2009.

- of this Consent Decree also shall resolve all civil claims of the United States and the State of Indiana for pollutants (except H₂SO₄ at Ratts Units 1 and 2) regulated under Parts C and D of Subchapter I of the Clean Air Act and under regulations promulgated thereunder as of the Date of Lodging of this Consent Decree, where such claims are based on any modification commenced before December 31, 2015, or before December 31, 2016 solely for a Unit at Ratts provided that Hoosier timely elects to Repower such Unit, and:
 - a. where such modification is commenced at any Hoosier System
 Unit after the Date of Lodging of this Consent Decree, or
 - b. where such modification is one this Consent Decree expressly directs Hoosier to undertake.

The term "modification" as used in this Paragraph shall have the meaning that term is given under the Clean Air Act and under the regulations in effect as of the Date of Lodging of this Consent Decree. The claims resolved for purposes of this Paragraph under Parts C or D of Subchapter I of the Act shall not include claims based upon CO₂ even if CO₂ becomes regulated under Parts C or D of Subchapter I of the Act after the Date of Entry of this Consent Decree.

149. Reopener. The resolution of the United States' civil claims against Hoosier, as provided by this Subsection A, is subject to the provisions of Subsection B of this Section.

B. Pursuit of Plaintiffs' Civil Claims Otherwise Resolved by Subsection A

150. <u>Bases for Pursuing Resolved Claims for Merom Unit 1 and Unit 2 and Ratts Unit 1 and Unit 2.</u> If Hoosier violates (a) the System-Wide Annual NO_x Tonnage Limitations required pursuant to Paragraphs 71-73, or (b) the System-Wide Annual SO₂Tonnage

Limitations required pursuant to Paragraphs 94-99; or if Hoosier operates a Unit more than ninety (90) Days past a date established in this Consent Decree without completing the required installation, upgrade, Retirement, Repower, or commencing Continuous Operation of any emission control device or achieving any Emission Rate or limitation required pursuant to Paragraphs 65-67, 68-70, 84-85, 90-92, 109-111, 113-114, and 119-121, then Plaintiffs may pursue any claim at Merom Unit 1 and Unit 2 and Ratts Unit 1 and Unit 2 that is otherwise resolved under Subsection A (Resolution of Plaintiffs' Civil Claims), subject to (a) and (b) below.

- a. For any claims based on modifications undertaken at Ratts Unit 1 or Unit 2 (unless Hoosier has elected to Repower such Unit(s) pursuant to Paragraph 87), for the pollutant in question, claims may be pursued only where the modification(s) on which such claim is based was commenced within the five (5) years preceding the violation or failure specified in this Paragraph.
- b. For any claims based on modifications undertaken at Merom Unit 1 and Unit 2 (and at a Ratts Unit that Hoosier has elected to Repower) for the pollutant in question, claims may be pursued only where the modification(s) on which such claim is based was commenced: (1) after the Date of Lodging of this Consent Decree and (2) within the five (5) years preceding the violation or failure specified in this Paragraph.
- 151. Additional Bases for Pursuing Resolved Claims for Modifications at Merom Unit 1 and Unit 2 (and at a Ratts Unit that Hoosier has elected to Repower). Solely with respect to Merom Unit 1 and Unit 2 (and at a Ratts Unit that Hoosier has elected to Repower),

Plaintiffs may also pursue claims arising from a modification (or collection of modifications) at such Units that has otherwise been resolved under Subsection A (Resolution of Plaintiffs' Civil Claims) if the modification (or collection of modifications) at such Unit(s) on which such claim is based (a) was commenced after the Date of Lodging of this Consent Decree and (b) individually (or collectively) increased the maximum hourly Emission Rate of that Unit for NO_x or SO₂ (as measured by 40 C.F.R. § 60.14 (b) and (h)) by more than ten percent (10%).

- 152. Additional Bases for Pursuing Resolved Claims for Modifications at Ratts.
- a. Solely with respect to Ratts Unit 1 and/or Unit 2 (unless Hoosier has elected to Repower such Unit(s)), the United States may also pursue claims arising from a modification (or collection of modifications) that has otherwise been resolved under Subsection A (Resolution of Plaintiffs' Civil Claims), if the modification (or collection of modifications) at Ratts Unit 1 or Unit 2 on which the claim is based was commenced within the five (5) years preceding any of the following events:
 - a modification (or collection of modifications) at Ratts Unit 1 or
 Unit 2 commenced after the Date of Lodging of this Consent
 Decree increases the maximum hourly Emission Rate for such
 Ratts Unit 1 or Unit 2 for the relevant pollutant (NO_x or SO₂) (as measured by 40 C.F.R. § 60.14(b) and (h));
 - 2. the aggregate of all Capital Expenditures made at Ratts Unit 1 or Unit 2 exceeds \$125/KW on the Unit's Boiler Island (based on the generating capacities identified in Paragraph 46) during the period from the Date of Entry of this Consent Decree through December

- 31, 2015. (Capital Expenditures shall be measured in calendar year2010 constant dollars, as adjusted by the McGraw-HillEngineering News-Record Construction Cost Index); or
- 3. a modification (or collection of modifications) at Ratts Unit 1 or Unit 2 commenced after the Date of Lodging of this Consent Decree results in an emissions increase of NO_x and/or SO₂ at Ratts Unit 1 or Unit 2, and such increase: (i) presents, by itself, or in combination with other emissions or sources, "an imminent and substantial endangerment" within the meaning of Section 303 of the Act, 42 U.S.C. §7603; (ii) causes or contributes to violation of a NAAQS in any Air Quality Control Area that is in attainment with that NAAQS; (iii) causes or contributes to violation of a PSD increment; or (iv) causes or contributes to any adverse impact on any formally-recognized air quality and related values in any Class I area. The introduction of any new or changed NAAQS shall not, standing alone, provide the showing needed under Subparagraphs (3)(ii) or (3)(iii) of this Paragraph to pursue any claim for a modification at Ratts Unit 1 or Unit 2 resolved under Subsection A of this Section.
- b. Solely with respect to Ratts Unit 1 and/or Unit 2 (unless Hoosier elects to Retire and/or Repower both Ratts Units), Plaintiffs may also pursue claims arising from a modification (or collection of modifications) that has otherwise been resolved under Subsection A (Resolution of Plaintiffs' Civil Claims) of this Consent Decree if such modification (or collection of

modifications) results in an emissions increase of SO₂ at such Unit, and such increase causes the emissions at Ratts to exceed the tonnage limitations of Paragraphs 83 or 89.

XII. PERIODIC REPORTING

- 153. After entry of this Consent Decree, Hoosier shall submit to Plaintiffs a periodic report, within sixty (60) Days after the end of each half of the calendar year (January through June and July through December). The report shall include the following information:
 - a. all information necessary to determine compliance with the requirements of the following Paragraphs of this Consent Decree: Paragraphs 65 through 82 concerning NO_x emissions and monitoring, including all information necessary to determine whether it is technically infeasible to Continuously Operate the SCR as provided in Paragraph 70, and the surrender of NO_x Allowances; Paragraphs 83 through 108 concerning SO₂ emissions and monitoring, and the surrender of SO₂ Allowances; Paragraphs 109 through 118 concerning H₂SO₄ emissions and monitoring; and Paragraphs 119 through 131 concerning PM emissions and monitoring;
 - b. daily removal efficiencies for SO₂ emissions from Merom Unit 1 and Unit 2 and
 30-Day Rolling Average SO₂ Removal Efficiencies for Merom Unit 1 and Unit 2,
 to demonstrate compliance with Paragraph 90;
 - c. 3-hour rolling average PM CEMS data as required by Paragraph 129, identifying all periods in excess of 0.030 lb/mmBTU or 0.015 lb/mmBTU, as appropriate, and all periods of monitor malfunction, maintenance, and/or repair as provided in Paragraph 125;

- d. all information relating to Super-Compliant NO_x Allowances that Hoosier claims to have generated in accordance with Paragraphs 79 through compliance beyond the requirements of this Consent Decree; and
- e. all information indicating that the installation or upgrade and commencement of operation of a new or upgraded pollution control device may be delayed, including the nature and cause of the delay, and any steps taken by Hoosier to mitigate such delay.
- 154. In any periodic report submitted pursuant to this Section, Hoosier may incorporate by reference information previously submitted under its Title V permitting requirements, provided that Hoosier attaches the Title V Permit report (or the pertinent portions of such report) and provides a specific reference to the provisions of the Title V Permit report that are responsive to the information required in the periodic report.
- 155. In addition to the reports required by Paragraph 153, if Hoosier violates or deviates from any provision of this Consent Decree, Hoosier shall submit to Plaintiffs a report on the violation or deviation within ten (10) business days after Hoosier knew or should have known of the event. In the report, Hoosier shall explain the cause or causes of the violation or deviation and any measures taken or to be taken by Hoosier to cure the reported violation or deviation or to prevent such violation or deviations in the future. If at any time, the provisions of this Consent Decree are included in Title V Permits, consistent with the requirements for such inclusion in this Consent Decree, then the deviation reports required under applicable Title V regulations shall be deemed to satisfy all the requirements of this Paragraph.

156. Each Hoosier report shall be signed by the Responsible Official as defined in Title V of the Clean Air Act for Merom and/or Ratts, as appropriate, and shall contain the following certification:

This information was prepared either by me or under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my evaluation, or the direction and my inquiry of the person(s) who manage the system, or the person(s) directly responsible for gathering the information, I hereby certify under penalty of law that, to the best of my knowledge and belief, this information is true, accurate, and complete. I understand that there are significant penalties for submitting false, inaccurate, or incomplete information to the United States.

157. If any NO_x or SO₂ Allowances are surrendered to any non-profit third party pursuant to Paragraphs 81 and/or 107, the non-profit third party's certification shall be signed by a managing officer of the non-profit third party and shall contain the following language:

I certify under penalty of law that _____ [name of non-profit third party] will not sell, trade, or otherwise exchange any of the allowances and will not use any of the allowances to meet any obligation imposed by any

XIII. REVIEW AND APPROVAL OF SUBMITTALS

misrepresentations to or misleading the United States.

environmental law. I understand that there are significant penalties for making

158. Hoosier shall submit each plan, report, or other submission required by this Consent

Decree to Plaintiffs whenever such a document is required to be submitted for review or
approval pursuant to this Consent Decree. EPA may approve the submittal or decline to
approve it and provide written comments explaining the bases for declining such
approval as soon as reasonably practicable. Within sixty (60) Days of receiving written
comments from EPA, Hoosier shall either: (a) revise the submittal consistent with the
written comments and provide the revised submittal to EPA; or (b) submit the matter for

- dispute resolution, including the period of informal negotiations, under Section XVI (Dispute Resolution) of this Consent Decree.
- 159. Upon receipt of EPA's final approval of the submittal, or upon completion of the submittal pursuant to dispute resolution, Hoosier shall implement the approved submittal in accordance with the schedule specified therein or another EPA-approved schedule.

XIV. STIPULATED PENALTIES

160. For any failure by Hoosier to comply with the terms of this Consent Decree, and subject to the provisions of Sections XV (Force Majeure) and XVI (Dispute Resolution), Hoosier shall pay, within thirty (30) Days after receipt of written demand to Hoosier by the United States, the following stipulated penalties to the United States:

Consent Decree Violation	Stipulated Penalty
a. Failure to pay the civil penalty as specified in Section X (Civil Penalty) of this Consent Decree	\$10,000 per Day

b. Failure to comply with any applicable 30-Day Rolling Average NO _x Emission Rate, 30-Day Rolling Average SO ₂ Emission Rate, 30-Day Rolling Average SO ₂ Removal Efficiency, H ₂ SO ₄ Emission Rate, or PM Emission Rate	\$2,500 per Day per violation where the violation is less than 5% in excess of the lb/mmBTU limits, or less than 0.25% below the removal efficiency requirement
	\$5,000 per Day per violation where the violation is equal to or greater than 5% but less than 10% in excess of the lb/mmBTU limits, or equal to or greater than 0.25% but less than 0.50% below the removal efficiency requirement
	\$10,000 per Day per violation where the violation is equal to or greater than 10% in excess of the lb/mmBTU limits, or greater than 0.50% below the removal efficiency requirement
c. Failure to comply with the applicable System-Wide Annual NO _x Tonnage Limitation established by this Consent Decree	\$5,000 per ton for first 100 tons, \$10,000 per ton for each additional ton above 100 tons, plus the surrender of NO _x Allowances in an amount equal to two times the number of tons of NO _x emitted that exceeded the System-Wide Annual NO _x Tonnage Limitation
d. Failure to comply with the applicable System-Wide Annual SO ₂ Tonnage Limitation established by this Consent Decree	\$5,000 per ton for first 100 tons, \$10,000 per ton for each additional ton above 100 tons, plus the Surrender of SO ₂ Allowances in an amount equal to two times the number of tons of SO ₂ emitted that exceeded the System-Wide Annual SO ₂ Tonnage Limitation

e. Failure to comply with the applicable Plant-Wide 12-Month Rolling SO_2 Tonnage Limitation required by Paragraphs 83, 88, and 89.

\$5,000 per ton per month for the first 100 tons over the limit, and \$10,000 per ton per month for each additional ton over the limit, plus the Surrender of SO₂ Allowances in an amount equal to two times the number of tons of SO₂ emitted that exceeded the Plant-Wide 12-Month Rolling SO₂ Tonnage Limitation

f. Failure to comply with the applicable Plant-Wide 12-Month Rolling SO₂ Tonnage Limitation required by Paragraph 86.

The Surrender of SO₂
Allowances in an amount equal to two times the number of tons of SO₂ emitted that exceeded the Plant-Wide 12-Month Rolling Tonnage SO₂
Limitation up to 1,000 tons in excess of the limit.

The Surrender of SO₂
Allowances in an amount equal to three times the number of tons of SO₂ emitted that exceeded the Plant-Wide 12-Month Rolling SO₂ Tonnage Limitation greater than 1,000 tons and less than 3,000 tons in excess of the limit.

The Surrender of SO₂
Allowances in an amount equal to four times the number of tons of SO₂ emitted that exceeded the Plant-Wide 12-Month
Rolling SO₂ Tonnage Limitation greater than 3,000 tons and less than 4,000 tons in excess of the limit.

\$10,000 per ton per month for each ton that is greater than 4,000 tons in excess of the limit, plus the Surrender of SO₂
Allowances in an amount equal to two times the number of tons of SO₂ emitted that exceeded the Plant-Wide 12-Month Rolling SO₂ Tonnage Limitation

g. Failure to install, commence Continuous Operation, or Continuously Operate a NO ₃ , SO ₂ , H ₂ SO ₄ , or PM control device, included in Paragraphs 65-70, 90-93, 109-110, 120-121 on either Merom Unit 1 or Unit 2 or Ratts Unit 1 or Unit 2, as required under this Consent Decree h. Failure to make a timely election pursuant to Paragraph 87 h. Failure to Retire or Repower a Unit, if elected, as required by Paragraph 88 f. Failure to Retire or Repower a Unit, if elected, as required by Paragraph 88 f. Failure to conduct a stack test for PM and H ₂ SO ₄ as required by Paragraphs 115 and 122 of this Consent Decree k. Failure to install or operate NO ₄ , SO ₂ , and/or PM CEMS as required in this Consent Decree k. Failure to apply for any permit required by Section XVII (Permits) m. Failure to timely submit, modify, or implement, as approved, the reports, plans, studies, analyses, protocols, or other submittals required by this Consent Decree n. Failure to surrender SO ₂ Allowances as required under this Consent Decree o. Failure to surrender NO ₃ Allowances as required under this Consent Decree p. Failure to demonstrate the third-party surrender of a NO ₃ or SO ₂ Allowance in accordance with Paragraphs 81 and 107 q. Failure to optimize the existing ESPs as required by Paragraph 119 r. Failure to undertake and complete any of the Environmental Mitigation Projects in compliance with Section IX (Environmental Mitigation Projects) of this Consent Decree s. Any other violation of this Consent Decree s. 1,000 per Day per violation during the first 30 Days; \$5,000 per Day per violation thereafter		T
i. Failure to Retire or Repower a Unit, if elected, as required by Paragraph 88 j. Failure to conduct a stack test for PM and H ₂ SO ₄ as required by Paragraphs 115 and 122 of this Consent Decree k. Failure to install or operate NO _x , SO ₂ , and/or PM CEMS as required in this Consent Decree l. Failure to apply for any permit required by Section XVII (Permits) m. Failure to timely submit, modify, or implement, as approved, the reports, plans, studies, analyses, protocols, or other submittals required by this Consent Decree n. Failure to surrender SO ₂ Allowances as required under this Consent Decree o. Failure to surrender NO _x Allowances as required under this Consent Decree p. Failure to demonstrate the third-party surrender of a NO _x or SO ₂ Allowance in accordance with Paragraphs 81 and 107 q. Failure to optimize the existing ESPs as required by Paragraph 119 r. Failure to undertake and complete any of the Environmental Mitigation Projects in compliance with Section IX (Environmental Mitigation Projects) of this Consent Decree	Continuously Operate a NO _x , SO ₂ , H ₂ SO ₄ , or PM control device, included in Paragraphs 65-70, 90-93, 109-110, 120-121 on either Merom Unit 1 or Unit 2 or Ratts Unit 1 or	during the first 30 Days; \$37,500 per Day per violation
required by Paragraph 88 for the first 30 Days; \$37,500 per Day per violation for each Day thereafter j. Failure to conduct a stack test for PM and H ₂ SO ₄ as required by Paragraphs 115 and 122 of this Consent Decree k. Failure to install or operate NO _x , SO ₂ , and/or PM CEMS as required in this Consent Decree l. Failure to apply for any permit required by Section XVII (Permits) m. Failure to timely submit, modify, or implement, as approved, the reports, plans, studies, analyses, protocols, or other submittals required by this Consent Decree n. Failure to surrender SO ₂ Allowances as required under this Consent Decree o. Failure to surrender NO _x Allowances as required under this Consent Decree p. Failure to demonstrate the third-party surrender of a NO _x or SO ₂ Allowance in accordance with Paragraphs 81 and 107 q. Failure to optimize the existing ESPs as required by Paragraph 119 r. Failure to undertake and complete any of the Environmental Mitigation Projects in compliance with Section IX (Environmental Mitigation Projects) of this Consent Decree	• 1	Days; \$15,000 per Day for each
required by Paragraphs 115 and 122 of this Consent Decree k. Failure to install or operate NO _x , SO ₂ , and/or PM CEMS as required in this Consent Decree 1. Failure to apply for any permit required by Section XVII (Permits) m. Failure to timely submit, modify, or implement, as approved, the reports, plans, studies, analyses, protocols, or other submittals required by this Consent Decree n. Failure to surrender SO ₂ Allowances as required under this Consent Decree o. Failure to surrender NO _x Allowances as required under this Consent Decree p. Failure to demonstrate the third-party surrender of a NO _x or SO ₂ Allowance in accordance with Paragraphs 81 and 107 q. Failure to optimize the existing ESPs as required by Paragraph 119 r. Failure to undertake and complete any of the Environmental Mitigation Projects in compliance with Sconsent Decree k. Failure to install or operate NO _x , SO ₂ , and/or PM CEMS \$1,000 per Day per violation \$1,000 per Day per violation \$2,500 per Day per violation \$1,000 per Day per violation during the first 30 Days; \$5,000 per Day per violation thereafter	± 1	for the first 30 Days; \$37,500 per Day per violation for each
as required in this Consent Decree 1. Failure to apply for any permit required by Section XVII (Permits) m. Failure to timely submit, modify, or implement, as approved, the reports, plans, studies, analyses, protocols, or other submittals required by this Consent Decree n. Failure to surrender SO ₂ Allowances as required under this Consent Decree o. Failure to surrender NO _x Allowances as required under this Consent Decree p. Failure to demonstrate the third-party surrender of a NO _x or SO ₂ Allowance in accordance with Paragraphs 81 and 107 q. Failure to optimize the existing ESPs as required by Paragraph 119 r. Failure to undertake and complete any of the Environmental Mitigation Projects in compliance with Sconsent Decree 1, 1,000 per Day per violation during the first 10 Days; \$1,000 per Day per violation 2, 5,500 per Day, plus \$1,000 per NO _x Allowance not surrendered 2, 5,500 per Day per violation 3, 5,500 per Day per violation 4, 5,500 per Day per violation 4, 6,000 per Day per violation 5,1,000 per Day per violation 6,1,000 per Day per violation during the first 30 Days; \$5,000 per Day per violation thereafter		\$5,000 per Day per violation
m. Failure to timely submit, modify, or implement, as approved, the reports, plans, studies, analyses, protocols, or other submittals required by this Consent Decree n. Failure to surrender SO ₂ Allowances as required under this Consent Decree o. Failure to surrender NO _x Allowances as required under this Consent Decree p. Failure to demonstrate the third-party surrender of a NO _x or SO ₂ Allowance in accordance with Paragraphs 81 and 107 q. Failure to optimize the existing ESPs as required by Paragraph 119 r. Failure to undertake and complete any of the Environmental Mitigation Projects in compliance with Section IX (Environmental Mitigation Projects) of this Consent Decree sy750 per Day per violation during the first 10 Days; \$1,000 per SO ₂ Allowance not surrendered \$37,500 per Day, plus \$1,000 per NO _x Allowance not surrendered \$2,500 per Day per violation \$1,000 per Day per violation \$1,000 per Day per violation \$1,000 per Day per violation during the first 30 Days; \$5,000 per Day per violation thereafter	<u> </u>	\$1,000 per Day per violation
approved, the reports, plans, studies, analyses, protocols, or other submittals required by this Consent Decree n. Failure to surrender SO ₂ Allowances as required under this Consent Decree o. Failure to surrender NO _x Allowances as required under this Consent Decree p. Failure to demonstrate the third-party surrender of a NO _x or SO ₂ Allowance in accordance with Paragraphs 81 and 107 q. Failure to optimize the existing ESPs as required by Paragraph 119 r. Failure to undertake and complete any of the Environmental Mitigation Projects in compliance with Section IX (Environmental Mitigation Projects) of this Consent Decree during the first 10 Days; \$1,000 per Day per violation thereafter \$37,500 per Day, plus \$1,000 per NO _x Allowance not surrendered \$2,500 per Day per violation \$1,000 per Day per violation \$1,000 per Day per violation during the first 30 Days; \$5,000 per Day per violation thereafter		\$1,000 per Day per violation
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this Consent Decree p. Failure to demonstrate the third-party surrender of a NO _x or SO ₂ Allowance in accordance with Paragraphs 81 and 107 q. Failure to optimize the existing ESPs as required by Paragraph 119 r. Failure to undertake and complete any of the Environmental Mitigation Projects in compliance with Section IX (Environmental Mitigation Projects) of this Consent Decree s37,300 per Day, plus \$1,000 per NO _x Allowance not surrendered \$2,500 per Day per violation \$1,000 per Day per violation during the first 30 Days; \$5,000 per Day per violation thereafter		per SO ₂ Allowance not
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r. Failure to undertake and complete any of the Environmental Mitigation Projects in compliance with Section IX (Environmental Mitigation Projects) of this Consent Decree \$1,000 per Day per violation during the first 30 Days; \$5,000 per Day per violation thereafter	or SO ₂ Allowance in accordance with Paragraphs 81 and	\$2,500 per Day per violation
Environmental Mitigation Projects in compliance with Section IX (Environmental Mitigation Projects) of this Consent Decree during the first 30 Days; \$5,000 per Day per violation thereafter		\$1,000 per Day per violation
s. Any other violation of this Consent Decree \$1,000 per Day per violation	Environmental Mitigation Projects in compliance with Section IX (Environmental Mitigation Projects) of this	during the first 30 Days; \$5,000
	s. Any other violation of this Consent Decree	\$1,000 per Day per violation

- 161. Violations of any limit based on a 30-Day rolling average constitutes thirty (30) Days of violation but where such a violation (for the same pollutant and from the same Unit) recurs within periods less than thirty (30) Days, Hoosier shall not be obligated to pay a daily stipulated penalty for any Day of the recurrence for which a stipulated penalty has already been paid.
- 162. All stipulated penalties shall begin to accrue on the Day after the performance is due or on the Day a violation occurs, whichever is applicable, and shall continue to accrue until performance is satisfactorily completed or until the violation ceases, whichever is applicable. Nothing in this Consent Decree shall prevent the simultaneous accrual of separate stipulated penalties for separate violations of this Consent Decree.
- 163. For purposes of the stipulated penalty Allowance Surrender required pursuant to Subparagraphs 160(e)-(f), Hoosier shall make the Surrender of any Allowances required for failure to meet an applicable Plant-Wide 12-Month Rolling SO₂ Tonnage Limitation on a calendar year basis within forty-five (45) Days from Hoosier's receipt of the next annual deduction report for Ratts.
- 164. Hoosier shall pay all stipulated penalties to the United States within thirty (30) Days of receipt of written demand to Hoosier from the United States, and shall continue to make such payments every thirty (30) Days thereafter until the violation(s) no longer continues, unless Hoosier elects within twenty (20) Days of receipt of written demand to Hoosier from the United States to dispute the accrual of stipulated penalties in accordance with the provisions in Section XVI (Dispute Resolution) of this Consent Decree.

- 165. Stipulated penalties shall continue to accrue as provided in accordance with Paragraph
 162 during any dispute, with interest on accrued stipulated penalties payable and
 calculated at the rate established by the Secretary of the Treasury, pursuant to 28 U.S.C.
 § 1961, but need not be paid until the following:
 - a. If the dispute is resolved by agreement, or by a decision of the United States pursuant to Section XVI (Dispute Resolution) of this Consent Decree that is not appealed to the Court, accrued stipulated penalties agreed or determined to be owing, together with accrued interest, shall be paid within thirty (30) Days of the effective date of the agreement or of the receipt of the United States' decision;
 - b. If the dispute is appealed to the Court and the United States prevails in whole or in part, Hoosier shall, within thirty (30) Days of receipt of the Court's decision or order, pay all accrued stipulated penalties determined by the Court to be owing, together with interest accrued on such penalties determined by the Court to be owing, except as provided in Subparagraph c, below;
 - c. If the Court's decision is appealed by either Party, Hoosier shall, within fifteen (15) Days of receipt of the final appellate court decision, pay all accrued stipulated penalties determined to be owing, together with interest accrued on such stipulated penalties determined to be owing by the appellate court.

Notwithstanding any other provision of this Consent Decree, the accrued stipulated penalties agreed by the United States and Hoosier, or determined by the United States through Dispute Resolution, to be owing may be less than the stipulated penalty amounts set forth in Paragraph 160.

- 166. All monetary stipulated penalties shall be paid in the manner set forth in Section X (Civil Penalty) of this Consent Decree and all Allowance Surrender stipulated penalties shall comply with the Allowance Surrender procedures of Paragraphs 80-82 and 106-108.
- 167. Should Hoosier fail to pay stipulated penalties in compliance with the terms of this Consent Decree, the United States shall be entitled to collect interest on such penalties, as provided for in 28 U.S.C. § 1961.
- 168. The stipulated penalties provided for in this Consent Decree shall be in addition to any other rights, remedies, or sanctions available to the United States by reason of Hoosier's failure to comply with any requirement of this Consent Decree or applicable law, except that for any violation of the Act for which this Consent Decree provides for payment of a stipulated penalty, Hoosier shall be allowed a credit for stipulated penalties paid against any statutory penalties also imposed for such violation.
- 169. If any of the Units at Merom or Ratts exceed an applicable 30-Day Rolling Average Emission Rate for NO_x or SO₂, or 30-Day Rolling Average SO₂ Removal Efficiency set forth in this Consent Decree due to malfunction, Hoosier, bearing the burden of proof, has an affirmative defense to stipulated penalties under this Consent Decree, if Hoosier has complied with the reporting requirements of Paragraphs 174 and 175 and has demonstrated all of the following:
 - a. the excess emissions were caused by a sudden, unavoidable breakdown of technology, beyond Hoosier's control;
 - b. the excess emissions (1) did not stem from any activity or event that could have been foreseen and avoided, or planned for, and (2) could not have been avoided by better operation and maintenance practices;

- c. to the maximum extent practicable, the air pollution control equipment and processes were maintained and operated in a manner consistent with good practice for minimizing emissions;
- d. repairs were made in an expeditious fashion when Hoosier knew or should have known that an applicable 30-Day Rolling Average Emission Rate or 30-Day Rolling Average Removal Efficiency was being or would be exceeded. Off-shift labor and overtime must have been utilized, to the extent practicable, to ensure that such repairs were made as expeditiously as practicable;
- e. the amount and duration of the excess emissions (including any bypass) were minimized to the maximum extent practicable during periods of such emissions;
- f. all possible steps were taken to minimize the impact of the excess emissions on ambient air quality;
- g. all emission monitoring systems were kept in operation if at all possible;
- h. Hoosier's actions in response to the excess emissions were documented by properly signed, contemporaneous operating logs, or other relevant evidence;
- the excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance; and
- j. Hoosier properly and promptly notified EPA as required by this Consent Decree.
- 170. To assert an affirmative defense for malfunction under Paragraph 169, Hoosier shall submit all data demonstrating the actual emissions for the Day the Malfunction occurs and the 29-Day period following the Day the Malfunction occurs. Hoosier may, if it elects, submit emissions data for the same 30-Day period but that excludes the excess emissions.

- 171. If any of the Units at Merom or Ratts exceed an applicable 30-Day Rolling Average Emission Rate for NO_x or SO₂, or 30-Day Rolling Average SO₂ Removal Efficiency set forth in this Consent Decree due to startup or shutdown, Hoosier, bearing the burden of proof, has an affirmative defense to stipulated penalties under this Consent Decree, if Hoosier has complied with the reporting requirements of Paragraphs 174 and 175 and has demonstrated all of the following:
 - a. the periods of excess emissions that occurred during startup and shutdown were short and infrequent and could not have been prevented through careful planning and design;
 - b. the excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance;
 - if the excess emissions were caused by a bypass (an intentional diversion of control equipment), then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - at all time, the facility was operated in a manner consistent with good practice for minimizing emissions;
 - e. the frequency and duration of operation in startup or shutdown mode was minimized to the maximum extent practicable;
 - f. all possible steps were taken to minimize the impact of the excess emissions on ambient air quality;
 - g. All emissions monitoring systems were kept in operation if at all possible;
 - h. Hoosier's actions during the period of excess emissions were documented by properly signed, contemporaneous operating logs, or other relevant evidence; and

- i. Hoosier properly and promptly notified EPA as required by this Consent Decree.
- 172. To assert an affirmative defense for startup or shutdown under Paragraph 171, Hoosier shall submit all data demonstrating the actual emissions for the Day the excess emissions from startup or shutdown occurs and the 29-Day period following the Day the excess emissions from startup or shutdown occurs. Hoosier may, if it elects, submit emissions data for the same 30-Day period but that excludes the excess emissions.
- 173. If excess emissions occur due to a malfunction during routine startup and shutdown, then those instances shall be treated as other malfunctions subject to Paragraph 169.
- 174. For an affirmative defense under Paragraphs 169 and 171, Hoosier, bearing the burden of proof, shall demonstrate, through submission of the data and information under the reporting provisions of this Section, that all reasonable and practicable measures within Hoosier's control were implemented to prevent the occurrence of the excess emissions.
- 175. Hoosier shall provide notice to Plaintiffs in writing of Hoosier's intent to assert an affirmative defense for malfunction, startup, or shutdown under Paragraphs 169 and 171, as soon as practicable, but in no event later than twenty-one (21) Days following the date of the malfunction, startup or shutdown. This notice shall be submitted to EPA and the State pursuant to the provisions of Section XIX (Notices). The notice shall contain:
 - a. The identity of each stack or other emission point where the excess emissions occurred;
 - b. The magnitude of the excess emissions expressed in lb/mmBTU or % Removal Efficiency and the operating data and calculations used in determining the magnitude of the excess emissions;
 - c. The time and duration or expected duration of the excess emissions;

- d. The identity of the equipment from which the excess emissions emanated;
- e. The nature and cause of the excess emissions;
- f. The steps taken, if the excess emissions were the result of a malfunction, to remedy the malfunction and the steps taken or planned to prevent the recurrence of the malfunction;
- g. The steps that were or are being taken to limit the excess emissions; and
- h. If applicable, a list of the steps taken to comply with permit conditions governing Unit operation during periods of startup, shutdown, and/or malfunction.
- 176. A malfunction, startup, or shutdown shall not constitute a Force Majeure Event unless the malfunction, startup, or shutdown also meets the definition of a Force Majeure Event, as provided in Section XV (Force Majeure).
- 177. The affirmative defense provided herein is only an affirmative defense to stipulated penalties for violations of this Consent Decree, and not a defense to any civil or administrative action for injunctive relief.

XV. FORCE MAJEURE

178. For purposes of this Consent Decree, a "Force Majeure Event" shall mean an event that has been or will be caused by circumstances beyond the control of Hoosier, its contractors, or any entity controlled by Hoosier that delays compliance with any provision of this Consent Decree or otherwise causes a violation of any provision of this Consent Decree despite Hoosier's best efforts to fulfill the obligation. "Best efforts to fulfill the obligation" include using the best efforts to anticipate any potential Force Majeure Event and to address the effects of any such event (a) as it is occurring and (b)

- after it has occurred, such that the delay and any adverse environmental effect of the delay or violation is minimized to the greatest extent possible.
- Notice of Force Majeure Events. If any event occurs or has occurred that may delay 179. compliance with or otherwise cause a violation of any obligation under this Consent Decree, as to which Hoosier intends to assert a claim of Force Majeure, Hoosier shall notify Plaintiffs in writing as soon as practicable, but in no event later than twenty-one (21) Days following the date Hoosier first knew, or by the exercise of due diligence should have known, that the event caused or may cause such delay or violation. In this notice, Hoosier shall reference this Paragraph of this Consent Decree and describe the anticipated length of time that the delay or violation may persist, the cause or causes of the delay or violation, all measures taken or to be taken by Hoosier to prevent or minimize the delay and any adverse environmental effect of the delay or violation, the schedule by which Hoosier proposes to implement those measures, and Hoosier's rationale for attributing a delay or violation to a Force Majeure Event. Hoosier shall adopt all reasonable measures to avoid or minimize such delays or violations. Hoosier shall be deemed to know of any circumstance which Hoosier, its contractors, or any entity controlled by Hoosier knew or should have known.
- 180. <u>Failure to Give Notice</u>. If Hoosier fails to comply with the notice requirements of this Section, the United States (after consultation with Indiana) may void Hoosier's claim for Force Majeure as to the specific event for which Hoosier has failed to comply with such notice requirement.
- 181. <u>United States' Response</u>. The United States shall notify Hoosier in writing regarding Hoosier's claim of Force Majeure within twenty (20) business days of receipt of the

notice provided under Paragraph 179. If the United States (after consultation with Indiana) agrees that a delay in performance has been or will be caused by a Force Majeure Event, the United States and Hoosier shall stipulate to an extension of deadline(s) for performance of the affected compliance requirement(s) by a period equal to the delay actually caused by the event. In such circumstances, an appropriate modification shall be made pursuant to Section XXIII (Modification) of this Consent Decree.

- 182. <u>Disagreement</u>. If the United States (after consultation with Indiana) does not accept Hoosier's claim of Force Majeure, or if the United States and Hoosier cannot agree on the length of the delay actually caused by the Force Majeure Event, the matter shall be resolved in accordance with Section XVI (Dispute Resolution) of this Consent Decree.
- Burden of Proof. In any dispute regarding Force Majeure, Hoosier shall bear the burden of proving that any delay in performance or any other violation of any requirement of this Consent Decree was caused by or will be caused by a Force Majeure Event. Hoosier shall also bear the burden of proving that Hoosier gave the notice required by this Section and the burden of proving the anticipated duration and extent of any delay(s) attributable to a Force Majeure Event. An extension of one compliance date based on a particular event may, but will not necessarily, result in an extension of a subsequent compliance date.
- 184. <u>Events Excluded</u>. Unanticipated or increased costs or expenses associated with the performance of Hoosier's obligations under this Consent Decree shall not constitute a Force Majeure Event.

- 185. Potential Force Majeure Events. The Parties agree that, depending upon the circumstances related to an event and Hoosier's response to such circumstances, the kinds of events listed below are among those that could qualify as Force Majeure Events within the meaning of this Section: construction, labor, or equipment delays; malfunction of a Unit or emission control device; unanticipated coal supply or pollution control reagent delivery interruptions; acts of God; acts of war or terrorism; and orders by a government official, government agency, other regulatory authority, or a regional transmission organization, acting under and authorized by applicable law, that directs Hoosier to supply electricity in response to a system-wide (state-wide or regional) emergency. Depending upon the circumstances and Hoosier's response to such circumstances, failure of a permitting authority to issue a necessary permit in a timely fashion may constitute a Force Majeure Event where the failure of the permitting authority to act is beyond the control of Hoosier and Hoosier has taken all steps available to it to obtain the necessary permit, including, but not limited to: submitting a complete permit application; responding to requests for additional information by the permitting authority in a timely fashion; and accepting lawful permit terms and conditions after expeditiously exhausting any legal rights to appeal terms and conditions imposed by the permitting authority.
- 186. As part of the resolution of any matter submitted to this Court under Section XVI

 (Dispute Resolution) regarding a claim of Force Majeure, the United States and Hoosier by agreement, or this Court by order, may in appropriate circumstances extend or modify the schedule for completion of work under this Consent Decree to account for the delay in the work that occurred as a result of any delay agreed to by the United States or

approved by the Court. Hoosier shall be liable for stipulated penalties pursuant to Section XIV (Stipulated Penalties) for its failure thereafter to complete the work in accordance with the extended or modified schedule (provided that Hoosier shall not be precluded from making a further claim of Force Majeure with regard to meeting any such extended or modified schedule).

XVI. <u>DISPUTE RESOLUTION</u>

- 187. The dispute resolution procedure provided by this Section shall be available to resolve all disputes arising under this Consent Decree, provided that the Party invoking such procedure has first made a good faith attempt to resolve the matter with the other Party.
- 188. The dispute resolution procedure required herein shall be invoked by one Party giving written notice to the other Party advising of a dispute pursuant to this Section. The notice shall describe the nature of the dispute and shall state the noticing Party's position with regard to such dispute. The Party receiving such a notice shall acknowledge receipt of the notice, and the Parties in dispute shall expeditiously schedule a meeting to discuss the dispute informally not later than fourteen (14) Days following receipt of such notice.
- 189. Disputes submitted to dispute resolution under this Section shall, in the first instance, be the subject of informal negotiations between the Parties. Such period of informal negotiations shall not extend beyond thirty (30) Days from the date of the first meeting between the Parties' representatives unless they agree in writing to shorten or extend this period.
- 190. If the Parties are unable to reach agreement during the informal negotiation period, the Plaintiffs shall provide Hoosier with a written summary of its position regarding the dispute. The written position provided by the Plaintiffs shall be considered binding

- unless, within forty-five (45) Days thereafter, Hoosier seeks judicial resolution of the dispute by filing a petition with this Court. If Hoosier seeks judicial resolution, the Plaintiffs' written summary shall be deemed its initial filing with this Court regarding the dispute. The Plaintiffs may submit a response to the petition within forty-five (45) Days of filing.
- 191. The time periods set out in this Section may be shortened or lengthened upon motion to the Court of one of the Parties to the dispute, explaining the Party's basis for seeking such a scheduling modification.
- 192. This Court shall not draw any inferences nor establish any presumptions adverse to either Party as a result of invocation of this Section or the Parties' inability to reach agreement.
- 193. As part of the resolution of any dispute under this Section, in appropriate circumstances the Parties may agree, or this Court may order, an extension or modification of the schedule for the completion of the activities required under this Consent Decree to account for the delay that occurred as a result of dispute resolution. Hoosier shall be liable for stipulated penalties pursuant to Section XIV (Stipulated Penalties) for its failure thereafter to complete the work in accordance with the extended or modified schedule, provided that Hoosier shall not be precluded from asserting that a Force Majeure Event has caused or may cause a delay in complying with the extended or modified schedule.
- 194. The Court shall decide all disputes pursuant to applicable principles of law for resolving such disputes. In their filings with the Court under Paragraph 190, the Parties shall state their respective positions as to the applicable standard of law for resolving the particular dispute.

XVII. PERMITS

- 195. Unless expressly stated otherwise in this Consent Decree, in any instance where otherwise applicable law or this Consent Decree requires Hoosier to secure a permit to authorize construction or operation of any device, including all preconstruction, construction, and operating permits required under State law, Hoosier shall make such application in a timely manner. Plaintiffs will use their best efforts to expeditiously fulfill their role in reviewing all permit applications submitted by Hoosier in order to meet the requirements of this Consent Decree.
- 196. When permits are required, Hoosier shall complete and submit applications for such permits to IDEM to allow sufficient time for all legally required processing and review of the permit request, including requests for additional information by IDEM. Any failure by Hoosier to submit a timely permit application for Merom Unit 1 and Unit 2 and/or Ratts Unit 1 and Unit 2 shall bar any use by Hoosier of Section XV (Force Majeure) of this Consent Decree, where a Force Majeure claim is based on permitting delays.
- 197. Notwithstanding the reference to Hoosier's Title V Permits for Merom Unit 1 and Unit 2 and Ratts Unit 1 and Unit 2 in this Consent Decree, the enforcement of such permit shall be in accordance with their own terms and the Act. Hoosier's Title V Permits for Merom and Ratts shall not be enforceable under this Consent Decree, although any term or limit established by or under this Consent Decree shall be enforceable under this Consent Decree regardless of whether such term has or will become part of a Title V Permit, subject to the terms of Section XXVII (Conditional Termination of Enforcement Under Decree) of this Consent Decree.

- Within one hundred eighty (180) Days after the Date of Entry of this Consent Decree,
 Hoosier shall amend any applicable Title V Permit application(s), or apply for
 amendments of its Title V Permits, to include a schedule for all Unit-specific, plantspecific, and system-specific performance, operational, maintenance, and control
 technology requirements established by this Consent Decree including, but not limited to,
 (a) Emission Rates and Removal Efficiencies, (b) the applicable System-Wide Annual
 NO_x Tonnage Limitations and System-Wide Annual SO₂ Tonnage Limitations, (c) the
 Plant-Wide 12-Month Rolling SO₂ Tonnage Limitations at Ratts, and (d) the
 requirements pertaining to the Surrender of SO₂ and NO_x Allowances.
- 199. By no later than December 31, 2015, Hoosier shall either apply to permanently include the requirements and limitations enumerated in this Consent Decree into a federally enforceable non-Title V permit or request a site-specific amendment to the Indiana SIP to include the requirements and limitations enumerated in this Consent Decree. The permit or Indiana SIP amendment shall require compliance with the following: (a) any applicable Emission Rate or Removal Efficiency, (b) the applicable System-Wide Annual NO_x Tonnage Limitations and System-Wide Annual SO₂ Tonnage Limitations, (c) the applicable Plant-Wide 12-Month Rolling SO₂ Tonnage Limitations at Ratts, and (d) the NO_x and SO₂ Allowance Surrender requirements set forth in this Consent Decree.
- 200. Hoosier shall provide the United States with a copy of each application for a federally enforceable permit or Indiana SIP amendment, as well as a copy of any permit proposed as a result of such application, to allow for timely participation in any public comment opportunity.

- 201. Prior to termination of this Consent Decree, Hoosier shall obtain enforceable provisions in its Title V permits for Merom and Ratts that incorporate all Unit-specific, plant-specific, and system-specific performance, operational, maintenance, and control technology requirements established by this Consent Decree including, but not limited to, (a) Emission Rates and Removal Efficiencies, (b) the applicable System-Wide Annual NO_x Tonnage Limitations and System-Wide Annual SO₂ Tonnage Limitations, (c) the Plant-Wide 12-Month Rolling SO₂ Tonnage Limitations at Ratts, and (d) the requirements pertaining to the Surrender of SO₂ and NO_x Allowances.
- 202. If Hoosier sells or transfers to an entity unrelated to Hoosier ("Third Party Purchaser")

 part or all of its Operational or Ownership Interest covered under this Consent Decree,

 Hoosier shall comply with the requirements of Section XX (Sales or Transfers of

 Operational or Ownership Interests) of this Consent Decree with regard to that

 Operational or Ownership Interest prior to any such sale or transfer unless, following any
 such sale or transfer, Hoosier remains the holder of the permit for such facility.

XVIII. INFORMATION COLLECTION AND RETENTION

- 203. Any authorized representative of the United States, including its attorneys, contractors, and consultants, upon presentation of credentials, shall have a right of entry upon the premises of Merom Unit 1 and Unit 2 and Ratts Unit 1 and Unit 2 at any reasonable time for the purpose of:
 - a. monitoring the progress of activities required under this Consent Decree;
 - verifying any data or information submitted to the United States in accordance
 with the terms of this Consent Decree;

- c. obtaining samples and, upon request, splits of any samples taken by Hoosier or its representatives, contractors, or consultants; and
- d. assessing Hoosier's compliance with this Consent Decree.
- 204. Hoosier shall retain, and instruct its contractors and agents to preserve, all non-identical copies of all records and documents (including records and documents in electronic form) now in its or its contractors' or agents' possession or control, and that directly relate to Hoosier's performance of its obligations under this Consent Decree for the following periods: (a) until December 31, 2020 for records concerning physical or operational changes undertaken in accordance with Section IV (NO_x Emission Reductions and Controls), Section V (SO₂ Emission Reductions and Controls), Section VI (H₂SO₄ Emission Reductions and Controls), and Section VII (PM Emission Reductions and Controls); and (b) until December 31, 2017 for all other records. This record retention requirement shall apply regardless of any corporate document retention policy to the contrary.
- 205. All information and documents submitted by Hoosier pursuant to this Consent Decree shall be subject to any requests under applicable law providing public disclosure of documents unless (a) the information and documents are subject to legal privileges or protection or (b) Hoosier claims and substantiates in accordance with 40 C.F.R. Part 2 that the information and documents contain confidential business information.
- 206. Nothing in this Consent Decree shall limit the authority of EPA to conduct tests and inspections at Hoosier's facilities under Section 114 of the Act, 42 U.S.C. § 7414, or any other applicable federal laws, regulations, or permits.

XIX. NOTICES

207. Unless otherwise provided herein, whenever notifications, submissions, or communications are required by this Consent Decree, they shall be made in writing and addressed as follows:

As to the United States of America:

Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice P.O. Box 7611, Ben Franklin Station Washington, DC 20044-7611 DJ# 90-5-2-1-09864

(if by commercial delivery service)
Chief, Environmental Enforcement Section
Environment and Natural Resources Division
U.S. Department of Justice
ENRD Mailroom, Room 2121
601 D Street, NW
Washington, DC 20004
DJ# 90-5-2-1-09864

and

(if by commercial delivery service)
Director, Air Enforcement Division
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
Ariel Rios South Building, Room 1119
1200 Pennsylvania Avenue, NW
Washington, DC 20004

(if by mail service)
Director, Air Enforcement Division
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
Mail Code 2242A
1200 Pennsylvania Avenue, NW
Washington, DC 20460

and

Director, Air Division U.S. EPA Region 5 77 W. Jackson Blvd. (AE-17J) Chicago, IL 60604

As to the State of Indiana:

Phil Perry
Chief, Compliance and Enforcement Branch
Office of Air Quality
Indiana Department of Environmental Management
100 North Senate Avenue
MC 61-53, IGCN 1003
Indianapolis, IN 46204-2251

and

Justin D. Barrett
Deputy Attorney General
Indiana Office of the Attorney General
302 West Washington Street
IGCS Fifth Floor
Indianapolis, IN 46204

As to HOOSIER:

Robert Richhart Vice President, Management Services Hoosier Energy REC, Inc. 7398 N State Road 37 Bloomington, IN 47404

Christopher M. Goffinet, Esq. General Counsel Hoosier Energy REC, Inc. 7398 N State Road 37 Bloomington, IN 47404

and

John M. Holloway, III, Esq. Elizabeth C. Williamson, Esq. Winston & Strawn LLP 1700 K Street, N.W. Washington, DC 20006-3817

- 208. All notifications, communications, or submissions made pursuant to this Section shall be sent either by: (a) overnight mail or overnight delivery service with signature required for delivery, or (b) certified or registered mail, return receipt requested. All notifications, communications, and transmissions (a) sent by overnight, certified, or registered mail shall be deemed submitted on the date they are postmarked, or (b) sent by overnight delivery service shall be deemed submitted on the date they are delivered to the delivery service.
- 209. Either Party may change either the notice recipient or the address for providing notices to it by serving the other Party with a notice setting forth such new notice recipient or address.

XX. SALES OR TRANSFERS OF OPERATIONAL OR OWNERSHIP INTERESTS

- 210. If Hoosier proposes to sell or transfer an Operational or Ownership Interest to another entity (a "Third Party Purchaser"), Hoosier shall advise the Third Party Purchaser in writing of the existence of this Consent Decree prior to such sale or transfer, and shall send a copy of such written notification to the Plaintiffs pursuant to Section XIX (Notices) of this Consent Decree at least sixty (60) Days before such proposed sale or transfer.
- 211. No sale or transfer of an Operational or Ownership Interest shall take place before the Third Party Purchaser and the Plaintiffs have executed, and the Court has approved, a modification pursuant to Section XXIII (Modification) of this Consent Decree making the Third Party Purchaser a party to this Consent Decree and jointly and severally liable with Hoosier for all the requirements of this Consent Decree that may be applicable to the transferred or purchased Operational or Ownership Interests.

- Ownership Interests between Hoosier and any Third Party Purchaser so long as the requirements of this Consent Decree are met. This Consent Decree shall not be construed to prohibit a contractual allocation as between Hoosier and any Third Party Purchaser of Operational or Ownership Interests of the burdens of compliance with this Consent Decree, provided that both Hoosier and such Third Party Purchaser shall remain jointly and severally liable to the United States for the obligations of this Consent Decree applicable to the transferred or purchased Operational or Ownership Interests.
- 213. If the Plaintiffs agree, the Plaintiffs, Hoosier, and the Third Party Purchaser that has become a party to this Consent Decree pursuant to Paragraph 211 may execute a modification that relieves Hoosier of its liability under this Consent Decree for, and makes the Third Party Purchaser liable for, all obligations and liabilities applicable to the purchased or transferred Operational or Ownership Interests. Notwithstanding the foregoing, however, Hoosier may not assign, and may not be released from, any obligation under this Consent Decree that is not specific to the purchased or transferred Operational or Ownership Interests, including the obligations set forth in Sections IX (Environmental Mitigation Projects) and X (Civil Penalty). Hoosier may propose and the Plaintiffs may agree to restrict the scope of the joint and several liability of any purchaser or transferee for any obligations of this Consent Decree that are not specific to the transferred or purchased Operational or Ownership Interests, to the extent such obligations may be adequately separated in an enforceable manner.

XXI. EFFECTIVE DATE

214. The effective date of this Consent Decree shall be the Date of Entry.

XXII. RETENTION OF JURISDICTION

215. The Court shall retain jurisdiction of this case after entry of this Consent Decree to enforce compliance with the terms and conditions of this Consent Decree and to take any action necessary or appropriate for the interpretation, construction, execution, or modification of the Consent Decree, or for adjudication of disputes. During the term of this Consent Decree, either Party to this Consent Decree may apply to the Court for any relief necessary to construe or effectuate this Consent Decree.

XXIII. MODIFICATION

216. The terms of this Consent Decree may be modified only by a subsequent written agreement signed by Plaintiffs and Hoosier. Where the modification constitutes a material change to any term of this Consent Decree, it shall be effective only upon approval by the Court.

XXIV. GENERAL PROVISIONS

- 217. When this Consent Decree specifies that Hoosier shall achieve and maintain a 30-Day Rolling Average Emission Rate or a 30-Day Rolling Average Removal Efficiency, the Parties expressly recognize that compliance with such 30-Day Rolling Average Emission Rate or a 30-Day Rolling Average Removal Efficiency shall commence immediately upon the date specified, and that compliance as of such specified date (e.g., December 30) shall be determined based on data from the 29 prior Unit Operating Days (e.g., December 1-29).
- 218. This Consent Decree is not a permit. Compliance with the terms of this Consent Decree does not guarantee compliance with all applicable federal, state, or local laws or regulations. The emission rates and removal efficiencies set forth herein do not relieve

- Hoosier from any obligation to comply with other state and federal requirements under the Clean Air Act, including Hoosier's obligation to satisfy any State modeling requirements set forth in the Indiana SIP.
- 219. This Consent Decree does not apply to any claim(s) of alleged criminal liability.
- 220. In any subsequent administrative or judicial action initiated by the United States for injunctive relief or civil penalties relating to Merom Unit 1 or Unit 2 or Ratts Unit 1 or Unit 2 as covered by this Consent Decree, Hoosier shall not assert any defense or claim based upon principles of waiver, res judicata, collateral estoppel, issue preclusion, claim preclusion, or claim splitting, or any other defense based upon the contention that the claims raised by the United States in the subsequent proceeding were brought, or should have been brought, in the instant case; provided, however, that nothing in this Paragraph is intended to affect the validity of Paragraphs 146-148 subject to Paragraphs 149-152.
- 221. Except as specifically provided by this Consent Decree, nothing in this Consent Decree shall relieve Hoosier of its obligation to comply with all applicable federal, state, and local laws and regulations, including, but not limited to, Hoosier's obligation to apply for a Clean Water Act National Pollutant Discharge Elimination System (NPDES) permit(s) or permit renewal for the discharge of wastewater from the operation of the FGDs at Merom, and in connection with any such application or application for permit renewal, to provide the NPDES permitting authority with all information necessary to appropriately characterize effluent from its operations and develop, if applicable, appropriate effluent limitations, including but not limited to all information necessary for the NPDES permitting authority to appropriately evaluate discharges of total dissolved solids (TDS) for its operations. Subject to the provisions in Section XI (Resolution of Civil Claims

- Against Hoosier), nothing contained in this Consent Decree shall be construed to prevent or limit the rights of the United States to obtain penalties or injunctive relief under the Act or other federal, state, or local statutes, regulations, or permits.
- 222. Each limit and/or other requirement established by or under this Consent Decree is a separate, independent requirement.
- 223. Performance standards, emissions limits, and other quantitative standards set by or under this Consent Decree must be met to the number of significant digits in which the standard or limit is expressed. For example, an Emission Rate of 0.100 is not met if the actual Emission Rate is 0.101. Hoosier shall round the fourth significant digit to the nearest third significant digit, or the third significant digit to the nearest second significant digit, depending upon whether the limit is expressed to three or two significant digits. For example, if an actual Emission Rate is 0.1004, that shall be reported as 0.100, and shall be in compliance with an Emission Rate of 0.100, and if an actual Emission Rate is 0.1005, that shall be reported as 0.101, and shall not be in compliance with an Emission Rate of 0.100. Hoosier shall report data to the number of significant digits in which the standard or limit is expressed.
- 224. This Consent Decree does not limit, enlarge, or affect the rights of any Party to this Consent Decree as against any third parties.
- 225. This Consent Decree constitutes the final, complete, and exclusive agreement and understanding among the Parties with respect to the settlement embodied in this Consent Decree, and supercedes all prior agreements and understandings among the Parties related to the subject matter herein. No document, representation, inducement, agreement, understanding, or promise constitutes any part of this Consent Decree or the

- settlement it represents, nor shall they be used in construing the terms of this Consent Decree.
- 226. Each Party to this action shall bear its own costs and attorneys' fees.

XXV. SIGNATORIES AND SERVICE

- 227. Each undersigned representative of the Parties certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind to this document the Party he or she represents.
- 228. This Consent Decree may be signed in counterparts, and such counterpart signature pages shall be given full force and effect.
- 229. Each Party hereby agrees to accept service of process by mail with respect to all matters arising under or relating to this Consent Decree and to waive the formal service requirements set forth in Rule 4 of the Federal Rules of Civil Procedure and any applicable Local Rules of this Court including, but not limited to, service of a summons.

XXVI. PUBLIC COMMENT

230. The Parties agree and acknowledge that final approval by the United States and entry of this Consent Decree is subject to the procedures of 28 C.F.R. § 50.7, which provides for notice of the lodging of this Consent Decree in the Federal Register, an opportunity for public comment, and the right of the United States to withdraw or withhold consent if the comments disclose facts or considerations which indicate that this Consent Decree is inappropriate, improper, or inadequate. Hoosier shall not oppose entry of this Consent Decree by this Court or challenge any provision of this Consent Decree unless the United States has notified Hoosier, in writing, that the United States no longer supports entry of this Consent Decree.

XXVII. CONDITIONAL TERMINATION OF ENFORCEMENT UNDER CONSENT DECREE

- 231. <u>Termination as to completed tasks.</u> As soon as Hoosier completes a construction project or any other requirement of this Consent Decree that is not ongoing or recurring, Hoosier may, by motion to this Court, seek termination of the provision or provisions of this Consent Decree that imposed the requirement.
- 232. <u>Conditional termination of enforcement through this Consent Decree.</u> Subject to the provisions of Paragraph 233, after Hoosier:
 - has successfully completed construction, and has maintained operation, of all
 pollution controls as required by this Consent Decree for a period of two years;
 and
 - b. has obtained all the final permits required by Section XVII (Permits) of this

 Consent Decree covering Merom Unit 1 and Unit 2 and Ratts Unit 1 and Unit 2

 that include as federally enforceable permit terms, all Unit-specific, plant-specific,
 and system-specific performance, operational, maintenance, and control
 technology requirements established by this Consent Decree;

then Hoosier may so certify these facts to the Plaintiffs and this Court. If the Plaintiffs do not object in writing with specific reasons within forty-five (45) Days of receipt of Hoosier's certification, then, for any violations of this Consent Decree that occur after the filing of notice, the Plaintiffs shall pursue enforcement of the requirements through the applicable permits and/or other enforcement authorities and not through this Consent Decree.

233. Resort to enforcement under this Consent Decree. Notwithstanding Paragraph 232, if enforcement of a provision in this Consent Decree cannot be pursued by the United States under the applicable permit(s) issued pursuant to the Clean Air Act or its implementing regulations ("CAA Permit"), or if a Consent Decree requirement was intended to be part of a CAA Permit and did not become or remain part of such permit, then such requirement may be enforced under the terms of this Consent Decree at any time.

XXVIII. FINAL JUDGMENT

234. Upon approval and entry of this Consent Decree by the Court, this Consent Decree shall constitute a final judgment between the Plaintiffs and Hoosier.

Signature Page for *United States of America v. Hoosier Energy Rural Electric Cooperative*Consent Decree

FOR THE UNITED STATES DEPARTMENT OF JUSTICE

Respectfully submitted,

IGNACIA S. MORENO
Assistant Attorney General
Environment and Natural Resources
Division
United States Department of Justice

W. BENJAMIN FISHEROW
Deputy Chief
Environmental Enforcement Section
Environment and Natural Resources
Division
P.O. Box 7611
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(202) 514-2750

JASON DUNN Senior Attorney Environmental Enforcement Section Environment and Natural Resources Division P.O. Box 7611 Washington, DC 20044-7611 (202) 514-1111 Signature Page for *United States of America v. Hoosier Energy Rural Electric Cooperative* Consent Decree

FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Respectfully submitted,

CYNTHIA GILES

Assistant Administrator

Office of Enforcement and

Compliance Assurance

United States Environmental Protection Agency

PHILLIP A. BROOKS

Director, Air Enforcement Division

United States Environmental

Protection Agency

ILANA S. SALTZBART

Attorney-Advisor

United States Environmental

Protection Agency

1200 Pennsylvania Ave, N.W. (2242A)

Washington, DC 20460

Signature Page for United States of America v. Hoosier Energy Rural Electric Cooperative Consent Decree

FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Respectfully submitted,

SUSAN HEDMAN Regional Administrator, Region 5 United States Environmental

Protection Agency

Ω SABRINA ARGENTIERI Associate Regional Counsel United States Environmental Protection Agency, Region 5 77 W. Jackson Blvd. (C-14J) Chicago, IL 60604

Signature Page for United States of America v. Hoosier Energy Rural Electric Cooperative Consent Decree

FOR THE STATE OF INDIANA

FOR THE STATE OF INDIANA, ON BEHALF OF THE INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT:



THOMAS W. EASTERLY Commissioner Indiana Department of Environmental Management

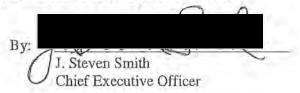
As to form and legality:

GREGORY F. ZOELLER Indiana Attorney General



PATRICIA ORLOFF ERDMANN Chief Counsel for Litigation Office of the Attorney General Indiana Government Center South, 5th Floor 302 West Washington Street Indianapolis, IN 46204 Signature Page for United States of America v. Hoosier Energy Rural Electric Cooperative Consent Decree

FOR HOOSIER ENERGY RURAL ELECTRIC COOPERATIVE



APPENDIX A ENVIRONMENTAL MITIGATION PROJECTS

In compliance with and in addition to the requirements in Section IX of this Consent Decree (Environmental Mitigation Projects), Hoosier shall comply with the requirements of this Appendix to ensure that the benefits of the \$5,000,000 in federally directed Environmental Mitigation Projects ("Projects") are achieved.

I. Forest Service Mitigation

- A. Within forty-five (45) days from the Date of Entry, Hoosier shall pay to the United States Forest Service the sum of \$200,000 to be used in accordance with 16 U.S.C. § 579c, for the improvement, protection, or rehabilitation of lands under the administration of the Forest Service. The Forest Service Project(s) will focus on the Hoosier National Forest. If the Hoosier National Forest is not possible as a Project focus, the Project(s) shall focus on one or more of the following areas alleged by Plaintiffs to have been injured by emissions from the Ratts and Merom Plants: Shawnee National Forest, Wayne National Forest, Daniel Boone National Forest, Cherokee National Forest, and Jefferson National Forest.
- B. Payment of the amount specified in the preceding paragraph shall be made to the Forest Service pursuant to payment instructions provided to Hoosier before or after the Date of Lodging. Notwithstanding Section I.A of this Appendix, payment of funds by Hoosier is not due until ten (10) days after receipt of payment instructions, or forty-five (45) days after the Date of Entry, whichever is later.
- C. Upon payment of the amount specified in Section I.A of this Appendix, Hoosier shall have no further responsibilities regarding the implementation of any Projects selected by the Forest Service in connection with this provision of the Consent Decree.

II. Overall Schedule and Budget for Additional Environmental Mitigation Projects

A. Within one hundred and twenty (120) days of the Date of Entry, as further described below, Hoosier shall choose Environmental Mitigation Projects from the projects outlined in Sections III through VI of this Appendix and shall submit proposed plans to EPA for review and approval pursuant to Section XIII of the Consent Decree (Review and Approval of Submittals) for spending the remaining \$4.8 million in Project Dollars specified in this Appendix in accordance with the deadlines established in this Appendix. EPA reserves the right to disapprove any

APPENDIX A ENVIRONMENTAL MITIGATION PROJECTS

of the projects should the Agency determine based on an analysis of the plans submitted by Hoosier and all the potential environmental impacts that the project is not environmentally beneficial.

- B. Hoosier may, at its election, consolidate the plans required by this Appendix into a single plan.
- C. The Parties agree that Hoosier is entitled to spread its payments for Environmental Mitigation Projects over the five-year period commencing upon the Date of Entry. Hoosier is not, however, precluded from accelerating payments to better effectuate a proposed mitigation plan, provided that Hoosier shall not be entitled to any reduction in the nominal amount of the required payments by virtue of the early expenditures.
- D. All proposed Project plans shall include the following:
 - 1. A plan for implementing the Project;
 - 2. A summary-level budget for the Project;
 - 3. A time-line for implementation of the Project; and
 - 4. A description of the anticipated environmental benefits of the Project including an estimate of emission reductions (e.g., SO₂, NO_x, PM, mercury, CO₂) expected to be realized.
- E. Upon approval of the plan(s) required by this Appendix by the United States, Hoosier shall complete the approved Projects according to the approved plan(s). Nothing in this Consent Decree shall be interpreted to prohibit Hoosier from completing the Projects ahead of schedule.
- F. Commencing with the first progress report due pursuant to Section XII (Periodic Reporting) of the Consent Decree, and continuing annually thereafter until completion of the Project(s), Hoosier will include in the progress report information describing the progress of the Project and the Project Dollars expended on the Project.
- G. In accordance with the requirements of Paragraph 158, within sixty (60) days following the completion of each Project, Hoosier shall submit to the United States for approval (with a courtesy copy to the State of Indiana), a report that documents:
 - 1. The date the Project was completed;

- 2. The results of implementation of the Project, including the estimated emission reductions or other environmental benefits achieved; and
- 3. The Project Dollars incurred by Hoosier in implementing the Project.

III. Coal Bed Methane Project

- A. Consistent with the requirements of Section II of this Appendix, Hoosier may propose a plan to capture and combust methane from coal beds to generate at least ten (10) megawatts of electricity. Hoosier will ensure that the carbon dioxide emissions resulting from the combustion of the methane will be supplied to a greenhouse for use as fertilizer. Hoosier shall spend no more than \$1 million in Project Dollars in performing this Coal Bed Methane Project.
- B. In addition to the requirements of Section II, the plan shall also satisfy the following criteria:
 - 1. Describe in detail the process Hoosier will use to extract sequestered methane from the coal beds;
 - 2. Describe in detail the process Hoosier will use to combust the methane to produce electricity;
 - 3. Describe in detail the process Hoosier will use to supply the CO₂ emissions resulting from the combustion of the methane to greenhouses;
 - 4. Describe how Hoosier will monitor the amount of CO₂ removed from the combustion gas and supplied to the greenhouse(s) (e.g., type(s) of monitoring equipment, analytical methodologies, frequency of monitoring and measurement, calibration techniques);
 - 5. Identify the coal beds from which Hoosier will extract the methane;
 - 6. Identify the greenhouse(s) which will utilize the CO_2 emissions resulting from the combustion of the methane;
 - 7. Identify the federal, state, and local environmental requirements

that the Coal Bed Methane Project will need to comply with and provide a detailed description of how Hoosier will meet such requirements;

- 8. Provide complete copies of applications for any permits required for the Coal Bed Methane Project;
- 9. Identify in cubic feet or meters the amount of methane that will be extracted and combusted annually for the Coal Bed Methane Project;
- 10. Describe the monitoring methods Hoosier will use to determine how much methane is being produced from the coal seams and used in the engines (e.g., (e.g., type(s) of monitoring equipment, analytical methodologies, frequency of monitoring and measurement, calibration techniques);
- 11. Provide an estimate of how much methane may leak as a result from the installation and operation of the wells and methane extraction system;
- 12. As part of the environmental benefit analysis required under Section II.D.4 of this Appendix, identify the annual generation of electricity (MWs) from the combustion of coal that will be annually offset by the Coal Bed Methane Project, and the resulting annual net emission reduction, if any, of SO₂, NOx, PM, mercury, and CO₂ from such offset.
- 13. Hoosier shall perform an in-depth environmental analysis to identify and describe any potential adverse environmental impacts from the Coal Bed Methane Project. Such analysis shall be of sufficient scope and breadth so as to enable EPA to thoroughly evaluate the potential adverse environmental impacts of this project prior to approving or disapproving the project. As part of such analysis, Hoosier shall identify and describe the following:
 - a. Impacts on water quality, including an evaluation of any changes in salinity, pH, concentrations of dissolved metals and radium, and the type and amounts of dissolved organic constituents in the water produced from the methane

- extraction process and the water remaining in the geological structure after the methane is extracted;
- b. If the water produced from the methane extraction process will meet the applicable requirements under federal and state regulations, including the Clean Water Act, the Safe Drinking Water Act, and the Resource Conservation and Recovery Act;
- c. Impacts on water quantity, including but not limited to, the water levels in aquifers, wetlands, and drinking water wells:
- e. Impact on wetlands;
- f. Impact on public health and welfare, including potential for fires, levels of gas leakage into surrounding residential and commercial buildings, property values, odors, and noise;
- g. Compaction or subsidence of geological formations;
- h. Impact on vegetation, including any crop yields and plant growth rates;
- i. Impact on air quality;
- j. Impact on ecosystems/habitat; and
- k. Impact on historic sites.
- 14. If, based upon the information provided by Hoosier as well as other available information, EPA, in its sole discretion, believes that the proposed Coal Bed Methane Project may adversely impact human health or the environment, EPA shall not approve the proposed project and Hoosier shall submit another project described in this Appendix for EPA's review and approval. EPA's disapproval of the Coal Bed Methane Project shall not be subject to Paragraph 158 or Section XVI (Dispute Resolution) of the Consent Decree.

IV. Wood Stove Changeout Project

A. Consistent with the requirements of Section II of this Appendix, Hoosier may propose a plan to sponsor a Wood-burning Appliance Changeout and Retrofit Project ("Wood Appliance Changeout and Retrofit Project") that a state, local, or tribal air pollution control agency ("air pollution control agency) or third-party non-profit will agree to implement in an area that would benefit from reductions of fine particle pollution and/or hazardous air pollutants by replacing, or retrofitting or upgrading inefficient, higher polluting wood-burning appliances (e.g., non-EPA certified wood stoves, fireplaces, old technology outdoor wood-

fire hydronic heaters) or inefficient resistance electric heating (e.g., baseboard or electric furnaces) with Energy Star qualified Heat Pumps, EPA Phase 2 hydronic heaters, or EPA-certified wood-stoves and/or cleaner burning, more energy-efficient hearth appliances (e.g., wood pellet, gas, or propane stove).

- B. The Wood Appliance Changeout and Retrofit Project that Hoosier sponsors shall provide educational information (including, energy efficiency, health and safety benefits, and outreach regarding cleaner-burning alternatives and proper operation of the new technology appliances) and incentives through rebates, discounts, and in some instances, actual replacement of the old technology wood-burning appliances or inefficient resistance electric heating for income-qualified residential homeowners, to encourage residential homeowners to replace their old, higher polluting and less energy efficient appliance with more energy efficient appliances such as geothermal heat pumps, Energy Star qualified heat pumps, and cleaner burning, more energy efficient heating appliances like wood pellet stoves, EPA-certified wood stoves, gas stoves, or propane stoves.
- C. Hoosier shall sponsor the implementation of the Wood Appliance Changeout and Retrofit Project in Hoosier's service area(s) in central and southern Indiana, bordered by the cities of Evansville, Terre Haute, Indianapolis, Richmond, Cincinnati and Louisville that promise significant environmental benefit from the Wood Appliance Changeout and Retrofit Project. In determining the specific areas to implement this Project within the aforementioned geographic area, Hoosier shall give priority to areas with high amounts of air pollution, especially particle pollution and/or hazardous air pollutants, areas located within a geography and topography that makes it susceptible to high levels of particle pollution, or areas that have a significant number of old and/or, higher polluting wood-burning or inefficient resistance electric heating appliances.
- D. The air pollution control agency(ies) and/or non-profit(s) that Hoosier selects shall consult with EPA's wood smoke team and implement the Wood Appliance Changeout and Retrofit Project consistent with the materials available on EPA's Burn Wise website at http://www.epa.gov/burnwise.
- E. In addition to the requirements of Section II, the plan shall also satisfy the following criteria:
 - 1. Identify the air pollution control agency(ies) and/or non-profit(s) selected to implement the Wood Appliance Changeout and Retrofit Project.

- 2. Describe the schedule and budgetary increments in which Hoosier shall provide the necessary funding to the air pollution control agency(ies) and/or non-profits(s) to implement the Wood Appliance Changeout and Retrofit Project.
- 3. Ensure that the air pollution control agency(ies) and/or non-profit(s) will implement the Wood Appliance Changeout and Retrofit Project in accordance with the requirements of this Appendix, and that the Project Dollars will be used to support the actual replacement, upgrade or retrofit of appliances currently used as the primary or secondary source of residential heat with a cleaner, more energy efficient appliance (i.e., geothermal heat pump, wood pellet stove, EPA-certified wood stove, gas stove, EPA Phase 2 qualified hydronic heater, or propane stove). To enable the project to carry on in the future funds may be used to support changeout/upgrades through revolving loan programs or other low-interest loan programs. Hoosier shall limit the use of Project Dollars for administrative costs associated with implementation of the program to no greater than 10% of the Project Dollars Hoosier provides to a specific air pollution control agency and/or non-profit. Up to 7% can be used for personnel cost and the remaining 3 % for other (e.g., outreach materials, training, studies/surveys, travel) project support costs.
- 4. Describe all of the elements of the Wood Appliance Changeout and Retrofit Project that the air pollution control agency(ies) and/or non-profit(s) will implement. Hoosier shall describe and estimate the number of energy efficient appliances it intends to make available, the cost per unit, and the criteria the air pollution control agency(ies) and/or non-profit(s) will use to determine which residential homeowners should be eligible for actual stove replacement.
- 5. If applicable, identify any organizations with which the air pollution control agency(ies) and/or non-profit(s) will partner to implement the Project, including such organizations as: the Hearth, Patio, and Barbecue Association of America, the Chimney Safety Institute of America, a local chapter of the American Lung Association, individual stove retailers, propane dealers, facilities that will dispose of old stoves so that they cannot be resold or reused, housing assistance agencies, local fire departments, local health organizations, and local green energy organizations.

6. Describe how the air pollution control agency(ies) and/or non-profit(s) will ensure that the old and/or, higher polluting wood-burning appliances or inefficient resistance electric heating will be properly recycled or disposed.

V. Clean Diesel Retrofit Project

- A. Consistent with the requirements of Section II of this Appendix, Hoosier may propose a plan to EPA for review and approval to retrofit in-service diesel engines with emission control equipment further described in this Section, designed to reduce emissions of particulates and/or ozone precursors (the "Clean Diesel Retrofit Project") and fund the operation and maintenance of the retrofit equipment for the time-period described below. This Project shall include, where necessary, techniques and infrastructure needed to support such retrofits. Hoosier shall ensure that the recipients operate and maintain the retrofit equipment for five years from the date of installation, by providing funding for operation and maintenance as described in Section V.B.7, below.
- B. In addition to the requirements of Section II, the plan shall also satisfy the following criteria:
 - 1. Involve vehicles based in and equipment located in Hoosier's service territory in central and southern Indiana, bordered by the cities of Evansville, Terre Haute, Indianapolis, Richmond, Cincinnati and Louisville.
 - 2. Provide for the retrofit of public diesel engines with EPA or California Air Resources Board ("CARB") verified emissions control technologies to achieve the greatest measurable mass reductions of particulates and/or ozone precursors for the fleet of school buses in the public school district(s) that participate(s) in the Clean Diesel Retrofit Project. Depending upon the particular EPA or CARB verified emissions control technology selected, the retrofit diesel engines must achieve emission reductions of particulates and/or ozone precursors by 30%-90%, as measured from the pre-retrofit emissions for the particular diesel engine.
 - 3. Describe the process Hoosier will use to determine the most appropriate emissions control technology for each particular diesel engine that will achieve the greatest mass reduction of particulates and/or ozone precursors. In making this determination, Hoosier must take into account

the particular operating criteria required for the EPA or CARB verified emissions control technology to achieve the verified emissions reductions.

- 4. Provide for the retrofit of diesel engines with either: (a) diesel particulate filters (DPF); (b) diesel oxidation catalysts (DOC); or (c) closed crankcase ventilation systems with either DPF or DOC.
- 5. Describe the process Hoosier will use to notify fleet operators and owners within the geographic area specified in Section V.B.1 that their fleet of vehicles may be eligible to participate in the Clean Diesel Retrofit Project and to solicit their interest in participating in the Project.
- 6. Describe the process and criteria Hoosier will use to select the particular fleet operator and owner to participate in this Project, consistent with the requirements of this Section.
- 7. For each of the recipient fleet owners and operators, describe the amount of Project Dollars that will cover the costs associated with: (a) purchasing the verified emissions control technology, (b) installation of the verified emissions control technology (including datalogging), (c) training costs associated with repair and maintenance of the verified emissions control technology (including technology cleaning and proper disposal of waste generated from cleaning), and (d) the incremental costs for repair and maintenance of the retrofit equipment (i.e., DPF, DOC, closed crankcase ventilation system) for five years from the date of installation, including the costs associated with the proper disposal of the waste generated from cleaning the verified emissions control technology. This Project shall not include costs for normal repair or operation of the retrofit diesel fleet.
- 8. Include a mechanism to ensure that recipients of the retrofit equipment will bind themselves to follow the operating criteria required for the verified emissions control technology to achieve the verified emissions reductions and properly maintain the retrofit equipment installed in connection with the Project for the period beginning on the date the installation is complete through December 31, 2015.
- 9. Describe the process Hoosier will use for determining which diesel engines in a particular fleet will be retrofitted with the verified emissions control technology, consistent with the criteria specified in Section V.B.2.

- 10. Ensure that recipient fleet owners and/or operators, or their funders, do not otherwise have a legal obligation to reduce emissions through the retrofit of diesel engines.
- 11. For any third party with whom Hoosier might contract to carry out this Project, establish minimum standards that include prior experience in arranging retrofits, and a record of prior ability to interest and organize fleets, school districts, and community groups to join a clean diesel program.
- 12. Ensure that the recipient fleet(s) comply with local, state, and federal requirements for the disposal of the waste generated from the verified emissions control technology and follow CARB's guidance for the proper disposal of such waste.
- 13. Include a schedule and budget for completing each portion of the Project, including funding for operation and maintenance of the retrofit equipment through December 31, 2015.
- C. In addition to the information required to be included in the report pursuant to Section II.D, above, Hoosier shall also describe the fleet owner/operator; where it implemented this Project; the particular types of verified emissions control technology (and the number of each type) that it installed pursuant to this Project; the type, year, and horsepower of each vehicle; an estimate of the number of citizens affected (if applicable) by this Project, and the basis for this estimate; and an estimate of the emission reductions for Project or engine, as appropriate (using the manufacturer's estimated reductions for the particular verified emissions control technology), including particulates, hydrocarbons, carbon monoxide, and nitrogen oxides.

VI. Solar Technologies Project

A. Consistent with the requirements of Section II of this Appendix, within one hundred twenty (120) days from entry of this Consent Decree, Hoosier shall submit to EPA for review and approval pursuant to Section XIII (Review and Approval of Submittals) of this Consent Decree a plan to install conventional flat panel or thin film solar photovoltaics ("PV Project") and/or solar thermal water/space heating systems ("Thermal Project") (collectively referred to herein as "the Project" when referring to both the PV Project and the Thermal Project) on public school buildings, state or local government-owned buildings, and

buildings owned by nonprofit groups in Indiana, specifically in Hoosier's service territory in central and southern Indiana, bordered by the cities of Evansville, Terre Haute, Indianapolis, Richmond, Cincinnati and Louisville. Such plan shall also include the requirement for (1) a manufacturer parts warranty for the solar panels and invertors installed pursuant to this Project for the life of such equipment and (2) a service contract ("Project Service Contract") for maintenance of the Project for twenty-five (25) years from the date of installation, including but not limited to, annual system checkups and solar module cleaning, and normal Project component replacements, including installation of new system components as needed to extend the life of the Project through the termination of the contract term. Hoosier may propose to purchase the Project Service Contract for the benefit of the entity that owns the building where the Project is installed (Service Contract Beneficiary) and to have the option of funding the cost of the Project Service Contract by depositing funds in an escrow account for use by such Service Contract Beneficiary solely for purposes of maintaining the system for the life of the Project. Hoosier and/or its non-profit member cooperatives will implement this project within their service territories.

B. A PV Project shall, at a minimum, consist of: (1) the installation of solar panels at a single location with unobstructed solar access, producing at least 10 kilowatts direct current, but not to exceed the total annual electricity baseload of the building the project serves; (2) a grid-tied inverter, appropriately sized for the capacity of the solar panels installed at the location; (3) the appropriate solar panel mounting equipment for the particular school, government-owned building, or building owned by nonprofit groups selected, i.e., roof mount or ground mount; (4) wiring, conduit, and associated switchgear and metering equipment required for interconnecting the solar generator to the utility grid; and (5) appropriate monitoring equipment supported by kiosk-delivered educational software to enable the school students and/or staff to monitor the total and hourly energy output of the system (kilowatt hours), environmental benefits delivered (pounds CO₂ avoided), hourly ambient temperature and cell temperature (C°), irradiance (W/M2), as well as time sensitive voltage, power and current metrics. The PV Project shall be installed on the customer side of the meter and ownership of the system shall be conveyed to the building owner at the site. All related environmental benefits shall be retained by the system owner, including associated renewable energy certificates. Hoosier shall include in its bid proposals the requirement that each PV System include a manufacturer parts warranty and a Project Service Contract, as described in subsection A, above. The service and maintenance contract/warranty will be delivered by Hoosier's member cooperatives or through a third-party provider (system integrator or service

provider). To the extent possible, Hoosier shall use North American Board of Certified Energy Practitioners (NACEP) certified energy professionals to perform the installation of the PV Projects to ensure the highest quality installation and performance of the system.

- C. A Thermal Project shall, at a minimum, consist of: (1) the proper installation of solar thermal technologies at a single location with unobstructed solar access, using active direct or indirect systems with OG-300 certification from the Solar Rating and Certification Corporation, (2) use of industry best practices in sizing the solar thermal collectors' surface area to match the intended storage tank and end use application; (3) appropriate monitoring equipment supported by kioskdelivered educational software to enable the school students and/or staff to monitor the total and hourly thermal energy output of the system, operating parameters, and environmental benefits delivered, and (4) installed systems should provide adequate freeze protection appropriate for the system's climate region. The Thermal Project shall be installed on the customer side of the meter and ownership of the system shall be conveyed to the building owner at the site. All related environmental benefits shall be retained by the system owner, including associated renewable energy certificates or carbon offsets. Hoosier shall include in its bid proposals the requirement that each Thermal System include a manufacturer parts warranty and a Project Service Contract, as described in subsection A, above. The service and maintenance contract/warranty will be delivered by Hoosier's member cooperatives or through a third-party provider (system integrator or service provider). To the extent possible, Hoosier shall use NABCEP-certified energy professionals to perform the installation of the Thermal Projects to ensure the highest quality installation and performance of the system.
- D. In addition to the requirements of Section II, the plan shall also satisfy the following criteria:
 - 1. Include a schedule and budget for completing each portion of the PV or Thermal Project.
 - 2. Provide a detailed accounting supporting the costs and activities associated with the Project Service Contract, and, if using an escrow account to fund the Project Service Contract, the schedule and monetary installments for deposits to such account to support the operation and maintenance activities over the life of the system and a demonstration that such escrow account includes appropriate restrictions on the Service Contract Beneficiary's use of such funds, solely for purposes of

maintaining the Project.

- 2. Describe the process Hoosier will use to notify the potential recipients described in subsection A, above, that they are eligible to participate in the PV or Thermal Project and to solicit their interest in participating.
- 3. Describe the process and criteria Hoosier will use to select potential recipients described in subsection A, above, where Hoosier will install the PV or Thermal Projects, including baseload electricity usage, thermal load, solar access availability, low income neighborhood schools and other relevant criteria.
- 4. Identify any person or entity other than Hoosier that will be involved in the PV or Thermal Project. Hoosier shall describe the third-party's role in the PV or Thermal Project, the basis for asserting that such entity is able and suited to perform the intended role, and the competitive bidding process used to solicit third-party interest. Any proposed third-party must be legally authorized to perform the proposed role and to receive Project Dollars.
- E. In addition to the information required to be included in the report pursuant to Section II.D, above, Hoosier shall also identify the school and/or government/nonprofit owned buildings where the PV or Thermal Projects were installed, describing the size of the system, components installed, total cost and expected energy output and environmental benefits, and any lessons learned.

Appendix B

- I. This Appendix specifies procedures to:
 - o Enhance SO₂ removal to a goal of 94%
 - o Improve performance of existing scrubber

II. Procedure.

- Hoosier Energy will add sodium formate or, alternately, an equivalent additive, to Unit 1 and Unit 2 by pumps that supply the additive to the fresh limestone slurry.
- Sodium Formate Flow rate at Steady State Conditions: A minimum operating concentration of 1500 ppm sodium formate with a target range of 2000 3000 ppm at steady state. The flow rate is adjusted to best achieve optimal performance of the scrubber based on the Buffering Capacity Analysis. Normal steady state is considered to be 4 modules in service and at 90% and greater load with scrubber chemistry at target levels.
- O Sodium Formate Flow Rate at Non-Steady State Conditions: During unit start-up, shutdown, malfunction, reduced load of less than 90% rated load, and scrubber maintenance periods to address mist eliminator element cleaning, cooling spray pipe cleaning, pump and module repairs and other maintenance items, sodium formate will be added to the extent it will minimize emissions. Operators will make flow adjustments to expeditiously reach the Steady State minimums and the sodium formate goal range by stabilizing and optimizing scrubber chemistry.
- Establishing Alternate Additive Flow Rate:
 - Should Hoosier Energy opt to inject an equivalent additive instead of sodium formate, such as Dibasic Acid (DBA), it will establish the appropriate flow rate and target concentration which may differ from the sodium formate flow rate and target concentration minimum and goal.
 - Hoosier Energy shall provide written notification to the Environmental Protection Agency (EPA) of its intent to use an alternate additive, and shall submit a plan to EPA, for review and approval pursuant to Section XIII of the Consent Decree (Review and Approval of Submittals), to establish the appropriate target concentration to achieve the goal of 94% SO₂ removal efficiency for such alternate additive. Such plan shall identify the new minimum target concentration and shall include technical support to

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Appendix B

demonstrate the correlation between the new concentration and SO₂ removal Upon EPA approval, Hoosier may discontinue use of sodium formate and begin injecting the alternate additive pursuant to the approved plan. EPA shall make best efforts to act on Hoosier's request for approval of an alternate additive within 30 days after Hoosier submits its plan to EPA

III. Monitoring and Recordkeeping.

- The sodium formate or alternate additive flow rate for each Unit is measured and recorded in daily FGD operations logs.
- Unit grab samples of scrubber bleed slurry are taken by the Chemical Lab Technician. The grab samples are analyzed by the Merom chemical lab to determine the sodium formate or alternate additive concentration measured in parts per million (ppm). The lab results are reviewed by the FGD operations department and adjustments to flow rates are made as required.

IN THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF KENTUCKY CENTRAL DIVISION LEXINGTON

UNITED STATES OF AMERICA,	
Plaintiff,)
v.) Civil Action No. 5:07-CV-0075-KSF
KENTUCKY UTILITIES COMPANY,)
Defendant.)
))

CONSENT DECREE

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APPENDIX			

WHEREAS, the United States of America ("the United States"), on behalf of the United States Environmental Protection Agency ("EPA"), has filed a complaint against Kentucky Utilities Company ("Kentucky Utilities") pursuant to Sections 113(b) and 167 of the Clean Air Act ("the Act"), 42 U.S.C. §§ 7413(b) and 7477, for injunctive relief and the assessment of civil penalties for violations of the Prevention of Significant Deterioration ("PSD") provisions of the Act, 42 U.S.C. §§ 7470-92; the New Source Performance Standards ("NSPS") of the Act, 42 U.S.C. § 7411; Title V of the Act, 42 U.S.C. §§ 7661-7661f; and the State Implementation Plan adopted by the Commonwealth of Kentucky and approved by EPA pursuant to Section 110 of the Act, 42 U.S.C. § 7410;

WHEREAS, in its complaint, the United States alleges, *inter alia*, that Kentucky Utilities modified and thereafter operated an electric generating unit at the Brown Power Plant without obtaining the necessary permits or installing and operating the best available control technology to control emissions of nitrogen oxides ("NO_x"), sulfur dioxide ("SO₂"), and/or particulate matter ("PM"), as the Act requires; that Kentucky Utilities modified and thereafter operated this Unit -- Brown Unit 3 -- in a manner that resulted in emissions of NO_x, SO₂, and/or PM in violation of applicable New Source Performance Standards; and that Kentucky Utilities operated Brown Unit 3 at a heat input rate in excess of 4128 million Btus ("MMBtus") per hour, in violation of a condition contained in the plant's operating permit;

WHEREAS, Kentucky Utilities sought and obtained, on March 1, 2005, a Title V operating permit that removed the 4128 MMBtu per hour heat input rate as an enforceable limit at Brown Unit 3 without going through the appropriate permitting procedures, including PSD review;

WHEREAS, the United States' complaint alleges claims upon which relief can be granted against Kentucky Utilities under Sections 113 and 167 of the Act, 42 U.S.C. §§ 7413 & 7477;

WHEREAS, the United States provided Kentucky Utilities and the Commonwealth of Kentucky with actual notice of alleged violations in accordance with Section 113(a)(1) of the Act, 42 U.S.C. § 7413(a)(1), and provided notice of the commonwealth of suit to the Commonwealth of Kentucky as required by Section 113(b) of the Act, 42 U.S.C. § 7413(b);

WHEREAS, the United States and Kentucky Utilities (collectively, the "Parties") have agreed that settlement of this action is in the best interest of the Parties and in the public interest, and that entry of this Consent Decree without litigation is the most appropriate means of resolving this matter;

WHEREAS, the Parties recognize, and the Court by entering this Consent Decree finds, that this Consent Decree has been negotiated in good faith and at arm's length and that this Consent Decree is fair, reasonable, consistent with the goals of the Act, and in the public interest;

WHEREAS, the actions to be taken and the emission reductions to be achieved by Kentucky Utilities under this Consent Decree are for purposes of resolving the claims alleged by the United States, and are undertaken by Kentucky Utilities as part of its efforts to achieve compliance with the Clean Air Act at Brown Unit 3;

WHEREAS, Kentucky Utilities denies the allegations in the complaint and maintains that it has been and remains in compliance with the Act and is not liable for

civil penalties or injunctive relief, and nothing herein shall constitute an admission of liability;

WHEREAS, the Parties have consented to entry of this Consent Decree without trial of any issues;

NOW, THEREFORE, without any admission of fact or law, it is hereby ORDERED, ADJUDGED, AND DECREED as follows:

I. JURISDICTION AND VENUE

1. This Court has jurisdiction over this action, the subject matter herein, and the Parties, pursuant to 28 U.S.C. §§ 1331, 1345, 1355, and 1367, and pursuant to Sections 111, 113 and 167 of the Act, 42 U.S.C. §§ 7411, 7413 and 7477. Venue is proper under Section 113(b) of the Act, 42 U.S.C. § 7413(b), and under 28 U.S.C. § 1391(b) and (c). Kentucky Utilities consents to, and shall not challenge, entry of this Consent Decree and this Court's jurisdiction to enter and enforce this Consent Decree. Except as expressly provided for herein, this Consent Decree shall not create any rights in any party other than the Parties to this Consent Decree. Except as provided in Section XXV (Public Comment) of this Consent Decree, the Parties consent to entry of this Consent Decree without further notice.

II. APPLICABILITY

- 2. Upon entry, the provisions of this Consent Decree shall apply to and be binding upon and inure to the benefit of the United States and Kentucky Utilities, and their successors and assigns, and upon their officers, employees, and agents, solely in their capacities as such.
- 3. Kentucky Utilities shall provide a copy of the pertinent provisions of this Consent Decree to all vendors, suppliers, consultants, contractors, and agents, and to any

other company or other organization retained to perform any of the work required by this Consent Decree. Notwithstanding any retention of contractors, subcontractors, or agents to perform any work required under this Consent Decree, Kentucky Utilities shall be responsible for ensuring that all work is performed in accordance with the requirements of this Consent Decree. In any action to enforce this Consent Decree, Kentucky Utilities shall not assert as a defense the failure of their officers, directors, employees, servants, agents, or contractors to take actions necessary to comply with this Consent Decree, unless Kentucky Utilities establishes that such failure resulted from a Force Majeure Event, as defined in Section XIV of this Consent Decree.

III. <u>DEFINITIONS</u>

4. Every term expressly defined by this Consent Decree shall have the meaning given to that term by this Consent Decree and, except as otherwise provided in this Consent Decree, every other term used in this Consent Decree that is also a term under the Act or the regulations implementing the Act shall mean in this Consent Decree what such term means under the Act or those implementing regulations.

"30-Day Rolling Average Emission Rate" shall be expressed in lb/MMBtu and calculated in accordance with the following procedure: (1) sum the total pounds of NO_x or SO₂ emitted from the Unit during the current Operating Day and the previous twenty-nine (29) Operating Days; (2) sum the total heat input to the Unit in MMBtu during the current Operating Day and the previous twenty-nine (29) Operating Days; and (3) divide the total number of pounds of NO_x or SO₂ emitted during the thirty (30) Operating Days by the total heat input during the thirty (30) Operating Days. A new "30-Day Rolling Average Emission Rate" for NO_x and for SO₂ shall be calculated for each new Operating Day. Except as provided for in this definition and in Paragraphs 76 through 78

(Malfunction), each 30-Day Rolling Average Emission Rate for NO_x or SO₂ shall include all emissions that occur during all periods within each Operating Day: (i) Kentucky Utilities may exclude emissions that occur during a period of Malfunction from the calculation of the 30-Day Rolling Average Emission Rate for NO_x or SO₂ if Kentucky Utilities meets the requirements of Paragraphs 76 and 77; (ii) Kentucky Utilities may exclude emissions during start up(s) of Brown Unit 3 following a major outage or during the commissioning of new equipment; provided, however, that this start up exclusion may not occur more frequently than once every five (5) calendar years and the excluded period may not exceed five (5) consecutive Days.

"30-Day Rolling Average SO₂ Removal Efficiency" means the percent reduction in the mass of SO₂ achieved by the Unit's Flue Gas Desulfurization ("FGD") system over a 30-Operating Day period and shall be calculated as follows: (1) sum the total pounds of SO₂ emitted from the Unit during the current Operating Day and the previous twenty-nine (29) Operating Days as measured at the outlet of the FGD system for the Unit; (2) sum the total pounds of SO₂ delivered to the inlet of the FGD system for the Unit during the current Operating Day and the previous twenty-nine (29) Operating Days as measured at the inlet to the FGD system for that Unit (this shall be calculated by measuring the ratio of the lb/MMBtu SO₂ inlet to the lb/MMBtu SO₂ outlet and multiplying the outlet pounds of SO₂ by that ratio); (3) subtract the outlet SO₂ emissions calculated in step one from the inlet SO₂ emissions calculated in step two; (4) divide the remainder calculated in step three by the inlet SO₂ emissions calculated in step two; and (5) multiply the quotient calculated in step four by 100 to express as a percentage of removal efficiency. A new 30-Day Rolling Average SO₂ Removal Efficiency shall be calculated for each new

Operating Day. Except as provided for in Paragraphs 76 through 78 (Malfunction), each 30-Day Rolling Average Removal Efficiency for SO₂ shall include all emissions that occur during all periods within each Operating Day. Kentucky Utilities may exclude emissions that occur during a period of Malfunction from the calculation of the 30-Day Rolling Average Removal Efficiency for SO₂ if Kentucky Utilities meets the requirements of Paragraphs 76 and 77.

"Brown Power Plant" means Units 1, 2 and 3 of the E.W. Brown Power Station located in Mercer County, Kentucky.

"Brown Unit 3" means Unit 3 of the Brown Power Plant.

"Business Day" shall mean any Day other than Saturday, Sunday, or a federally recognized holiday.

"CEMS" or "Continuous Emission Monitoring System," means, for obligations involving NO_x and SO₂ under this Consent Decree, the devices defined in 40 C.F.R. § 72.2, the inlet SO₂ lb/MMBtu monitors, and the computer system for recording, calculating, and storing data and equations required by this Consent Decree.

"Clean Air Act" or "Act" means the federal Clean Air Act, 42 U.S.C. §§ 7401-7671q, and its implementing regulations.

"Commonwealth" means the Commonwealth of Kentucky.

"Consent Decree" or "Decree" means this Consent Decree.

"Continuously Operate" or "Continuous Operation" means that when an emission control device, such as a SCR, low NO_x burner, over-fire air, FGD, or ESP, is used at Brown Unit 3, such control device shall be operated at all times the Unit is in operation, except during a Malfunction of such control device, consistent with the technological

limitations, manufacturers' specifications, and good engineering and maintenance practices for such device and the Unit so as to minimize emissions to the extent practicable.

"Day" means calendar day, unless otherwise specified as a Business Day.

"Emission Rate" for a given pollutant means the number of pounds of that pollutant emitted per million British thermal units of heat input (lb/MMBtu), measured in accordance with this Consent Decree.

"EPA" means the United States Environmental Protection Agency.

"ESP" means an electrostatic precipitator, which is a pollution control device for the reduction of particulate matter.

"FGD" means Flue Gas Desulfurization System, which is a pollution control device that employs flue gas desulfurization technology, including an absorber utilizing lime, flyash, or limestone slurry for the reduction of sulfur dioxide emissions.

"Fossil Fuel" means any hydrocarbon fuel, including coal, petroleum coke, petroleum oil, or natural gas.

"Kentucky Utilities" means the defendant, Kentucky Utilities Company.

"lb/MMBtu" means one pound of a pollutant per million British thermal units of heat input.

"Malfunction" means malfunction as that term is defined under 40 C.F.R. § 60.2.

"MW" means a megawatt or one million Watts.

"NO_x" means oxides of nitrogen, measured in accordance with the provisions of this Consent Decree.

" NO_x Allowance" means an authorization or credit to emit a specified amount of NO_x during the Ozone Season that is allocated or issued by Kentucky. This definition shall not apply to any allowance issued by Kentucky related to programs authorizing emissions of NO_x on an annual basis notwithstanding that such annual allowance includes the right to emit NO_x during the Ozone Season.

"Operating Day" means any calendar day on which the Unit fires fossil fuel.

"Ownership Interest" means part or all of Kentucky Utilities' legal or equitable ownership interest in Brown Unit 3.

"Ozone Season" shall mean the period beginning May 1^{st} and ending September 30^{th} of any calendar year.

"Parties" means the United States and Kentucky Utilities Company. "Party" means one of the named "Parties."

"PM" means total filterable particulate matter, measured in accordance with the provisions of this Consent Decree.

"Prevention of Significant Deterioration" or "PSD" means the prevention of significant deterioration of air quality program under Part C of Subchapter I of the Clean Air Act, 42 U.S.C. §§ 7470-7492, and 40 C.F.R. Part 52.

"Project Dollars" means Kentucky Utilities' expenditures and payments incurred or made in carrying out the Environmental Mitigation Projects identified in Section VIII (Environmental Mitigation Projects) of this Consent Decree to the extent that such expenditures or payments both: (a) comply with the requirements set forth in Section VIII (Environmental Mitigation Projects) and Appendix A of this Consent Decree, and (b)

constitute Kentucky Utilities' direct payments for such projects, or Kentucky Utilities' external costs for contractors, vendors, and equipment.

"SCR" means selective catalytic reduction system, which is a pollution control device that employs selective catalytic reduction technology for the reduction of NO_x emissions.

" SO_2 " means sulfur dioxide, measured in accordance with the provisions of this Consent Decree.

"SO₂ Allowance" means "allowance" of SO₂ as defined at 42 U.S.C. § 7651a(3): "an authorization, allocated to an affected Unit by the Administrator of EPA under Subchapter IV of the Act, to emit, during or after a specified calendar year, one ton of sulfur dioxide."

"Surrender" means, with regard to SO₂ and NO_x Allowances, complying with the procedures set forth herein so that such Allowances can never be used to meet any compliance requirement under the Clean Air Act or a state implementation plan.

"Surplus NO_x Allowance" means any NO_x Allowance issued by Kentucky for Brown Unit 3 that Kentucky Utilities does not need to meet the federal and/or state Clean Air Act regulatory requirements for that Unit during the Ozone Season. The number of NO_x Allowances that are surplus to Kentucky Utilities' Clean Air Act NO_x Allowance holding requirements shall be equal to the amount by which the NO_x Allowances allocated to Brown Unit 3 for a particular Ozone Season are greater than the total amount of NO_x emissions from that Unit for the same Ozone Season.

"Title V Permit" means the permit required of Kentucky Utilities' Brown Power Plant under Subchapter V of the Act, 42 U.S.C. §§ 7661-7661e.

"Unit" means, for the purposes of this Consent Decree, collectively, at Brown Unit 3, the Brown Unit 3 coal crusher, stationary equipment that feeds coal to the boiler, the boiler that produces steam for the steam turbine, the steam turbine, the generator, the equipment necessary to operate the generator, steam turbine and boiler, and all ancillary equipment, including pollution control equipment and systems necessary for the production of electricity. An electric utility steam generating station may comprise one or more Units.

"Unit Annual NO_x Tonnage Limitation" means the limitation, as specified in this Consent Decree, on the total number of tons of NO_x emitted from Brown Unit 3 during the relevant calendar year (*i.e.*, January 1 through December 31). Compliance with the Unit Annual NO_x Tonnage Limitation shall be calculated for each new calendar year and such calculation shall include all NO_x emitted from Brown Unit 3 as reported in the electronic data reports required under Title IV of the Clean Air Act during all periods of operation during the relevant calendar year.

"Unit Annual SO₂ Tonnage Limitation" means the limitation, as specified in this Consent Decree, on the total number of tons of SO₂ emitted from Brown Unit 3 during the relevant calendar year (*i.e.*, January 1 through December 31). Compliance with the Unit Annual SO₂ Tonnage Limitation shall be calculated for each new calendar year and such calculation shall include all SO₂ emitted from Brown Unit 3 as reported in the electronic data reports required under Title IV of the Clean Air Act during all periods of operation during the relevant calendar year.

IV. NO_x EMISSION REDUCTIONS

A. NO_x Emission Controls

- 5. By no later than December 31, 2012, Kentucky Utilities shall install an SCR at Brown Unit 3.
- 6. Beginning no later than December 31, 2012, Kentucky Utilities shall commence Continuous Operation of the SCR so as to achieve and thereafter maintain at Brown Unit 3 a 30-Day Rolling Average Emission Rate for NO_x of no greater than 0.070 lb/MMBtu, except as provided in Paragraph 7 of this Consent Decree.
- 7. Beginning no later than December 31, 2012, during any 30-Day period used to calculate a 30-Day Rolling Average Emission Rate for NO_x, if the dispatch of Brown Unit 3 requires the operation of Brown Unit 3 at a load level that results in flue gas temperature so low that it becomes technically infeasible to Continuously Operate the SCR, despite best efforts by Kentucky Utilities to do so, Kentucky Utilities shall achieve and maintain at Brown Unit 3 a 30-Day Rolling Average Emission Rate for NO_x of no greater than 0.080 lbs/MMBtu.
- 8. Beginning thirty (30) days from entry of this Consent Decree, Kentucky Utilities shall Continuously Operate the existing low NO_x burners and over-fire air at Brown Unit 3.
- 9. During calendar years 2009 through 2012, Kentucky Utilities shall not exceed a Unit Annual NO_x Tonnage Limitation at Brown Unit 3 of 4,072 tons of NO_x per calendar year.

B. General NO_x Provisions

10. In determining emission rates for NO_x , Kentucky Utilities shall use CEMS in accordance with the reference methods specified in 40 C.F.R. Part 75, except that NO_x

emissions data need not be bias-adjusted. At least one hundred eighty (180) days prior to commencing operation of the SCR, and no later than June 30, 2012, Kentucky Utilities shall submit to EPA for review and approval, a plan for the placement and installation of NO_x CEMS at Brown Unit 3 for the purpose of measuring NO_x emissions from only Brown Unit 3, and not Brown Units 1 and 2. Kentucky Utilities shall install and commence continuous operation of such CEMS within one hundred twenty (120) days of receiving EPA's approval of the plan.

C. Use and Surrender of NO_x Allowances

- 11. Except as may be necessary to comply with Section XIII (Stipulated Penalties), Kentucky Utilities shall not use NO_x Allowances to comply with any requirement of this Consent Decree, including compliance with any emission limitation, by using, tendering, or otherwise applying NO_x Allowances to achieve compliance or offset any emissions above the limits specified in this Consent Decree.
- 12. Except as provided in this Consent Decree, Kentucky Utilities shall not sell, trade, or transfer any NO_x Allowances allocated to Brown Unit 3 that would otherwise be available for sale, trade, or transfer as a result of the actions taken by Kentucky Utilities to comply with the requirements of this Consent Decree. The NO_x Allowances allocated to Brown Unit 3 may be used by Kentucky Utilities only to meet its own federal and/or state Clean Air Act regulatory requirements for that Unit.
- 13. For each calendar year beginning with calendar year 2009 and continuing through calendar year 2020, Kentucky Utilities shall surrender to EPA, or transfer to a non-profit third party as provided herein, Surplus NO_x Allowances, except as provided in Paragraph 17. Kentucky Utilities shall surrender such Surplus NO_x Allowances within sixty (60) days of the end of each calendar year.

- 14. For all Surplus NO_x Allowances required to be surrendered to EPA, Kentucky Utilities or the third-party recipient(s) (as the case may be) shall first submit a NO_x Allowance transfer request form to EPA's Office of Air and Radiation's Clean Air Markets Division directing the transfer of such Surplus NO_x Allowances to the EPA Enforcement Surrender Account or to any other EPA account that EPA may direct in writing. As part of submitting these transfer requests, Kentucky Utilities or the third-party recipient(s) shall irrevocably authorize the transfer of these Surplus NO_x Allowances and identify by name of account and any applicable serial or other identification numbers or station names the source and location of the Surplus NO_x Allowances being surrendered.
- 15. If any Surplus NO_x Allowances required to be surrendered under this Consent Decree are transferred to a non-profit third party, Kentucky Utilities shall include a description of such transfer in the next report submitted to EPA pursuant to Section XI (Periodic Reporting) of this Consent Decree. Such report shall: (a) provide the identity of the non-profit third party recipient(s) of the Surplus NO_x Allowances and a listing of the serial numbers of the transferred Surplus NO_x Allowances; and (b) include a certification by the third-party recipient(s) stating that the recipient(s) will not sell, trade, or otherwise exchange any of the allowances and will not use any of the Surplus NO_x Allowances to meet any obligation imposed by any environmental law. No later than the third periodic report due after the transfer of any Surplus NO_x Allowances, Kentucky Utilities shall include a statement that the third-party recipient(s) surrendered the Surplus NO_x Allowances for permanent surrender to EPA in accordance with the provisions of Paragraph 14 within one year after Kentucky Utilities transferred the Surplus NO_x

Allowances to them. Kentucky Utilities shall not have complied with the Surplus NO_x Allowance surrender requirements of this Paragraph until all third-party recipient(s) shall have actually surrendered the transferred Surplus NO_x Allowances to EPA.

- 16. The requirements in this Consent Decree pertaining to Kentucky Utilities' use and surrender of Ozone Season NO_x Allowances (Paragraphs 11, 12, 13, 14, 15 and 17) are permanent injunctions that are not subject to any termination provision of this Consent Decree, and shall survive any termination of this Consent Decree as long as Kentucky continues to allocate NO_x Allowances for the Ozone Season. This Paragraph and the requirements in Paragraphs 11, 12, 13, 14, 15 and 17 shall not apply to any future emissions trading program involving only annual NO_x limits and/or annual NO_x allowances.
- 17. Nothing in this Consent Decree shall preclude Kentucky Utilities from selling or transferring NO_x Allowances allocated to Brown Unit 3 that become available for sale or trade solely as a result of the achievement and maintenance of a NO_x emission rate below a 30-Day Rolling Average Emission Rate for NO_x of 0.070 lb/MMBtu. Kentucky Utilities must timely report the generation of such super-compliant NO_x Allowances in accordance with Section XI (Periodic Reporting) of this Consent Decree.
- 18. Nothing in this Consent Decree shall prevent Kentucky Utilities from purchasing or otherwise obtaining NO_x Allowances from another source for purposes of complying with state or federal Clean Air Act requirements to the extent otherwise allowed by law.

V. SO₂ EMISSION REDUCTIONS

A. SO₂ Emission Controls

- 19. Beginning no later than December 31, 2010, Kentucky Utilities shall install a FGD at Brown Unit 3.
- 20. Beginning no later than December 31, 2010, Kentucky Utilities shall commence Continuous Operation of the FGD so as to achieve and thereafter maintain a 30-Day Rolling Average Emission Rate for SO₂ of no greater than 0.100 lb/MMBtu or a 30-Day Rolling Average SO₂ Removal Efficiency of not lower than 97%.
- 21. During calendar years 2009 and 2010, Kentucky Utilities shall not exceed a Unit Annual SO_2 Tonnage Limitation at Brown Unit 3 of 31,998 tons of SO_2 per calendar year.
- 22. Beginning with calendar year 2011, and continuing annually on a calendar year basis thereafter, Kentucky Utilities shall not exceed a Unit Annual SO₂ Tonnage Limitation at Brown Unit 3 of 2,300 tons of SO₂ per calendar year.

B. General SO₂ Provisions

23. In determining Emission Rates and Removal Efficiencies for SO₂, Kentucky Utilities shall use CEMS in accordance with those reference methods specified in 40 C.F.R. Part 75. Inlet pounds of SO₂ will be calculated as described in the definition of 30-Day Rolling Average SO₂ Removal Efficiency.

C. <u>Use and Surrender of SO₂ Allowances</u>

24. Except as may be necessary to comply with Section XIII (Stipulated Penalties), Kentucky Utilities shall not use SO₂ Allowances to comply with any requirement of this Consent Decree, including compliance with any emission limitation,

by using, tendering, or otherwise applying SO₂ Allowances to achieve compliance or offset any emissions above the limits specified in this Consent Decree.

- 25. By March 1, 2009, or thirty (30) days after entry of the Consent Decree, whichever is later, Kentucky Utilities shall permanently surrender to EPA, or transfer to a non-profit third party, a total of 53,000 SO₂ Allowances of 2008 or earlier vintage.
- 26. If any SO₂ Allowances required to be surrendered under this Consent Decree are transferred directly to a non-profit third party, Kentucky Utilities shall include a description of such transfer in the next report submitted to EPA pursuant to Section XI (Periodic Reporting) of this Consent Decree. Such report shall: (i) provide the identity of the non-profit third party recipient(s) of the SO₂ Allowances and a listing of the serial numbers of the transferred SO₂ Allowances; and (ii) include a certification by the third party recipient(s) stating that the recipient(s) will not sell, trade, or otherwise exchange any of the allowances and will not use any of the SO₂ Allowances to meet any obligation imposed by any environmental law. No later than the third periodic report due after the transfer of any SO₂ Allowances, Kentucky Utilities shall include a statement that the third party recipient(s) surrendered the SO₂ Allowances for permanent surrender to EPA in accordance with the provisions of Paragraph 27 within one year after Kentucky Utilities transferred the SO₂ Allowances to them. Kentucky Utilities shall not have complied with the SO₂ Allowance surrender requirements of this Paragraph until all third party recipient(s) shall have actually surrendered the transferred SO₂ Allowances to EPA.
- 27. For all SO₂ Allowances surrendered to EPA, Kentucky Utilities or the third party recipient(s) (as the case may be) shall first submit an SO₂ Allowance transfer request form to EPA's Office of Air and Radiation's Clean Air Markets Division

directing the transfer of such SO₂ Allowances to the EPA Enforcement Surrender Account or to any other EPA account that EPA may direct in writing. As part of submitting these transfer requests, Kentucky Utilities or the third party recipient(s) shall irrevocably authorize the transfer of these SO₂ Allowances and identify – by name of account and any applicable serial or other identification numbers or station names – the source and location of the SO₂ Allowances being surrendered.

28. Nothing in this Consent Decree shall prevent Kentucky Utilities from purchasing or otherwise obtaining SO₂ Allowances from another source for purposes of complying with state or federal Clean Air Act requirements to the extent otherwise allowed by law.

VI. PM EMISSION REDUCTIONS

A. PM Controls

29. Beginning thirty (30) days after entry of this Consent Decree, and continuing thereafter, Kentucky Utilities shall Continuously Operate the ESP at Brown Unit 3 to maximize PM emission reductions at all times when the Unit is in operation, provided that such operation of the ESP is consistent with the technological limitations, manufacturer's specifications and good engineering and maintenance practices for the ESP. Except as required during correlation testing under 40 C.F.R. Part 60, Appendix B, Performance Specification 11, and Quality Assurance Requirements under Appendix F, Procedure 2, as required by this Consent Decree, Kentucky Utilities shall, at a minimum: (a) fully energize each section of the ESP; (b) operate automatic control systems on the ESP, including the plate-cleaning and discharge electrode cleaning systems, to maximize PM collection efficiency; (c) maintain power levels delivered to the ESP, consistent with manufacturers' specifications, the operational design of the Unit, and good engineering

practices; and (d) inspect the ESP for any openings or leakage in ESP casings, ductwork, and expansion joints, and make repairs to any section of the ESP needing repair during the next scheduled or unscheduled outage.

B. PM Emission Rate

30. No later than December 31, 2010, and continuing thereafter, Kentucky Utilities shall Continuously Operate the ESP at Brown Unit 3 to achieve a PM Emission Rate no greater than 0.030 lb/MMBtu. Compliance with the 0.030 lbs/MMBtu emission rate shall be demonstrated by stack tests in accordance with Paragraphs 31-32.

C. PM Emissions Monitoring

- 31. Beginning in calendar year 2011, and continuing in each calendar year thereafter, Kentucky Utilities shall conduct a stack test for PM on the common stack servicing Brown Unit 3 at least one time each calendar year, with each stack test conducted at least six (6) months apart. The stack test requirement imposed by this Paragraph may be satisfied by stack tests conducted by Kentucky Utilities as required by its permits held for Brown Unit 3 for any year that such stack tests are required under the permits.
- 32. The reference methods and procedures for determining compliance with PM Emission Rates shall be those specified in 40 C.F.R. Part 60, Appendix A, Method 5, 5B, or 17, or an alternative method requested for use by Kentucky Utilities, and approved for use herein by EPA. The alternative method must conform to the EPA requirements specified in 40 C.F.R. Part 60, Appendix A and 40 C.F.R. § 60.50Da, or any federally-approved method contained in the Kentucky State Implementation Plan. Each test shall consist of three separate runs performed under representative operating conditions not including periods of startup, shutdown, or Malfunction. The sampling time for each run

shall be at least 120 minutes and the volume of each run shall be 1.70 dry standard cubic meters (60 dry standard cubic feet). Kentucky Utilities shall calculate the PM Emission Rates from the stack test results in accordance with 40 C.F.R. § 60.8(f), and shall report the results of each PM stack test to EPA within forty-five (45) days of completion of each test.

D. <u>Installation and Operation of PM CEMS</u>

- CEMS at the common stack servicing Brown Unit 3, as specified below. The PM CEMS shall be comprised of (a) a continuous particle mass monitor that measures particulate matter concentrations, directly or indirectly, on an hourly average basis and (b) a CO₂ diluent monitor used to convert the concentration to units of lb/MMBtu. Kentucky Utilities shall maintain, in an electronic database, the hourly average emission values produced by the PM CEMS in lb/MMBtu. Kentucky Utilities shall use best efforts to keep the PM CEMS running and producing data whenever Brown Unit 3 is in operation. All periods of monitor malfunction, maintenance or repair shall be noted as such in the electronic database.
- 34. At least two hundred seventy (270) days prior to commencing operation of PM CEMS as set forth in Paragraph 35, and no later than September 30, 2010, Kentucky Utilities shall submit to EPA pursuant to Section XII (Review and Approval of Submittals) of this Consent Decree: (a) a plan for the installation and certification of a PM CEMS, and (b) a proposed Quality Assurance/Quality Control ("QA/QC") protocol that Kentucky Utilities shall follow in correlating the PM CEMS. In developing both the plan for installation and certification of the PM CEMS and the QA/QC protocol, Kentucky Utilities shall use the criteria set forth in 40 C.F.R. Part 60, Appendix B,

Performance Specification 11, and Appendix F, Procedure 2. Following approval by EPA of the protocol, Kentucky Utilities shall thereafter operate each PM CEMS in accordance with the approved protocol.

35. Within one hundred eighty (180) calendar days following commencement of operation of the FGD, Kentucky Utilities shall install, correlate, maintain, and operate a PM CEMS on the Unit, in accordance with the PM CEMS installation plan and QA/QC protocol approved by EPA pursuant to the preceding Paragraph. No later than ninety (90) days after Kentucky Utilities begins operation of the PM CEMS, Kentucky Utilities shall conduct performance specification tests of the PM CEMS to demonstrate compliance with the PM CEMS installation and certification plan submitted to and approved by EPA in accordance with Section XII (Review and Approval of Submittals) and shall report such information to EPA no later than forty-five (45) days after such tests.

E. PM Reporting

- 36. Following the installation of the PM CEMS, Kentucky Utilities shall report to EPA, pursuant to Section XI (Periodic Reporting), the data recorded by the PM CEMS in the common stack for Brown Units 1, 2 and 3, expressed in electronic format in lb/MMBtu on a 6-hour and 24-hour rolling average basis.
- 37. Although stack tests shall be used for demonstrating compliance with the PM Emission Rate imposed by this Consent Decree, nothing in this Consent Decree is intended to, or shall, alter or waive any applicable law, including but not limited to any defenses, entitlements, challenges, or clarifications related to the Credible Evidence Rule, 62 Fed. Reg. 8314 (Feb. 24, 1997), concerning the use of data for any purpose under the Act.

VII. PROHIBITION ON NETTING CREDITS OR OFFSETS

- 38. Emission reductions that result from actions to be taken by Kentucky Utilities after entry of this Consent Decree to comply with the requirements of this Consent Decree shall not be considered as a creditable contemporaneous emission decrease for the purpose of obtaining a netting credit or offset under the Clean Air Act's Nonattainment NSR and PSD programs.
- 39. The limitation on the generation and use of netting credits or offsets set forth in the previous Paragraph does not apply to emission reductions achieved by Brown Unit 3 that are greater than those required under this Consent Decree. For purposes of this Paragraph, emission reductions from Brown Unit 3 are greater than those required under this Consent Decree if they result from Kentucky Utilities' compliance with federally enforceable emission rates or removal efficiencies that are more stringent than those limits imposed on Brown Unit 3 under this Consent Decree and under applicable provisions of the Clean Air Act and the Kentucky State Implementation Plan.
- 40. Nothing in this Consent Decree is intended to preclude the emission reductions generated under this Consent Decree from being considered by the Commonwealth of Kentucky or EPA as creditable contemporaneous emission decreases for the purpose of attainment demonstrations submitted pursuant to § 110 of the Act, 42 U.S.C. § 7410, or in determining impacts on NAAQS, PSD increment, or air quality related values, including visibility, in a Class I area.

VIII. ENVIRONMENTAL MITIGATION PROJECTS

41. Kentucky Utilities shall implement the Environmental Mitigation Projects ("Projects") described in Appendix A to this Consent Decree in compliance with the approved plans and schedules for such Project and other terms of this Consent Decree.

- 42. Kentucky Utilities shall submit plans for each of the Projects to EPA for review and approval pursuant to Section XII (Review and Approval of Submittals) of this Consent Decree in accordance with the schedules set forth in Appendix A to this Consent Decree. In implementing the Projects, Kentucky Utilities shall spend no less than \$3,000,000. Kentucky Utilities shall maintain, and present to EPA upon request, all documents to substantiate the Project Dollars expended and shall provide these documents to EPA within thirty (30) days of a request by EPA for such documentation.
- 43. All plans and reports prepared by Kentucky Utilities pursuant to the requirements of this Section of the Consent Decree and required to be submitted to EPA shall be publicly available from Kentucky Utilities without charge.
- 44. Kentucky Utilities shall certify, as part of each plan submitted to EPA for any Project, that Kentucky Utilities is not otherwise required by law to perform the Project described in the plan, that Kentucky Utilities is unaware of any other person who is required by law to perform the Project, and that Kentucky Utilities will not use any Project, or portion thereof, to satisfy any obligations that it may have under other applicable requirements of law.
- 45. Kentucky Utilities shall use good faith efforts to secure as much environmental benefit as possible for the Project Dollars expended, consistent with the applicable requirements and limits of this Consent Decree.
- 46. If Kentucky Utilities elects (where such an election is allowed) to undertake a Project by contributing funds to another person or entity that will carry out the Project in lieu of Kentucky Utilities, but not including Kentucky Utilities' agents or contractors, that person or instrumentality must, in writing: (a) identify its legal authority

for accepting such funding; and (b) identify its legal authority to conduct the Project for which Kentucky Utilities contributes the funds. Regardless of whether Kentucky Utilities elected (where such election is allowed) to undertake a Project by itself or to do so by contributing funds to another person or instrumentality that will carry out the Project, Kentucky Utilities acknowledges that it will receive credit for the expenditure of such funds only if Kentucky Utilities demonstrates that the funds have been actually spent by either Kentucky Utilities or by the person or instrumentality receiving them, and that such expenditures met all requirements of this Consent Decree.

- 47. Beginning six (6) months after entry of this Consent Decree, and continuing until completion of each Project (including any applicable periods of demonstration or testing), Kentucky Utilities shall provide EPA with semi-annual updates concerning the progress of each Project.
- 48. Within sixty (60) days following the completion of each Project required under this Consent Decree (including any applicable periods of demonstration or testing), Kentucky Utilities shall submit to EPA a report that documents the date that the Project was completed, Kentucky Utilities' results of implementing the Project, including the emission reductions or other environmental benefits achieved, and the total Project Dollars expended by Kentucky Utilities in implementing the Project.

IX. CIVIL PENALTY

49. Within thirty (30) calendar days after entry of this Consent Decree, Kentucky Utilities shall pay to the United States a civil penalty in the amount of \$1,400,000. The civil penalty shall be paid by Electronic Funds Transfer ("EFT") to the United States Department of Justice, in accordance with current EFT procedures, referencing USAO File No. 2007V00233, DOJ Case No. 90-5-1-1-07915, and the civil

action case name and case number of this action. The costs of such EFT shall be Kentucky Utilities' responsibility. Payment shall be made in accordance with instructions provided to Kentucky Utilities by the Financial Litigation Unit of the U.S. Attorney's Office for the Eastern District of Kentucky. Any funds received after 2:00 p.m. EDT shall be credited on the next Business Day. At the time of payment, Kentucky Utilities shall provide notice of payment, referencing the USAO File Number, the DOJ Case Number, and the civil action case name and case number, to the Department of Justice and to EPA in accordance with Section XVIII (Notices) of this Consent Decree.

- 50. Failure to timely pay the civil penalty shall subject Kentucky Utilities to interest accruing from the date payment is due until the date payment is made at the rate prescribed by 28 U.S.C. § 1961, and shall render Kentucky Utilities liable for all charges, costs, fees, and penalties established by law for the benefit of a creditor or of the United States in securing payment.
- 51. Payments made pursuant to this Section are penalties within the meaning of Section 162(f) of the Internal Revenue Code, 26 U.S.C. § 162(f), and are not tax-deductible expenditures for purposes of federal law.

X. RESOLUTION OF CERTAIN CIVIL CLAIMS OF THE UNITED STATES

52. Entry of this Decree shall resolve all civil claims of the United States against Kentucky Utilities that arose from any modifications commenced at Brown Unit 3 prior to the Date of Lodging of this Consent Decree, including but not limited to those modifications alleged in the United States' Complaint in this civil action and in the Notices of Violation issued to Kentucky Utilities on April 25, 2006, and December 5, 2006, under:

- a. Sections 502(a) and 504(a) of Title V of the Clean Air Act, 42 U.S.C §§ 7611(a) and 7611(c), but only to the extent that such claims are based on (i) Kentucky Utilities' failure to obtain an operating permit that reflects applicable requirements imposed under Parts C or D of Subchapter I, or Section 111 of the Clean Air Act, and (ii) Kentucky Utilities' operation of Brown Unit 3 at a heat input in excess of the value listed in the July 20, 1993 Brown Unit 3 Operating Permit No. O-86-068 (Revision 2) and its March 1, 2005 Brown Power Plant Title V permit No. V-03-034;
- b. Parts C or D of Subchapter I of the Clean Air Act, 42 U.S.C. §§

 7470-7492, 7501-7515, including any claims arising from deletion of enforceable heat input limits listed in the July 20, 1993 Brown Unit 3 Operating Permit No. O-86-068 (Revision 2) from Kentucky Utilities' March 1, 2005 Brown Power Plant Title V permit No. V-03-034;
- c. Section 111 of the Clean Air Act, 42 U.S.C. § 7411, and 40C.F.R.§ 60.14;
- d. 401 KAR 51:017 and all relevant prior versions of these regulations, including any claims arising from deletion of enforceable heat input limits listed in the July 20, 1993 Brown Unit 3 Operating Permit No. O-86-068 (Revision 2) from Kentucky Utilities' March 1, 2005 Brown Power Plant Title V permit No. V-03-034; and

e. 401 KAR 52.020 and all relevant prior versions of these regulations, but only to the extent that such claims are based on (i) Kentucky Utilities' failure to obtain an operating permit that reflects applicable requirements imposed under Parts C or D of Subchapter I, or Section 111 of the Clean Air Act, and (ii) Kentucky Utilities' operation of Brown Unit 3 at a heat input in excess of the value listed in the July 20, 1993 Brown Unit 3 Operating Permit No. O-86-068 (Revision 2) and its March 1, 2005 Brown Power Plant Title V permit No. V-03-034.

XI. PERIODIC REPORTING

- 53. <u>Compliance Report</u>. After entry of this Decree, Kentucky Utilities shall submit to EPA a semi-annual report, within sixty (60) days after the end of each half of the calendar year (January through June and July through December). The report shall include the following:
 - Information, including milestone dates, regarding the design and installation of the FGD and the SCR required under this Consent Decree, including any problems encountered or anticipated, together with implemented or proposed solutions;
 - b. Any information indicating that the installation or commencement of operation of a pollution control device might be delayed, including the nature and cause of the delay, and any steps taken by Kentucky Utilities to mitigate such delay;
 - c. Beginning with the first report filed after June 30, 2013, information to demonstrate compliance with the 30-Day Rolling

- Average Emission Rate for NO_x during the preceding six-month reporting period;
- d. Beginning with the first report filed after June 30, 2013, information identifying the amount of time, if any, during the preceding six-month reporting period in which the dispatch of Brown Unit 3 requires operation of Brown Unit 3 at a load level that results in flue gas temperature so low that it becomes technically infeasible to Continuously Operate the SCR;
- e. Beginning with the first report filed after June 30, 2011, information to demonstrate compliance with the 30-Day Rolling Average Emission Rate for SO₂ or 30-Day Rolling Average SO₂ Removal Efficiency during the preceding six-month reporting period;
- f. Beginning December 31, 2011, for each semi-annual report submitted after the end of a calendar year, information to demonstrate compliance with the Unit Annual SO₂ Tonnage Limitation in Paragraph 22 during the preceding calendar year;
- g. For the first semi-annual report to be submitted under this Consent Decree, and continuing annually thereafter, demonstration of the surrender of all SO_2 and NO_x allowances required to be surrendered under this Consent Decree, as well as any supercompliant NO_x allowances;

- h. All data recorded by the PM CEMs in the common stack for Brown Units 1, 2 and 3 as required by Paragraph 36, including data, if any, from all periods of monitor malfunction, maintenance, or repair as provided in Paragraph 33; and
- All other information necessary to determine compliance with the requirements of this Consent Decree.
- Deviations Report. In addition to the reports required by the previous Paragraph, if Kentucky Utilities violates or deviates from any provision of this Consent Decree, Kentucky Utilities shall submit to the United States a report on the violation or deviation within ten Business Days after Kentucky Utilities knew or should have known of the event. In the report, Kentucky Utilities shall explain the cause or causes of the violation or deviation and any measures taken or to be taken by Kentucky Utilities to cure the reported violation or deviation or to prevent such violation or deviations in the future. For PM emissions measured by PM CEMS, the requirements of this Paragraph shall be satisfied by compliance with the reporting requirements set forth in Paragraph 36.
- 55. Each Kentucky Utilities report shall be signed by Kentucky Utilities' Director, Environmental Affairs, or his or her equivalent or designee of at least the rank of Vice President, and shall contain the following certification:

This information was prepared either by me or under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my evaluation, or the direction and my inquiry of the person(s) who manage the system, or the person(s) directly responsible for gathering the information, I hereby certify under penalty of law that, to the best of my knowledge and belief, this information is true, accurate, and complete. I understand that there are significant penalties for

submitting false, inaccurate, or incomplete information to the United States.

56. If any allowances are surrendered to any third party pursuant to Section IV.C (Use and Surrender of NO_x Allowances) or V.C (Use and Surrender of SO₂ Allowances), the third party's certification shall be signed by a managing officer of the third party, and shall contain the following language:

I certify under penalty of law that ______ [name of third party] will not sell, trade, or otherwise exchange any of the allowances and will not use any of the allowances to meet any obligation imposed by any environmental law. I understand that there are significant penalties for making misrepresentations to or misleading the United States.

XII. REVIEW AND APPROVAL OF SUBMITTALS

- 57. Kentucky Utilities shall submit to EPA each submission required to be submitted by Kentucky Utilities for review or approval. EPA may approve the submittal or decline to approve it and provide written comments explaining the bases for declining such approval. Within sixty (60) days of receiving written comments from EPA, Kentucky Utilities shall either: (a) revise the submittal consistent with the written comments and provide the revised submittal to EPA; or (b) submit the matter for dispute resolution, including the period of informal negotiations, under Section XV (Dispute Resolution) of this Consent Decree.
- 58. Upon receipt of EPA's final approval of the submittal, or upon completion of the submittal pursuant to dispute resolution, Kentucky Utilities shall implement the approved submittal in accordance with the schedule specified therein.

XIII. STIPULATED PENALTIES

59. For any failure by Kentucky Utilities to comply with the terms of this Consent Decree, and subject to the provisions of Sections XIV (Force Majeure) and XV (Dispute Resolution), Kentucky Utilities shall pay, within thirty (30) days after receipt of written demand to Kentucky Utilities by the United States, the following stipulated penalties to the United States:

Consent Decree Violation	Stipulated Penalty
a. Failure to pay the civil penalty as specified in Section X (Civil Penalty) of this Consent Decree	\$10,000 per Day
b. Failure to comply with any applicable 30-Day Rolling Average Emission Rate for NO _x , where the violation is less than 5% in excess of the limit set forth in this Consent Decree	\$2,500 per Day per violation
c. Failure to comply with any applicable 30-Day Rolling Average Emission Rate for NO _x , where the violation is equal to or greater than 5% but less than 10% in excess of the limit set forth in this Consent Decree	\$5,000 per Day per violation
d. Failure to comply with any applicable 30-Day Rolling Average Emission Rate for NO _x , where the violation is equal to or greater than 10% in excess of the limit set forth in this Consent Decree	\$10,000 per Day per violation
e. Failure to comply with any applicable 30-Day Rolling Average Removal Efficiency or 30-Day Rolling Average Emission Rate for SO ₂ where the violation is less than 5% in excess of the 30-Day Rolling Average Emission Rate for SO ₂ or is less than 5% below the 30-Day Rolling Average Removal Efficiency for SO ₂ in this Consent Decree	\$2,500 per Day per violation
f. Failure to comply with any applicable 30-	

Consent Decree Violation Day Rolling Average Removal Efficiency or 30-Day	Stipulated Penalty
Rolling Average Emission Rate for SO ₂ where the violation is more than 5% but less than 10% in excess of the 30-Day Rolling Average Emission Rate for SO ₂ or is more than 5% but less than 10% below the 30-Day Rolling Average Removal Efficiency for SO ₂ in this Consent Decree	\$5,000 per Day per violation
g. Failure to comply with any applicable 30-Day Rolling Average Removal Efficiency or 30-Day Rolling Average Emission Rate for SO ₂ where the violation is greater than 10% in excess of the 30-Day Rolling Average Emission Rate for SO ₂ or is greater than 10% below the 30-Day Rolling Average Removal Efficiency for SO ₂ in this Consent Decree	\$10,000 per Day per violation
h. Failure to comply with the Unit-Specific Annual Tonnage Limitation for SO ₂ for Brown Unit 3	The surrender of SO ₂ Allowances in an amount equal to four times the number of tons by which the limitation was exceeded
i. Failure to install, commence operation, or continue operation of the NO_x or SO_2 pollution control devices on any Unit as required under this Consent Decree	\$10,000 per Day per violation during the first 30 days; \$32,500 per Day per violation thereafter
j. Failure to install or operate CEMS as required in this Consent Decree	\$1,000 per Day per violation
k. Failure to apply for any permit required by Section XVI (Permits)	\$1,000 per Day per violation
l. Failure to timely submit, modify, or implement, as approved, the reports, plans, studies, analyses, protocols, or other submittals required by this Consent Decree	\$750 per Day per violation during the first ten days, \$1,000 per Day per violation thereafter
m. Failure to surrender NO _x Allowances as required by this Consent Decree–	(a) \$32,500 per Day plus (b) \$1,000 per NO _x Allowance not

Consent Decree Violation	Stipulated Penalty
	surrendered, and \$5,000 per NO _x Allowance for each NO _x Allowance used, sold, or transferred in violation of this Consent Decree
n. Failure to surrender SO ₂ Allowances as required by this Consent Decree	(a) \$32,500 per Day plus (b) \$1,000 per SO ₂ Allowance not surrendered, and \$5,000 per SO ₂ Allowance for each SO ₂ Allowance used, sold, or transferred in violation of this Consent Decree
o. Failure to demonstrate the third-party surrender of a NO_x Allowance or SO_2 Allowance in accordance with this Consent Decree	\$2,500 per Day per violation
p. Failure to undertake and complete an Environmental Mitigation Project in accordance with this Consent Decree	\$1,000 per Day per violation during the first 30 days, \$5,000 per Day per violation thereafter
q. Any other violation of this Consent Decree	\$1,000 per Day per violation

- 60. Violation of any limit based on a 30-Day Rolling Average constitutes thirty (30) days of violation, but where such a violation of the same pollutant recurs at Brown Unit 3 within a period of less than thirty (30) days, Kentucky Utilities shall not be obligated to pay a daily stipulated penalty for any Day of the recurrence for which a stipulated penalty has already been paid.
- 61. All stipulated penalties shall begin to accrue on the Day after the performance is due or on the Day a violation occurs, whichever is applicable, and shall continue to accrue until performance is satisfactorily completed or until the violation

ceases, whichever is applicable. Nothing in this Consent Decree shall prevent the simultaneous accrual of separate stipulated penalties for separate violations of this Consent Decree.

- 62. Kentucky Utilities shall pay all stipulated penalties to the United States within thirty (30) days of receipt of written demand to Kentucky Utilities from the United States, and shall continue to make such payments every thirty (30) days thereafter until the violation(s) no longer continues, unless Kentucky Utilities elects, within twenty days of receipt of written demand for stipulated penalties from the United States, to dispute the accrual of stipulated penalties in accordance with the provisions in Section XV (Dispute Resolution) of this Consent Decree.
- 63. Stipulated penalties shall continue to accrue as provided in accordance with Paragraph 61 and this Paragraph 63 during any dispute, with interest on accrued stipulated penalties payable and calculated at the rate established by the Secretary of the Treasury, pursuant to 28 U.S.C. § 1961, but need not be paid until the following:
 - a. If the dispute is resolved by agreement, or by a decision of United States pursuant to Section XV (Dispute Resolution) of this Consent Decree that is not appealed to this Court, Kentucky Utilities shall pay all accrued stipulated penalties agreed or determined to be owing, together with accrued interest, within thirty (30) days of the effective date of the agreement or of the receipt of the United States' decision;
 - b. If the dispute is appealed to this Court, and the United States prevails in whole or in part, Kentucky Utilities shall pay all

accrued stipulated penalties determined by this Court to be owing, together with interest accrued on such penalties determined by this Court to be owing, within sixty (60) days of receipt of the Court's decision or order, except as provided in Subparagraph 63.c, below;

c. If the Court's decision is appealed by any Party, Kentucky Utilities shall pay all accrued stipulated penalties determined by the appellate court to be owing, together with interest accrued on such stipulated penalties determined to be owing, within fifteen (15) days of receipt of the final appellate court decision.

Notwithstanding any other provision of this Consent Decree, the accrued stipulated penalties agreed by the United States and Kentucky Utilities, or determined by the United States through Dispute Resolution, to be owing may be less than the stipulated penalty amounts set forth in Paragraph 59.

- 64. All monetary stipulated penalties shall be paid in the manner set forth in Section IX (Civil Penalty) of this Consent Decree. All allowance surrender penalties shall comply with the allowance surrender procedures set forth in this Consent Decree.
- 65. Should Kentucky Utilities fail to pay stipulated penalties in compliance with the terms of this Consent Decree, the United States shall be entitled to collect interest on such penalties, as provided for in 28 U.S.C. § 1961.
- 66. The stipulated penalties provided for in this Consent Decree shall be in addition to any other rights, remedies, or sanctions available to the United States by reason of Kentucky Utilities' failure to comply with any requirement of this Consent Decree or applicable law, except that for any violation of the Act for which this Consent

Decree provides for payment of a stipulated penalty, Kentucky Utilities shall be allowed a credit for stipulated penalties paid against any statutory penalties also imposed for such violation.

XIV. FORCE MAJEURE

- 67. For purposes of this Consent Decree, a "Force Majeure Event" shall mean an event that has been or will be caused by circumstances beyond the control of Kentucky Utilities, its contractors, or any entity controlled by Kentucky Utilities, that delays compliance with any provision of this Consent Decree or otherwise causes a violation of any provision of this Consent Decree, despite Kentucky Utilities' best efforts to fulfill the obligation. "Best efforts to fulfill the obligation" include using best efforts to anticipate any potential Force Majeure Event and to address the effects of any such event (a) as it is occurring and (b) after it has occurred, such that the delay or violation is minimized to the greatest extent possible.
- Motice of Force Majeure Events. If any event occurs or has occurred that may delay compliance with or otherwise cause a violation of any obligation under this Consent Decree as to which Kentucky Utilities intends to assert a claim of Force Majeure, Kentucky Utilities shall notify the United States in writing as soon as practicable, but in no event later than twenty-one (21) Business Days following the date Kentucky Utilities first knew, or by the exercise of due diligence should have known, that the event caused or may cause such delay or violation. In this notice, Kentucky Utilities shall reference this Paragraph of this Consent Decree and describe the anticipated length of time that the delay or violation may persist, the cause or causes of the delay or violation, all measures taken or to be taken by Kentucky Utilities to prevent or minimize the delay or violation, the schedule by which Kentucky Utilities proposes to implement

those measures, and Kentucky Utilities' rationale for attributing a delay or violation to a Force Majeure Event. Kentucky Utilities shall adopt all reasonable measures to avoid or minimize such delays or violations. Kentucky Utilities shall be deemed to know of any circumstance which Kentucky Utilities, its contractors, or any entity controlled by Kentucky Utilities knew or should have known.

- 69. <u>Failure to Give Notice</u>. If Kentucky Utilities fails to comply with the notice requirements of this Section, the United States may void Kentucky Utilities' claim for Force Majeure as to the specific event for which Kentucky Utilities has failed to comply with such notice requirement.
- 70. <u>United States' Response</u>. EPA shall notify Kentucky Utilities in writing regarding Kentucky Utilities' claim of Force Majeure within twenty Business Days of receipt of the notice provided under Paragraph 68. If the United States agrees that a delay in performance has been or will be caused by a Force Majeure Event, then the United States and Kentucky Utilities shall stipulate to an extension of deadline(s) for performance of the affected compliance requirement(s) by a period equal to the delay actually caused by the event. In such circumstances, the Parties shall make an appropriate modification of the deadline(s) pursuant to Section XXII (Modification) of this Consent Decree.
- 71. <u>Disagreement</u>. If the United States does not accept Kentucky Utilities' claim of Force Majeure, or if EPA and Kentucky Utilities cannot agree on the length of the delay actually caused by the Force Majeure Event, the matter shall be resolved in accordance with Section XV (Dispute Resolution) of this Consent Decree.

- The state of the state of the proof. In any dispute regarding Force Majeure, Kentucky Utilities shall bear the burden of proving that any delay in performance or any other violation of any requirement of this Consent Decree was caused by or will be caused by a Force Majeure Event. Kentucky Utilities shall also bear the burden of proving that Kentucky Utilities gave the notice required by this Section and the burden of proving the anticipated duration and extent of any delay attributable to a Force Majeure Event. An extension of one compliance date based on a particular event may, but will not necessarily, result in an extension of a subsequent compliance date.
- 73. <u>Events Excluded</u>. Unanticipated or increased costs or expenses associated with the performance of Kentucky Utilities' obligations under this Consent Decree shall not constitute a Force Majeure Event.
- 74. Potential Force Majeure Events. The Parties agree that, depending upon the circumstances related to an event and Kentucky Utilities' response to such circumstances, the kinds of events listed below are among those that could qualify as Force Majeure Events within the meaning of this Section: construction, labor, or equipment delays; Malfunction of a Unit or emission control device; acts of God; acts of war or terrorism; and orders by a government official, government agency, other regulatory authority, or a regional transmission organization, acting under and authorized by applicable law, that requires Kentucky Utilities to supply electricity in response to a state-wide or regional emergency. Depending upon the circumstances and Kentucky Utilities' response to such circumstances, failure of a permitting authority to issue a necessary permit in a timely fashion may constitute a Force Majeure Event where the failure of the permitting authority to act is beyond the control of Kentucky Utilities and

Kentucky Utilities has taken all steps available to it to obtain the necessary permit, including, but not limited to: submitting a complete permit application; responding to requests for additional information by the permitting authority in a timely fashion; and accepting lawful permit terms and conditions after expeditiously exhausting any legal rights to appeal terms and conditions imposed by the permitting authority.

- 75. As part of the resolution of any matter submitted to this Court under Section XV (Dispute Resolution) of this Consent Decree regarding a claim of Force Majeure, the United States and Kentucky Utilities by agreement, or this Court by order, may in appropriate circumstances extend or modify the schedule for completion of work under this Consent Decree to account for the delay in the work that occurred as a result of any delay agreed to by the United States and the States or approved by the Court. Kentucky Utilities shall be liable for stipulated penalties for its failure thereafter to complete the work in accordance with the extended or modified schedule (provided that Kentucky Utilities shall not be precluded from making a further claim of Force Majeure with regard to meeting any such extended or modified schedule).
- Malfunction Events. If Kentucky Utilities proposes to exclude emissions during a period of Malfunction from the calculation of any 30-Day Rolling Average Emission Rate or 30-Day Rolling Average SO₂ Removal Efficiency, Kentucky Utilities shall notify the United States in writing as soon as practicable, but in no event later than twenty-one (21) days following the date the Malfunction occurs. In this notice, Kentucky Utilities shall describe the anticipated length of time that the Malfunction may persist, the cause or causes of the Malfunction, all measures taken or to be taken by Kentucky Utilities to minimize the duration of the Malfunction, and the schedule by which

Kentucky Utilities proposes to implement those measures. Kentucky Utilities shall adopt all reasonable measures to minimize the duration of such Malfunctions, and to prevent the recurrence of such Malfunctions in the future.

- 77. Kentucky Utilities may exclude NO_x and SO₂ emissions data during a period of Malfunction, after approval from EPA pursuant to Paragraph 78, from calculation of the 30-Day Rolling Average Emission Rate for NO_x or SO₂ or the 30-Day Rolling Average Removal Efficiency for SO₂, only if, in the notice required pursuant to Paragraph 76, Kentucky Utilities demonstrates that:
- a. The Malfunction did not result from the failure of Kentucky Utilities to properly operate and maintain the equipment that experienced the Malfunction;
- b. Kentucky Utilities took all reasonable steps to correct, as expeditiously as practicable, the condition causing the emissions to exceed the 30-Day Rolling Average Emission Rate for NO_x or SO₂ or 30-Day Rolling Average Removal Efficiency for SO₂;
- c. Kentucky Utilities took all reasonable steps to minimize emissions and their effect on air quality resulting from the Malfunction;
- d. The excess emissions are not part of a recurring pattern indicative of inadequate design, operation, or maintenance; and
- e. The Malfunction was not caused entirely or in part by poor maintenance, careless operation, or any other preventable upset conditions or equipment breakdown.
- 78. EPA shall notify Kentucky Utilities of its determination of whether emissions during the period of Malfunction may be excluded from calculation of the 30-Day Rolling Average Emission Rate for NO_x or SO₂ or the 30-Day Rolling Average

Removal Efficiency for SO₂ as soon as practicable, but no later than sixty (60) days after the date that all information required by Paragraphs 76 and 77 has been submitted.

79. A Malfunction does not constitute a Force Majeure Event unless the Malfunction also meets the definition of a Force Majeure Event, as provided in this Section. Conversely, a period of Malfunction may be excluded by Kentucky Utilities from the calculations of emission rates and removal efficiencies, as allowed under this Paragraph, regardless of whether the Malfunction constitutes a Force Majeure Event.

XV. DISPUTE RESOLUTION

- 80. The dispute resolution procedure provided by this Section shall be available to resolve all disputes arising under this Consent Decree, provided that the Party invoking such procedure has first made a good faith attempt to resolve the matter with the other Party.
- 81. The dispute resolution procedure required herein shall be invoked by one Party giving written notice to the other Party advising of a dispute pursuant to this Section. The notice shall describe the nature of the dispute and shall state the noticing Party's position with regard to such dispute. The Party receiving such a notice shall acknowledge receipt of the notice, and the Parties in dispute shall expeditiously schedule a meeting to discuss the dispute informally not later than twenty (20) Business Days following receipt of such notice.
- 82. Disputes submitted to dispute resolution under this Section shall, in the first instance, be the subject of informal negotiations among the disputing Parties. Such period of informal negotiations shall not extend beyond thirty (30) Days from the date of the first meeting among the disputing Parties' representatives unless they agree in writing to shorten or extend this period. During the informal negotiations period, the disputing

Parties may also submit their dispute to a mutually agreed upon alternative dispute resolution ("ADR") forum if the Parties agree that the ADR activities can be completed within the thirty (30) Day informal negotiations period (or such longer period as the Parties may agree to in writing).

- 83. If the disputing Parties are unable to reach agreement during the informal negotiation period, the United States shall provide Kentucky Utilities with a written summary of its position regarding the dispute. The written position provided by the United States shall be considered binding unless, within forty-five (45) Days thereafter, Kentucky Utilities seeks judicial resolution of the dispute by filing a petition with the Court. The United States may respond to the petition within forty-five (45) Days of filing.
- 84. The time periods set out in this Section may be shortened or lengthened upon motion to the Court of one of the Parties to the dispute, explaining the party's basis for seeking such a scheduling modification.
- 85. The Court shall not draw any inferences nor establish any presumptions adverse to any disputing Party as a result of invocation of this Section or the disputing Parties' inability to reach agreement.
- As part of the resolution of any dispute under this Section, in appropriate circumstances the disputing Parties may agree, or the Court may order, an extension or modification of the schedule for the completion of the activities required under this Consent Decree to account for the delay that occurred as a result of dispute resolution. Kentucky Utilities shall be liable for stipulated penalties for its failure thereafter to complete the work in accordance with the extended or modified schedule, provided that

Kentucky Utilities not be precluded from asserting that a Force Majeure Event has caused or may cause a delay in complying with the extended or modified schedule.

87. The Court shall decide all disputes pursuant to applicable principles of law for resolving such disputes. In their initial filings with the Court, the disputing Parties shall state their respective positions as to the applicable standard of law for resolving the particular dispute.

XVI. PERMITS

- 88. Unless expressly stated otherwise in this Consent Decree, in any instance where otherwise applicable law or this Consent Decree requires Kentucky Utilities to secure a permit to authorize construction or operation of any device contemplated herein, including all preconstruction, construction, and operating permits required under state law, Kentucky Utilities shall make such application in a timely manner. Kentucky Utilities shall provide Notice to the United States under Section XVIII (Notices), that Kentucky Utilities has submitted an application for Brown Unit 3 for any permit described in this Paragraph.
- 89. Notwithstanding the previous Paragraph, nothing in this Consent Decree shall be construed to require Kentucky Utilities to apply for or obtain a PSD or Nonattainment NSR permit for physical changes in, or changes in the method of operation of Kentucky Utilities that would give rise to claims resolved by Section X, Paragraph 52 (Resolution of Certain Civil Claims of the United States) of this Consent Decree.
- 90. When permits are required as described in this Section, Kentucky Utilities shall complete and submit applications for such permits to the appropriate authorities to allow time for all legally required processing and review of the permit request, including

requests for additional information by the permitting authorities. Any failure by Kentucky Utilities to submit a timely permit application for Brown Unit 3 shall bar any use by Kentucky Utilities of Section XIV (Force Majeure) of this Consent Decree, where a Force Majeure claim is based on permitting delays.

- 91. Notwithstanding the reference to Title V permits in this Consent Decree, the enforcement of such permits shall be in accordance with their own terms and the Act. The Title V permits shall not be enforceable under this Consent Decree, although any term or limit established by or under this Consent Decree shall be enforceable under this Consent Decree regardless of whether such term has or will become part of a Title V permit, subject to the terms of Section XXVI (Conditional Termination of Enforcement Under Decree) of this Consent Decree.
- 92. Within one hundred eighty (180) days after entry of this Consent Decree, or at the time that Kentucky Utilities submits its Brown Plant Title V permit application to renew the existing Title V permit that will expire on March 1, 2010, whichever is later, Kentucky Utilities shall apply to permanently include a federally-enforceable numerical hourly heat input rate limitation for Brown Unit 3 of no greater than 5300 MMBtu/hr in the Brown Plant Title V permit, such that the hourly heat input rate limitation becomes and remains an "applicable requirement" as that term is defined in 40 C.F.R. § 70.2. Kentucky Utilities shall state in its application that it shall measure compliance with the heat input limitation by calculating hourly heat input rates using hourly mass coal burned data and weekly composite fuel sampling analysis data collected for Brown Unit 3. EPA will use best efforts to expeditiously review such application submitted by Kentucky Utilities and will not object to amendment or renewal of Kentucky Utilities' Title V

permit based on that application to include, in accordance with this Paragraph, that heat input rate as the federally enforceable heat input limit for Brown Unit 3.

- 93. Within one-hundred eighty (180) days after entry of this Consent Decree, or at the time that Kentucky Utilities submits its Brown Plant Title V permit application to renew the existing Title V permit that will expire on March 1, 2010, whichever is later, Kentucky Utilities shall amend any applicable Title V permit application, or apply for amendments of its Title V permit, to include a schedule for all unit-specific and plant-specific performance, operational, maintenance, and control technology requirements established by this Consent Decree including, but not limited to, required emission rates, removal efficiencies, the Unit Annual Tonnage Limitations for SO₂ and NO_x, and the requirements pertaining to the use and surrender of NO_x Allowances.
- 94. Within one (1) year from the commencement of operation of the final pollution control device to be installed on the Unit under this Consent Decree, Kentucky Utilities shall apply to permanently include the requirements and limitations enumerated in this Consent Decree into a federally-enforceable permit, such that the requirements and limitations become and remain "applicable requirements" as that term is defined in 40 C.F.R. § 70.2. The permit shall require compliance with the following: (a) any applicable 30-Day Rolling Average Emission Rate; (b) any applicable 30-Day Rolling Average SO₂ Removal Efficiency; (c) the Unit Annual SO₂ Tonnage Limitation set forth in Paragraph 22 of this Consent Decree; and (d) the NO_x Allowance restrictions set forth in this Consent Decree.
- 95. Kentucky Utilities shall provide EPA with a copy of each application to amend its Title V permit for Brown Unit 3, as well as a copy of any permit proposed as a

result of such application, to allow for timely participation in any public comment opportunity.

96. If Kentucky Utilities sells or transfers to an entity unrelated to Kentucky Utilities ("Third Party Purchaser") part or all of its Ownership Interest in the Brown Plant, Kentucky Utilities shall comply with the requirements of Section XIX (Sales or Transfers of Ownership Interests) with regard to that Unit prior to any such sale or transfer unless, following any such sale or transfer, Kentucky Utilities remains the holder of the Title V permit for such facility.

XVII. INFORMATION COLLECTION AND RETENTION

- 97. Any authorized representative of the United States, including their attorneys, contractors, and consultants, upon presentation of credentials, shall have a right of entry upon the premises of the Brown Power Plant at any reasonable time for the purpose of:
 - a. monitoring the progress of activities required under this Consent
 Decree;
 - b. verifying any data or information submitted to the United States in accordance with the terms of this Consent Decree;
 - obtaining samples and, upon request, splits of any samples taken
 by Kentucky Utilities or its representatives, contractors, or consultants; and
 - d. assessing Kentucky Utilities' compliance with this Consent Decree.
- 98. Kentucky Utilities shall retain, and instruct its contractors and agents to preserve, all non-identical copies of all records and documents (including records and

documents in electronic form) now in its or its contractors' or agents' possession or

control, and that directly relate to Kentucky Utilities' performance of its obligations

under this Consent Decree until December 31, 2017. This record retention requirement

shall apply regardless of any corporate document retention policy to the contrary.

99. All information and documents submitted by Kentucky Utilities pursuant

to this Consent Decree shall be subject to any requests under applicable law providing

public disclosure of documents unless (a) the information and documents are subject to

legal privileges or protection or (b) Kentucky Utilities claims and substantiates in

accordance with 40 C.F.R. Part 2 that the information and documents contain confidential

business information.

100. Nothing in this Consent Decree shall limit the authority of the EPA to

conduct tests and inspections at Kentucky Utilities' facilities under Section 114 of the

Act, 42 U.S.C. § 7414, or any other applicable federal or state laws, regulations or

permits.

XVIII. NOTICES

101. Unless otherwise provided herein, whenever notifications, submissions, or

communications are required by this Consent Decree, they shall be made in writing and

addressed as follows:

As to the United States of America:

Chief, Environmental Enforcement Section

Environment and Natural Resources Division

U.S. Department of Justice

P.O. Box 7611, Ben Franklin Station

Washington, D.C. 20044-7611

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DJ# 90-5-2-1-06837

and

Director, Air Enforcement Division Office of Enforcement and Compliance Assurance U.S. Environmental Protection Agency Ariel Rios Building [2242A] 1200 Pennsylvania Avenue, N.W. Washington, DC 20460

and

Director
Air, Pesticides and Toxics Management Division
U.S. EPA- Region 4
Sam Nunn Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, GA 30303-8960

As to Kentucky Utilities:

General Counsel E.ON U.S. LLC 220 West Main Street Louisville, KY 40202

William Bumpers
Baker Botts LLP
The Warner
1299 Pennsylvania Avenue, N.W.
Washington, DC 20004

102. All notifications, communications or submissions made pursuant to this Section shall be sent either by: (a) overnight mail or overnight delivery service, or (b) certified or registered mail, return receipt requested. All notifications, communications and transmissions (a) sent by overnight, certified or registered mail shall be deemed submitted on the date they are postmarked, or (b) sent by overnight delivery service shall be deemed submitted on the date they are delivered to the delivery service.

103. Any Party may change either the notice recipient or the address for providing notices to it by serving all other Parties with a notice setting forth such new notice recipient or address.

XIX. SALES OR TRANSFERS OF OWNERSHIP INTERESTS

- 104. If Kentucky Utilities proposes to sell or transfer an Ownership Interest to a Third Party Purchaser, Kentucky Utilities shall advise the Third Party Purchaser in writing of the existence of this Consent Decree prior to such sale or transfer, and shall send a copy of such written notification to the United States pursuant to Section XVIII (Notices) of this Consent Decree at least sixty (60) Days before such proposed sale or transfer.
- 105. No sale or transfer of an Ownership Interest shall take place before the Third Party Purchaser and the United States have executed, and the Court has approved, a modification pursuant to Section XXII (Modification) of this Consent Decree making the Third Party Purchaser a party to this Consent Decree, jointly and severally liable with Kentucky Utilities for all the requirements of this Decree that may be applicable to the transferred or purchased Ownership Interest.
- Ownership Interest between Kentucky Utilities and any Third Party Purchaser so long as the requirements of this Consent Decree are met. This Consent Decree shall not be construed to prohibit a contractual allocation as between Kentucky Utilities and any Third Party Purchaser of Ownership Interests of the burdens of compliance with this Decree, provided that both Kentucky Utilities and such Third Party Purchaser shall remain jointly and severally liable to the United States for the obligations of the Decree applicable to the transferred or purchased Ownership Interest.

107. If the United States agrees, then the United States, Kentucky Utilities, and the Third Party Purchaser that has become a party to this Consent Decree pursuant to Paragraph 105, may execute a modification that relieves Kentucky Utilities of its liability under this Consent Decree for, and makes the Third Party Purchaser liable for, all obligations and liabilities applicable to the purchased or transferred Ownership Interest. Notwithstanding the foregoing, however, Kentucky Utilities may not assign, and may not be released from, any obligation under this Consent Decree that is not specific to the purchased or transferred Ownership Interest, including the obligations set forth in Sections VIII (Environmental Mitigation Projects) and IX (Civil Penalty). Kentucky Utilities may propose and the United States may agree to restrict the scope of the joint and several liability of any purchaser or transferree for any obligations of this Consent Decree that are not specific to the transferred or purchased Ownership Interest, to the extent such obligations may be adequately separated in an enforceable manner.

XX. <u>EFFECTIVE DATE</u>

108. The effective date of this Consent Decree shall be the date upon which this Consent Decree is entered by the Court.

XXI. RETENTION OF JURISDICTION

109. The Court shall retain jurisdiction of this case after entry of this Consent Decree to enforce compliance with the terms and conditions of this Consent Decree and to take any action necessary or appropriate for its interpretation, construction, execution, modification, or adjudication of disputes. During the term of this Consent Decree, any Party to this Consent Decree may apply to the Court for any relief necessary to construe or effectuate this Consent Decree.

XXII. MODIFICATION

110. The terms of this Consent Decree may be modified only by a subsequent written agreement signed by the United States and Kentucky Utilities. Where the modification constitutes a material change to any term of this Decree, it shall be effective only upon approval by the Court.

XXIII. GENERAL PROVISIONS

- 111. This Consent Decree is not a permit. Compliance with the terms of this Consent Decree does not guarantee compliance with all applicable federal, state, or local laws or regulations. The emission rates set forth herein do not relieve Kentucky Utilities from any obligation to comply with other state and federal requirements under the Clean Air Act, including Kentucky Utilities' obligation to satisfy any state modeling requirements set forth in the Kentucky State Implementation Plan.
 - 112. This Consent Decree does not apply to any claims of criminal liability.
- 113. In any subsequent administrative or judicial action initiated by the United States for injunctive relief or civil penalties relating to the facilities covered by this Consent Decree, Kentucky Utilities shall not assert any defense or claim based upon principles of waiver, res judicata, collateral estoppel, issue preclusion, claim preclusion, or claim splitting, or any other defense based upon the contention that the claims raised by the United States in the subsequent proceeding were brought, or should have been brought, in the instant case; provided, however, that nothing in this Paragraph is intended to affect the validity of Section X (Resolution of Certain Civil Claims of the United States).
- 114. Nothing in this Consent Decree shall relieve Kentucky Utilities of its obligation to comply with all applicable federal, state, and local laws and regulations. Subject to the provisions in Section X (Resolution of Certain Civil Claims of the United

States), nothing contained in this Consent Decree shall be construed to prevent or limit the rights of the United States to obtain penalties or injunctive relief under the Act or other federal, state, or local statutes, regulations, or permits.

- 115. Nothing in this Consent Decree is intended to, or shall, alter or waive any applicable law (including but not limited to any defenses, entitlements, challenges, or clarifications related to the Credible Evidence Rule, 62 Fed. Reg. 8314 (Feb. 24, 1997)) concerning the use of data for any purpose under the Act.
- 116. Each limit and/or other requirement established by or under this Decree is a separate, independent requirement.
- 117. Performance standards, emissions limits, and other quantitative standards set by or under this Consent Decree must be met to the number of significant digits in which the standard or limit is expressed. For example, an Emission Rate of 0.100 is not met if the actual Emission Rate is 0.101. Kentucky Utilities shall round the fourth significant digit to the nearest third significant digit, or the third significant digit to the nearest second significant digit, depending upon whether the limit is expressed to three or two significant digits. For example, if an actual Emission Rate is 0.1004, that shall be reported as 0.100, and shall be in compliance with an Emission Rate of 0.100, and if an actual Emission Rate is 0.1005, that shall be reported as 0.101, and shall not be in compliance with an Emission Rate of 0.100. Kentucky Utilities shall report data to the number of significant digits in which the standard or limit is expressed.
- 118. This Consent Decree does not limit, enlarge or affect the rights of any Party to this Consent Decree as against any third parties.

- agreement and understanding among the Parties with respect to the settlement embodied in this Consent Decree, and supersedes all prior agreements and understandings among the Parties related to the subject matter herein. No document, representation, inducement, agreement, understanding, or promise constitutes any part of this Decree or the settlement it represents, nor shall they be used in construing the terms of this Consent Decree.
 - 120. Each Party to this action shall bear its own costs and attorneys' fees.

XXIV. SIGNATORIES AND SERVICE

- 121. Each undersigned representative of the Parties certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind to this document the Party he or she represents.
- 122. This Consent Decree may be signed in counterparts, and such counterpart signature pages shall be given full force and effect.
- 123. Each Party hereby agrees to accept service of process by mail with respect to all matters arising under or relating to this Consent Decree and to waive the formal service requirements set forth in Rule 4 of the Federal Rules of Civil Procedure and any applicable Local Rules of this Court including, but not limited to, service of a summons.

XXV. PUBLIC COMMENT

124. The Parties agree and acknowledge that final approval by the United States and entry of this Consent Decree is subject to the procedures of 28 C.F.R. § 50.7, which provides for notice of the lodging of this Consent Decree in the Federal Register, an opportunity for public comment, and the right of the United States to withdraw or withhold consent if the comments disclose facts or considerations which indicate that the

Consent Decree is inappropriate, improper or inadequate. Kentucky Utilities shall not oppose entry of this Consent Decree by this Court or challenge any provision of this Consent Decree unless the United States has notified Kentucky Utilities, in writing, that the United States no longer supports entry of the Consent Decree.

XXVI. CONDITIONAL TERMINATION UNDER DECREE

- 125. <u>Termination as to Completed Tasks</u>. As soon as Kentucky Utilities completes a construction project or any other requirement of this Consent Decree that is not ongoing or recurring, Kentucky Utilities may, by motion to this Court, seek termination of the provision or provisions of this Consent Decree that imposed the requirement.
- 126. <u>Conditional Termination of Enforcement Through the Consent Decree.</u>
 After Kentucky Utilities:
- a. has successfully completed construction, and has maintained operation, of all pollution controls as required by this Consent Decree for at least two (2) years; and
- b. has obtained a final Title V permit (i) as required by the terms of this Consent Decree; (ii) that covers Brown Unit 3; and (iii) that include as applicable requirements all of the requirements specified in Paragraphs 92 and 94 of this Consent Decree;

then Kentucky Utilities may so certify these facts to the United States and this Court. If the United States does not object in writing with specific reasons within forty-five (45) Days of receipt of Kentucky Utilities' certification, then, for any Consent Decree violations that occur after the filing of notice, any enforcement action taken by the United States to resolve those violations shall seek to enforce the requirements contained in the

Title V permit through the applicable Title V permit and/or other enforcement authority and not through this Consent Decree.

127. Resort to Enforcement under this Consent Decree. Notwithstanding the preceding Paragraph, if enforcement of a provision in this Decree cannot be pursued by the United States under the applicable Title V permit, or if a Decree requirement was intended to be part of a Title V Permit and did not become or remain part of such permit, then such requirement may be enforced by the United States under the terms of this Decree at any time.

XXVII. FINAL JUDGMENT

128. Upon approval and entry of this Consent Decree by the Court, this Consent Decree shall constitute a final judgment between the United States and Kentucky Utilities.

SO ORDERED, THIS	DAY OF	, 2009.
	THE HONORABL	LE KARL S. FORESTER
	UNITED STATES	DISTRICT JUDGE

Signature Page for Consent Decree in:

United States of America v.
Kentucky Utilities Company, No. 5:07-CV-0075-KSF (E.D. Ky.)

FOR THE UNITED STATES OF AMERICA:

JOHN C. CRUDEN

Deputy Assistant Attorney General Environment and Natural Resources Division United States Department of Justice

W. BENJAMIN FISHEROW
Deputy Section Chief
ANDREW C. HANSON
Trial Attorney
Environmental Enforcement Section
Environment and Natural Resources
Division
United States Department of Justice

Signature Page for Consent Decree in:

United States of America
v.
Kentucky Utilities Company, No. 5:07-CV-0075-KSF (E.D. Ky.)

LEE GENTRY

Assistant United States Attorney Eastern District of Kentucky United States Department of Justice

Signature Page for Consent Decree in:

United States of America

ν.

Kentucky Utilities Company, No. 5:07-CV-0075-KSF (E.D. Ky.)

CATHERINE R. McCABE

Acting Assistant Administrator Office of Enforcement and Compliance Assurance United States Environmental Protection Agency

MATTHEW M. MORRISON

Acting Director, Air Enforcement Division Office of Enforcement and Compliance Assurance United States Environmental Protection Agency

Signature Page for Consent Decree in:

United States of America v.
Kentucky Utilities Company, No. 5:07-CV-0075-KSF (E.D. Ky.)

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Signature Page for Consent Decree in:

United States of America
v.
Kentucky Utilities Company, No. 5:07-CV-0075-KSF

FOR DEFENDANT KENTUCKY UTILITIES COMPANY:

Name: Ralph Bowling

Title: Vice President, Power Production

E.ON U.S. LLC

APPENDIX

In compliance with, and in addition to, the requirements in Section VIII of this Consent Decree (Environmental Mitigation Projects), Kentucky Utilities shall comply with the requirements of this Appendix to ensure that the benefits of the \$3 million in Project Dollars are achieved.

I. Overall Environmental Mitigation Projects Schedule and Budget

- A. Within one hundred twenty (120) days from entry of this Consent Decree, as further described below, Kentucky Utilities shall submit plans to EPA for review and approval pursuant to Section XII (Review and Approval of Submittals) of this Consent Decree for spending the \$3 million in Project Dollars specified in this Appendix in accordance with the deadlines established in this Appendix. EPA shall determine, prior to approval, that all Environmental Mitigation Projects ("Projects") are consistent with federal law.
- B. Kentucky Utilities may, at its election, consolidate the plans required by this Appendix into a single plan.
- C. Consistent with Paragraph 47 of the Consent Decree, beginning six months from entry of this Consent Decree, and continuing semi-annually thereafter until completion of each Project (including any applicable periods of demonstration or testing), Kentucky Utilities shall provide EPA with written reports detailing the progress of each Project, including an accounting of Project Dollars spent to date.
- D. Consistent with Paragraph 48 of the Consent Decree, within sixty (60) days following the completion of each Project required under this Consent Decree (including any applicable periods of demonstration or testing), Kentucky Utilities shall submit to the United States a report that documents the date that the Project was completed, Kentucky Utilities' results of implementing the Project, including the emission reductions or other environmental benefits achieved, and the Project Dollars expended by Kentucky Utilities in implementing the Project.
- E. Upon EPA's approval of the plans required by this Appendix, Kentucky Utilities shall complete the Projects according to the approved plans. Nothing in the Consent Decree or this Appendix shall be interpreted to prohibit Kentucky Utilities from completing the Projects before the deadlines specified in the schedule of an approved plan.
- F. If Kentucky Utilities is unable to expend all of the Project Dollars as allocated below in accordance with the schedule contained in this Appendix and with this Consent Decree, or if a third party does not expend all the Project Dollars as allocated to it in accordance with this Appendix and with this Consent Decree and the schedules contained therein, Kentucky Utilities shall provide notice to EPA and the United States Department of Justice pursuant to Section XVIII (Notices) that not all of those funds were expended in accordance with this Appendix and this Consent Decree. In such notice, Kentucky Utilities shall propose new environmental mitigation projects on which the remaining Project Dollars will be expended with a proposed

schedule of when such projects shall be implemented. Upon review and approval by EPA pursuant to Section XII (Review and Approval of Submittals), Kentucky Utilities shall implement those environmental mitigation projects in accordance with the schedule as approved by EPA and Paragraph 58 of this Consent Decree.

II. Carbon Dioxide ("CO2") Sequestration Project

- A. By no later than December 31, 2009, Kentucky Utilities shall make funding contributions in the total amount of \$1.8 million to the Western Kentucky Carbon Storage Foundation, Inc. ("Foundation"), a 501(c)(3) tax-exempt organization, to be used for the purpose of supporting research by the University of Kentucky's Kentucky Geological Survey ("KGS"), through the Kentucky Consortium for Carbon Storage ("KYCCS"), to determine the feasibility of permanent geological sequestration of CO₂ in western Kentucky, as described in more detail in Section II.B. of this Appendix, below (the "CO₂ Sequestration Project").
- B. The funds contributed to the Foundation by Kentucky Utilities shall be used for the performance of the western Kentucky deep saline carbon storage project, one of four subprojects being conducted by KYCCS. The western Kentucky project includes all activities necessary to complete the drilling of a deep test well in western Kentucky, injection testing to evaluate CO₂ sequestration capability, and analysis of resulting data.
- C. The \$1.8 million that Kentucky Utilities contributes to the Foundation shall be used only for the following activities, as they are described in Exhibit 1 to the June 11, 2008 Memorandum of Agreement between KGS and the Foundation: Phase 2, Pre-Selection Site Screening; Phase 3, Detailed Site Characterization and Final Approval; Phase 4, Well Permitting, Design, Construction and Evaluation; Phase 5, Injection Testing, Well Closure and Monitoring; and Phase 6, Reporting and Closure. As part of its report to be submitted pursuant to Section I.D., above, Kentucky Utilities shall provide a description of the activities for which the Foundation expended money during the performance period for the Project.
- D. In addition to the information required to be included in the report to be submitted pursuant to Section I.D., above, Kentucky Utilities shall also provide to EPA the results of the injection tests, including any final written reports regarding the results prepared by KYCCS, either as part of the report submitted pursuant to Section I.D. or within thirty (30) days after such information is made available to the Foundation or Kentucky Utilities, whichever is earlier.

III. Clean Diesel School Bus Retrofit Project

A. Within one hundred twenty (120) days from entry of this Consent Decree, Kentucky Utilities shall submit to EPA for review and approval pursuant to Section XII (Review and Approval of Submittals) of this Consent Decree a plan to retrofit in-service public school bus diesel engines with emission control equipment further described in this Section, designed to reduce emissions of particulates and/or ozone precursors and fund the operation and maintenance of the retrofit equipment for the time period described below (the "Clean Diesel School Bus Retrofit Project"). This Project shall include, where necessary, techniques and infrastructure needed to support such retrofits. Kentucky Utilities shall spend no less than \$1,000,000 in

Project Dollars in performing this Clean Diesel School Bus Retrofit Project. Kentucky Utilities shall complete the installation of the retrofit equipment no later than December 31, 2010, and ensure that the recipients operate and maintain the retrofit equipment from the date of installation through December 31, 2015, by providing funding for operation and maintenance as described in Section III.B.7, below.

- B. The plan shall also satisfy the following criteria:
- 1. Involve public school bus fleets located in the Commonwealth of Kentucky.
- 2. Provide for the retrofit of public school bus diesel engines with EPA or California Air Resources Board ("CARB") verified emissions control technologies designed to achieve the greatest measurable mass reductions of particulates and/or ozone precursors for the fleet of school buses in the public school district(s) that participate(s) in this Project. Depending upon the particular EPA or CARB verified emissions control technology selected, the retrofit school bus diesel engines must achieve emission reductions of particulates and/or ozone precursors by 30%-90%, as measured from the pre-retrofit emissions for the particular diesel school bus.
- 3. Describe the process Kentucky Utilities will use to determine the most appropriate emissions control technology for each particular school bus diesel engine that will achieve the greatest mass reduction of particulates and/or ozone precursors. In making this determination, Kentucky Utilities must take into account the particular operating criteria required for the EPA or CARB verified emissions control technology to achieve the verified emissions reductions.
- 4. Provide for the retrofit of school bus diesel engines with either: (a) diesel particulate filters; (b) diesel oxidation catalysts and closed crankcase ventilation systems; or (c) another emission reduction technology or methodology approved by EPA.
- 5. Describe the process Kentucky Utilities will use to notify public school districts within the geographic area specified in Section III.B.1 that their fleet of school buses may be eligible to participate in the Clean Diesel School Bus Retrofit Project and to solicit their interest in participating in the Project.
- 6. Describe the process and criteria Kentucky Utilities will use to select the particular public school districts to participate in this Project, consistent with the requirements of this Section.
- 7. For each of the recipient public school districts, describe the amount of Project Dollars that will cover the costs associated with: (a) purchasing the verified emissions control technology, (b) installation of the verified emissions control technology (including data logging), (c) training costs associated with repair and maintenance of the verified emissions control technology (including technology cleaning and proper disposal of waste generated from cleaning), and (d) the incremental costs for repair and maintenance of the retrofit equipment from the date of installation through December 31,

- 2015, including the costs associated with the proper disposal of the waste generated from cleaning the verified emissions control technology. This Project shall not include costs for normal repair or operation of the retrofit school bus.
- 8. Include a mechanism to ensure that recipients of the retrofit equipment will bind themselves to follow the operating criteria required for the verified emissions control technology to achieve the verified emissions reductions and properly maintain the retrofit equipment installed in connection with the Project for the period beginning on the date the installation is complete through December 31, 2015.
- 9. Describe the process Kentucky Utilities will use for determining which school buses in a particular public school fleet will be retrofit with the verified emissions control technology, consistent with the criteria specified in Section III.B.2.
- 10. Ensure that recipient public school district(s), or their funders, do not otherwise have a legal obligation to reduce emissions through the retrofit of school bus diesel engines.
- 11. For any third party with whom Kentucky Utilities might contract to carry out this Project, establish minimum standards that include prior experience in arranging retrofits, and a record of prior ability to interest and organize fleets, school districts, and community groups to join a clean diesel program.
- 12. Ensure that the recipient public school district(s) comply with local, state, and federal requirements for the disposal of the waste generated from the verified emissions control technology and follow CARB's guidance for the proper disposal of such waste.
- 13. Include a schedule and budget for completing each portion of the Project, including funding for operation and maintenance of the retrofit equipment through December 31, 2015.
- C. In addition to the information required to be included in the report to be submitted pursuant to Section I.D., above, Kentucky Utilities shall also describe the school districts where it implemented this Project; the particular types of verified emissions control technology (and the number of each type) that it installed pursuant to this Project; the type, year, and horsepower of each retrofit school bus; an estimate of the number of school children affected by this Project, and the basis for this estimate; and an estimate of the emission reductions for each retrofit school bus (using the manufacturer's estimated reductions for the particular verified emissions control technology), including particulates, hydrocarbons, carbon monoxide, and nitrogen oxides.
- D. Upon EPA's approval of the plan, Kentucky Utilities shall complete the Clean Diesel School Bus Retrofit Project according to the approved plan and schedule.

IV. National Parks Mitigation

- A. Within sixty (60) days from entry of this Consent Decree, Kentucky Utilities shall pay to the National Park Service the sum of \$200,000 to be used in accordance with the Park System Resource Protection Act, 16 U.S.C. § 19jj, for the restoration of land, watersheds, vegetation, and forests using adaptive management techniques designed to improve ecosystem health and mitigate harmful effects from air pollution. This may include reforestation or restoration of native species and acquisition of equivalent resources and support for collaborative initiatives with state and local agencies and other stakeholders to develop plans to assure resource protection over the long-term. Projects will focus on the Mammoth Cave National Park Class I area in Kentucky.
- B. Payment of the amount specified in the preceding paragraph shall be made to the Natural Resource Damage and Assessment Fund managed by the United States Department of the Interior. Instructions for transferring funds will be provided to Kentucky Utilities by the National Park Service. Notwithstanding Section IV.A of this Appendix, payment of funds by Kentucky Utilities is not due until ten (10) days after receipt of payment instructions.
- C. Upon payment of the required funds into the Natural Resource Damage and Assessment Fund, Kentucky Utilities shall have no further responsibilities regarding the implementation of any project selected by the National Park Service in connection with this provision of the Consent Decree.

IN THE UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF INDIANA

UNITED STATES OF AMERICA,	
and)
THE STATE OF INDIANA,)
Plaintiffs)
v.	Civil Action No
NORTHERN INDIANA PUBLIC SERVICE CO.,)))
Defendant.))

CONSENT DECREE

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WHEREAS, Plaintiff, the United States of America ("the United States"), on behalf of the United States Environmental Protection Agency ("EPA"), and Plaintiff, the State of Indiana, are filing with this Consent Decree a Complaint for injunctive relief and civil penalties pursuant to Sections 113(b)(2) and 167 of the Clean Air Act ("the Act"), 42 U.S.C. §§ 7413(b)(2) and 7477, and 326 Indiana Administrative Code sections 2-2 and 2-7, alleging that Defendant, Northern Indiana Public Service Co. ("NIPSCO"), has undertaken construction projects at major emitting facilities in violation of the Prevention of Significant Deterioration ("PSD") provisions of Part C of Subchapter I of the Act, 42 U.S.C. §§ 7470-7492, in violation of Nonattainment New Source Review requirements, 42 U.S.C. §§ 7501-7515, in violation of the requirements of Title V of the Act, 42 U.S.C. §§ 7661-7661f and in violation of the federally enforceable Indiana State Implementation Plan ("SIP");

WHEREAS, EPA issued a Notice of Violation (the "NOV") to NIPSCO on September 29, 2004, pursuant to Section 113(a) of the Act, 42 U.S.C. § 7413(a), alleging violations at the Michigan City, Rollin M. Schahfer, and Bailly Generating Stations of:

- (a) the PSD provisions in Part C of Subchapter I of the Act, 42 U.S.C. §§ 7470-92,
- (b) the Nonattainment New Source Review requirements in Part D of Subchapter I of the Act, 42 U.S.C. §§ 7501-7515,
 - (c) Subchapter V of the Act, 42 U.S.C. §§ 7661-7661f, and
- (d) the federally enforceable Indiana SIP, including provisions implementing 40 C.F.R. § 52.21, and approved by EPA;

WHEREAS, EPA provided NIPSCO and the State of Indiana actual notice of the alleged violations and commencement of the action, in accordance with Section 113 of the Act, 42 U.S.C. § 7413;

WHEREAS, NIPSCO has been the owner and operator of the Michigan City, Rollin M. Schahfer, and Bailly Generating Stations from 1985 to the present;

WHEREAS, in the Complaint, Plaintiffs United States and the State of Indiana (collectively "Plaintiffs") allege, <u>inter alia</u>, that NIPSCO modified units and failed to obtain the necessary permits and install the controls necessary under the Act to reduce sulfur dioxide, nitrogen oxides, and/or particulate matter emissions, and that such emissions can damage human health and the environment;

WHEREAS, Plaintiffs' Complaint states claims upon which, if proven, relief can be granted against NIPSCO under Sections 113 and 167 of the Act, 42 U.S.C. §§ 7413 and 7477, and 28 U.S.C. § 1355;

WHEREAS, NIPSCO has denied and continues to deny the violations alleged in the Complaint and the NOV, and maintains that it has been and remains in compliance with the Act, federal implementing regulations and Indiana air regulations and statutes, including the Indiana SIP, and that it is not liable for civil penalties, injunctive or other relief;

WHEREAS, the Plaintiffs and the Defendant (collectively "the Parties," and each, individually, a Party) anticipate that the installation and operation of pollution control equipment pursuant to this Consent Decree will achieve significant reductions of sulfur dioxide ("SO₂"), nitrogen oxides ("NO_x"), and particulate matter ("PM") emissions and improve air quality; and

WHEREAS, the Parties have agreed, and the Court by entering this Consent Decree finds, that this Consent Decree has been negotiated in good faith and at arms' length; that this settlement is fair, reasonable, in the best interest of the Parties and the public, and is consistent with the goals of the Act and the Indiana SIP; and that entry of this Consent Decree without further litigation is the most appropriate means of resolving this matter;

WHEREAS, the Defendant has asserted that its Bailly Generating Station Units 7 and 8, Michigan City Generating Station Unit 12, and Schahfer Generating Station Unit 14, are cyclone-fired units, with cycling demand for electric generation and inherently high NOx baseline emissions, equipped with SCR (as hereinafter defined) systems with ammonia on demand ("AOD") systems.

NOW, THEREFORE, without any admission by the Defendant, and without adjudication of or admission with respect to the violations alleged in the Complaint or the NOV, it is hereby ORDERED, ADJUDGED, AND DECREED as follows:

I. <u>JURISDICTION AND VENUE</u>

- This Court has jurisdiction over this action, the subject matter herein, and the Parties consenting hereto, pursuant to 28 U.S.C. §§ 1331, 1345, 1355, and 1367, and Sections 113 and 167 of the Act, 42 U.S.C. §§ 7413 and 7477. Venue is proper under Section 113(b) of the Act, 42 U.S.C. § 7413(b), and under 28 U.S.C. §§ 1391(b) and (c).
- 2) Solely for the purposes of this Consent Decree and the underlying Complaint, Defendant waives all objections and defenses that it may have to the Court's jurisdiction over Defendant and to venue in this District. Defendant shall not challenge the terms of this Consent Decree or this Court's jurisdiction to enter and enforce this Consent Decree and agrees that the Complaint states claims upon which, if such claims were proven, relief may be granted pursuant to Section 113 of the Act, 42 U.S.C. § 7413(b).
- 3) Solely for purposes of the Complaint filed by Plaintiffs in this matter and this Consent Decree, for purposes of entry and enforcement of this Consent Decree, Defendant waives any defense or objection based on standing. Except as expressly provided for herein, this Consent Decree shall not create any rights in any party other than

Plaintiffs and Defendant. Except as provided in Section XXVIII (Public Comment) of this Consent Decree, the Parties consent to entry of this Consent Decree without further notice.

4) Notwithstanding the foregoing, should this Consent Decree not be entered by this Court, then the waivers and consents set forth in this Section I (Jurisdiction and Venue) shall be null and void and of no effect.

II. APPLICABILITY

- 5) Upon entry, the provisions of this Consent Decree shall apply to and be binding upon the Plaintiffs, the United States, including EPA, and the State of Indiana, including the Indiana Department of Environmental Management, and upon NIPSCO, its successors and assigns, and its officers, employees and agents, solely in their capacities as such.
- NIPSCO shall be responsible for providing a copy of this Consent Decree to all vendors, suppliers, consultants, contractors, agents, and any other companies or organizations retained after entry of this Consent Decree to perform any of the work required by this Consent Decree. Notwithstanding any retention of contractors, subcontractors, or agents to perform any work required under this Consent Decree, NIPSCO shall be responsible for ensuring that all work is performed in accordance with the requirements of this Consent Decree. In any action to enforce this Consent Decree, NIPSCO shall not assert as a defense the failure of its officers, directors, employees, servants, agents, or contractors to take actions necessary to comply with this Consent Decree, unless NIPSCO establishes that such failure resulted from a Force Majeure Event, as defined in Section XVI (Force Majeure) of this Consent Decree.

III. DEFINITIONS

7) A "365-Day Rolling Average Emission Rate" for a Cyclone-fired Unit, other than the Bailly Units, shall be expressed as lb/mmBTU and calculated in accordance with the following procedure: first, sum the total pounds of NOx emitted from the Cyclone-fired Unit during an Operating Day and the previous three hundred and sixty-four (364) Operating Days, with such emissions being determined from data derived from CEMS installed and operated at the Unit; second, sum the total heat input to the Cyclone-fired Unit in mmBTU during the Operating Day and the previous three hundred and sixty-four (364) Operating Days; and third, divide the total number of pounds of NOx emitted during those three hundred and sixty-five (365) Operating Days by the total heat input during those three hundred and sixty-five (365) Operating Days. For Bailly Units 7 and 8, which share common stacks, the "365-Day Rolling Average Emission Rate" shall be expressed as lb/mmBTU and calculated in accordance with the procedure enumerated above in this Paragraph for other Cyclone-fired Units, except that the total pounds of NOx emitted and the total heat input used to calculate the 365-Day Rolling Average Emission Rate shall be calculated by using the combined total pounds of NOx emitted from Bailly Units 7 and 8 and the combined total heat input to Bailly Units 7 and 8. A new 365-Day Rolling Average Emission Rate shall be calculated for each new Operating Day. When a 365-Day Rolling Average Emission Rate includes Operating Days to which two different 365-Day Rolling Average Emission Rates apply, the less stringent 365-Day Rolling Average Emission Rate shall apply until such time as all Operating Days within the 365-day rolling average period fall within the more stringent specified 365-Day Rolling Average Emission Rate (e.g., if the specified 365Day Rolling Average Emission Rate for a Cyclone-fired Unit on December 31, 2009 is 0.140 lb/mmBTU and the specified 365-Day Rolling Average Emission Rate for that same Cyclone-fired Unit on December 31, 2010 becomes 0.120 lb/mmBTU, the less stringent December 31, 2009 specified rate would be the applicable 365-Day Rolling Average Emission Rate to determine on June 1, 2011 the Cyclone-fired Unit's compliance because the 365-Day Rolling Average Emission Rate determined on June 1, 2011 would include Operating Days prior to December 31, 2010). Each 365-Day Rolling Average Emission Rate shall include all emissions that occur during all periods of startup, shutdown and Malfunction within an Operating Day, except that emissions associated with a Malfunction that is determined to be a Force Majeure Event pursuant to Section XVI of this Consent Decree shall be excluded from the calculation of a 365-Day Rolling Average Emission Rate.

Bailly Units, shall be expressed as lb/mmBTU and calculated in accordance with the following procedure: first, sum the total pounds of the pollutant in question emitted from the Unit during an Operating Day and the previous twenty-nine (29) Operating Days, with such emissions being determined from data derived from CEMS installed and operated at the Unit; second, sum the total heat input to the Unit in mmBTU during the Operating Day and the previous twenty-nine (29) Operating Days; and third, divide the total number of pounds of the pollutant emitted during the thirty (30) Operating Days by the total heat input during the thirty (30) Operating Days. For Bailly Units 7 and 8, which share common stacks, the "30-Day Rolling Average Emission Rate" shall be expressed as lb/mmBTU and calculated in accordance with the procedure enumerated

above in this Paragraph for other Units, except that the total pounds of NOx emitted and the total heat input used to calculate the 30-Day Rolling Average Emission Rate shall be calculated by using the combined total pounds of NOx emitted from Bailly Units 7 and 8 and the combined total heat input to Bailly Units 7 and 8. A new 30-Day Rolling Average Emission Rate shall be calculated for each new Operating Day. When a 30-Day Rolling Average Emission Rate includes Operating Days that fall within two different specified 30-Day Rolling Average Emission Rates, the less stringent 30-Day Rolling Average Emission Rate shall apply until such time as all Operating Days within the 30day rolling average period fall within the more stringent specified 30-Day Rolling Average Emission Rate (e.g., if the specified 30-Day Rolling Average Emission Rate for a Unit on December 1, 2010 is 0.170 lb/mmBTU and the specified 30-Day Rolling Average Emission Rate for that same Unit on January 1, 2011 becomes 0.150 lb/mmBTU, the less stringent December 1, 2010 specified rate would be the applicable 30-Day Rolling Average Emission Rate to determine on January 15, 2011 the Unit's compliance because the 30-Day Rolling Average Emission Rate determined on January 15, 2011 would include Operating Days prior to January 1, 2011). Each 30-Day Rolling Average Emission Rate shall include all emissions that occur during all periods of startup, shutdown and Malfunction within an Operating Day, except that emissions associated with a Malfunction that is determined to be a Force Majeure Event pursuant to Section XVI of this Consent Decree shall be excluded from the calculation of a 30-Day Rolling Average Emission Rate.

9) A "30-Day Rolling Average Removal Efficiency" means the percent reduction in the emissions of a pollutant achieved by a Unit's pollution control device

over a 30-Operating Day period. This percentage shall be calculated by subtracting the Unit's outlet 30-Day Rolling Average Emission Rate from the Unit's inlet 30-Day Rolling Average Emission Rate, with such rates being determined from data derived from CEMS installed and operated at the Unit, dividing the result by the 30-Day Rolling Average Emission Rate from the Unit's inlet and then multiplying that result by 100. A new 30-Day Rolling Average Removal Efficiency shall be calculated for each new Operating Day. 30-Day Rolling Average Emission Rates used in the calculation of 30-Day Rolling Average Removal Efficiencies pursuant to this Paragraph shall include all emissions that occur during all periods of startup, shutdown and Malfunction within an Operating Day, except that emissions associated with a Malfunction that is determined to be a Force Majeure Event pursuant to Section XVI of this Consent Decree shall be excluded from the calculation of a 30-Day Rolling Average Emission Rate.

- 10) "Annual System Tonnage Limitation" means the limitation on the number of tons of the pollutant in question that may be emitted from the NIPSCO System during the relevant calendar year (i.e., January 1 through December 31), and shall include all emissions of the pollutant emitted during periods of startup, shutdown and Malfunction.
- 11) "Boiler Island" means a Unit's: (a) fuel combustion system (including bunker, coal pulverizers, crusher, stoker, and fuel burners); (b) combustion air system; (c) steam generating system (<u>i.e.</u>, firebox, boiler tubes and walls); and (d) draft system (excluding the stack), as further described in "Interpretation of Reconstruction," John B. Rasnick, U.S. EPA (November 25, 1986), and the attachments thereto.
- 12) "Calendar Month" means all of the Operating Days in one calendar month period.

- 13) "Capital Expenditures" means all capital expenditures, as defined by Generally Accepted Accounting Principles ("GAAP"), as those principles exist at the Date of Entry of this Consent Decree, excluding the cost of installing or upgrading pollution control devices.
- 14) "CEMS" and "Continuous Emission Monitoring System" mean, for obligations involving NO_X and SO₂ under this Consent Decree, the devices defined in 40 C.F.R.§ 72.2 and installed and maintained as required by 40 C.F.R. Part 75.
- 15) "Clean Air Act" and "the Act" mean the federal Clean Air Act, 42 U.S.C. §§ 7401-7671q, and its implementing regulations.
- 16) "Consent Decree" and "Decree" mean this Consent Decree, including Appendix A which is hereto incorporated into this Consent Decree.
- obligations involving NOx, PM, and SO₂ under this Consent Decree, the operation of any specified NOx, PM or SO₂ control technology equipment at all times that the Unit it serves is in operation, except during a Malfunction of the control technology equipment, consistent with technological limitations, manufacturers' specifications, and good air pollution control practices for minimizing emissions (as defined in 40 C.F.R. § 60.11(d)).
- 18) "Cyclone-fired Unit" means those Units in the NIPSCO System that operate cyclone-fired boilers for electric generation and have inherently high NOx baseline emissions. The following Units in the NIPSCO System are considered Cyclone-fired Units: Bailly Unit 7 and Unit 8, Michigan City Unit 12, and Schahfer Unit 14.

- 19) "Date of Entry" means the date this Consent Decree is signed or otherwise approved in writing by the District Court Judge for the United States District Court for the Northern District of Indiana.
- 20) "Date of Lodging" means the date this Consent Decree is filed for lodging with the Clerk of the Court for the United States District Court for the Northern District of Indiana.
 - "Defendant" means the Northern Indiana Public Service Co. ("NIPSCO").
- 22) "Emission Rate" means the number of pounds of pollutant emitted per million British thermal units of heat input ("lb/mmBTU"), measured in accordance with this Consent Decree.
 - 23) "EPA" means the United States Environmental Protection Agency.
- 24) "ESP" and "Electrostatic Precipitator" mean a device for removing particulate matter from combustion gases by imparting an electric charge to the particles and then attracting them to a metal plate or screen of opposite charge before the combustion gases are exhausted to the atmosphere.
- 25) "Flue Gas Desulfurization System" and "FGD" mean a pollution control device that employs flue gas desulfurization technology, including an absorber utilizing lime, fly ash, or limestone slurry, for the reduction of sulfur dioxide emissions.
- 26) "Fossil Fuel" means any hydrocarbon fuel, including coal, petroleum oil, and natural gas.
- "Improved Unit" means, in the case of NO_X , a NIPSCO System Unit that has an SCR or is scheduled under this Consent Decree to be equipped with an SCR (or an equivalent NOx control technology approved pursuant to Paragraph 65) or in the case of

SO₂, a NIPSCO System Unit that has an FGD or is scheduled under this Consent Decree to be equipped with an FGD (or equivalent SO₂ control technology approved pursuant to Paragraph 80) in accordance with this Consent Decree. A Unit may be an Improved Unit for one pollutant without being an Improved Unit for the other. The following Units are, in accordance with the preceding sentences, Improved Units for purposes of this Consent Decree: Bailly Units 7 and 8 (NO_X and SO₂); Michigan City Unit 12 (NO_X and SO₂); Schahfer Unit 14 (NO_X and SO₂); Schahfer Unit 15 (SO₂) and Schahfer Units 17 and 18 (SO₂). Schahfer Unit 15 can become an Improved Unit for NOx, if NIPSCO elects NOx Option 1 as described in Table 1 and Paragraph 60 of this Consent Decree. Schahfer Unit 15 can also become an Improved Unit for NOx if NIPSCO elects NOx Option 2 as described in Table 1 and Paragraph 60 and Schahfer Unit 15 becomes, at NIPSCO's discretion, subject to a federally enforceable 0.080 lb/mmBTU NO_X 30-Day Rolling Average Emission Rate, for which the rate and the requirement to Continuously Operate such SNCR is incorporated into a site-specific amendment to the SIP and modification to the Title V permit. Schahfer Units 17 and 18 can become an Improved Unit for NOx if either Unit is equipped with an SCR (or equivalent NO_X control technology approved pursuant to Paragraph 65) and has become subject to a federally enforceable 0.080 lb/mmBTU NO_x 30-Day Rolling Average Emission Rate, which rate, and the requirement to Continuously Operate such SCR, is incorporated into a site-specific amendment to the SIP and modification to the Title V permit.

28) "Indiana SIP" means the Indiana state implementation plan approved and enforceable by EPA under Section 110 of the Act.

- 29) "lb/mmBTU" means one pound of a pollutant per million British thermal units of heat input.
- 30) "Low Sulfur Coal" means coal that will achieve an uncontrolled SO_2 emission rate of less than 1.00 lb/mmBTU.
- 31) "Malfunction" means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not Malfunctions.
- emissions achieved by the FGD at Bailly Units 7 and 8 during a Calendar Month. This percentage shall be calculated in accordance with the following procedure: (a) first, sum the total pounds of SO₂ emitted during a Calendar Month from the outlet at the Bailly main stack (CS001) and the Bailly bypass stack; (b) second, divide that sum by the sum of the total pounds of SO₂ during that same Calendar Month that enter the Bailly FGD (as measured at the inlet to the FGD) and are emitted from Bailly bypass stack; (c) third, subtract that result from 1.0 or 100 percent (*i.e.*, if the resulting number is 0.10, subtract 0.10 from 1.0); and, (d) fourth, multiply that result by 100. The pounds of SO₂ emitted from the Bailly main stack (CS001), inlet to the FGD, and bypass stack shall be determined from data derived from SO₂ CEMS installed and operated at Bailly. Emissions associated with a Malfunction that is determined to be a Force Majeure Event pursuant to Section XVI of this Consent Decree shall be excluded from the calculation of a Monthly SO₂ Removal Efficiency.
 - 33) "MW" means a megawatt or one million watts.

- 34) "National Ambient Air Quality Standards" and "NAAQS" mean the national ambient air quality standards that are promulgated pursuant to Section 109 of the Act, 42 U.S.C. § 7409.
 - "NIPSCO" means Northern Indiana Public Service Co.
- 36) "NIPSCO System" means the following coal-fired, electric steamgenerating Units owned by NIPSCO and located in the State of Indiana, with estimated net demonstrated generating capacities for such Units listed in parentheses below:
 - a. the Bailly Electric Generation Station ("Bailly") in Porter County, IN,
 comprised of Unit 7 (160 MW) and Unit 8 (320 MW);
 - the Michigan City Generating Station ("Michigan City") in LaPorte
 County, IN, comprised of Unit 12 (469 MW);
 - c. the Rollin M. Schahfer Electric Generating Station ("Schahfer") in Jasper County, IN, comprised of Unit 14 (431 MW), Unit 15 (472 MW), Unit 17 (361 MW), and Unit 18 (361 MW); and
 - d. the Dean H. Mitchell Electric Generating Station ("Mitchell") in Lake
 County, IN, comprised of Unit 4 (110 MW), Unit 5 (125 MW), Unit 6 (126 MW), and Unit 11 (125 MW).
- 37) "Nonattainment New Source Review" and "Nonattainment NSR" mean the nonattainment area New Source Review ("NSR") program within the meaning of Part D of Subchapter I of the Act, 42 U.S.C. §§ 7501-7515, and 40 C.F.R. Part 51, as well as any Nonattainment NSR provisions of the Indiana SIP.
 - 38) "NO_X" means oxides of nitrogen.

- 39) " NO_X Allowance" means an authorization or credit to emit a specified amount of NO_X that is allocated or issued under an emissions trading or marketable permit program of any kind that has been established under the Clean Air Act or the Indiana SIP.
- 40) "Over- Fired Air" and "OFA" mean an in-furnace staged combustion control to reduce NO_X emissions.
- 41) "Operating Day" means any calendar day during which a Unit fires Fossil Fuel.
- 42) "Other Unit" means any Unit within the NIPSCO System that is not an Improved Unit for the pollutant in question. A Unit may be an Improved Unit for NO_X and an Other Unit for SO_2 , and vice versa.
- 43) "Ownership Interest" means part or all of NIPSCO's legal or equitable ownership interest in the NIPSCO System Units.
- 44) "Parties" means the United States, including the EPA and the United States Department of Justice, the State of Indiana, including the Indiana Attorney General and the Indiana Department of Environmental Management, and NIPSCO.
- 45) "Plaintiff(s)" means the United States, including the EPA and the United States Department of Justice, and the State of Indiana, including the Indiana Attorney General and the Indiana Department of Environmental Management ("IDEM").
- 46) "PM Control Device" means any device, including an ESP or a fullstream baghouse, that reduces emissions of particulate matter ("PM").
 - 47) "PM" means particulate matter.

- 48) "PM Continuous Emission Monitoring System" and "PM CEMS" mean the equipment that samples, analyzes, measures, and provides, by readings taken at frequent intervals, an electronic or paper record of PM emissions.
- 49) "PM Emission Rate" means the number of pounds of PM emitted per million BTU of heat input ("lb/mmBTU").
- or made in carrying out the Environmental Mitigation Projects identified in Section X (Environmental Mitigation Projects) of this Consent Decree to the extent that such expenditures or payments both: (a) comply with the requirements set forth in Section X (Environmental Mitigation Projects) and Appendix A of this Consent Decree; and (b) constitute NIPSCO's direct payments for such projects, NIPSCO's external costs for contractors, vendors, and equipment, or NIPSCO's internal costs consisting of employee time, travel, or out-of-pocket expenses specifically attributable to these particular projects and documented in accordance with GAAP.
- 51) "PSD" means Prevention of Significant Deterioration program within the meaning of Part C of Subchapter I of the Clean Air Act, 42 U.S.C. §§ 7470-7492 and 40 C.F.R. Part 52, as well as any PSD provisions of the Indiana SIP.
- 52) "Retire" or "Retirement" means to permanently cease to operate, physically render inoperable, and relinquish all Clean Air Act permits for a Unit within the NIPSCO System.
- 53) "Selective Catalytic Reduction System" and "SCR" mean a pollution control device that employs selective catalytic reduction technology for the reduction of NO_X emissions.

- 54) "Selective Non-Catalytic Reduction System" and "SNCR" mean a pollution control device that employs selective non-catalytic reduction technology for the reduction of NO_X emissions.
 - "SO₂" means sulfur dioxide.
- 56) "SO₂ Allowance" means "allowance" as defined at 42 U.S.C. § 7651a(3): "an authorization, allocated to an affected unit by the Administrator of EPA under Subchapter IV of the Act, to emit, during or after a specified calendar year, one ton of sulfur dioxide."
- 57) "Surrender" means permanently surrendering NOx or SO₂ allowances so that such NOx or SO₂ allowances can never be used to meet any compliance requirement under the Clean Air Act, the Indiana SIP, or this Consent Decree.
- 58) "Title V Permit" means the permit required for NIPSCO's major sources under Subchapter V of the Act, 42 U.S.C. §§ 7661-7661f.
- 59) "Unit" means, collectively, the coal pulverizer, stationary equipment that feeds coal to the boiler, the boiler that produces steam for the steam turbine, the steam turbine, the generator, equipment necessary to operate the generator, steam turbine and boiler, and all ancillary equipment, including pollution control equipment, at or serving a coal-fired steam electric generating unit. An electric steam generating station may comprise one or more Units.

IV. NO_X EMISSION REDUCTIONS AND CONTROLS

A. NO_X Emission Controls

60) Commencing for each Unit on the dates set forth in Table 1 below, NIPSCO shall Continuously Operate the NOx control technology at each Unit in the

NIPSCO System as stated in Table 1 and achieve and continuously maintain the 30-Day Rolling Average Emission Rates for NOx set forth in Table 1.

Table 1

Unit	Control Technology	30-Day Rolling Average Emission Rate (lb/mmBTU)	Date required to meet 30-Day Rolling Average Emission Rate
Bailly Units 7 and 8	Bailly Unit 7 SCR; Bailly Unit 8 SCR	0.180	March 31, 2011
Michigan City Unit 12	SCR	0.160	March 31, 2011
	NOx Option A: SCR	NOx Option A: 0.160	December 31, 2018
	NOx Option B: Retire	NOx Option B: N/A	
Schahfer Unit 14	SCR	0.160	March 31, 2011
Schahfer Unit 15	LNB/OFA	0.180	January 31, 2011
	NOx Option 1: SCR	NOx Option 1: 0.080	NOx Option 1: December 31, 2015
	NOx Option 2: SNCR	NOx Option 2: 0.150	,
			NOx Option 2:
			December 31, 2012
Schahfer Unit 17	LNB/OFA	0.200	March 31, 2011
Schahfer Unit 18	LNB/OFA	0.200	March 31, 2011

- By December 31, 2014, NIPSCO shall notify EPA of its decision to implement either NOx Option A or NOx Option B for Michigan City Unit 12 as described in Table 1.
- 62) By December 31, 2011, NIPSCO shall notify EPA of its decision to implement either NOx Option 1 or NOx Option 2 for Schahfer Unit 15 as described in Table 1.

63) Commencing for each Cyclone-fired Unit on the dates set forth in Table 2 below, NIPSCO shall Continuously Operate the NOx control technology at each Cyclone-fired Unit in the NIPSCO System as stated in Table 2 and achieve and continuously maintain the 365-Day Rolling Average Emission Rates for NOx set forth in Table 2.

Table 2

Unit	Control Technology	365-Day Rolling Average Emission Rate (lb/mmBTU)	Date required to meet 365-Day Rolling Average Emission Rate
Bailly Units 7	Bailly Unit 7 SCR;	0.150	December 31, 2010
and 8	Bailly Unit 8 SCR	0.130	December 31, 2013
		0.120	December 31, 2015
Michigan City Unit 12	SCR	0.140	December 31, 2010
		0.120	December 31, 2011
		0.100	December 31, 2013
Schahfer Unit 14	SCR	0.140	December 31, 2010
		0.120	December 31, 2012
		0.100	December 31, 2014

Beginning forty five (45) days from the Date of Entry of this Consent Decree, NIPSCO shall Continuously Operate low NOx burners ("LNB") and/or OFA on the NIPSCO System Units according to Table 3 below.

Table 3

NIPSCO System Unit	NOx Control Technology
Bailly Unit 7	OFA
Bailly Unit 8	OFA
Michigan City Unit 12	OFA
Schahfer Unit 14	OFA
Schahfer Unit 15	LNB/OFA
Schahfer Unit 17 LNB/OFA	

Schahfer Unit 18	LNB/OFA

(after consultation by EPA with the State of Indiana), NIPSCO may, in lieu of installing and operating SCR or SNCR technology at a Unit, install and operate at that Unit equivalent NOx control technology so long as such equivalent NOx control technology has been demonstrated to be capable of achieving and maintaining a 30-Day Rolling Average Rate for NOx of not more than 0.080 lb/mmBTU for that NIPSCO Unit. If NIPSCO elects to install and operate equivalent NOx control technology at a Unit, it must commence operation of the equivalent NOx control technology at that Unit by the date specified for SCR or SNCR installation in Table 1 or Table 2. Upon installation of such equivalent NOx control technology at a Unit as a means of complying with Table 1 or 2, NIPSCO shall Continuously Operate and achieve and maintain a 30-Day Rolling Average Emission Rate for NOx of not more than 0.080 lb/mmBTU at that Unit.

B. General NO_X Provision

66) In determining Emission Rates for NO_X, NIPSCO shall use CEMS in accordance with the procedures of 40 C.F.R. Part 75.

C. Annual System Tonnage Limitation for NO_X

In addition to meeting the emission limits set forth in Tables 1 and 2, all Units in the NIPSCO System, collectively, shall not emit NO_X in excess of the Annual System Tonnage Limitations calculated on a calendar-year basis set forth in Table 4.

Table 4:

Annual NIPSCO System Tonnage
Limitation for NO _X
15,825 tons
15,537 tons
If NIPSCO selects NOx Option 1 in Table 1 (SCR on Schahfer Unit
15): 15,247 tons
If NIPSCO selects NOx Option 2
in Table 1(SNCR on Schahfer Unit 15): 13,752 tons
If NIPSCO selects NOx Option 1
in Table 1 (SCR on Schahfer Unit 15): 14,959 tons
If NIPSCO selects NOx Option 2
in Table 1 (SNCR on Schahfer
Unit 15): 13,464 tons
If NIPSCO selects NOx Option 1
in Table 1 (SCR on Schahfer Unit 15): 14,365 tons
If NIPSCO selects NOx Option 2
in Table 1 (SNCR on Schahfer
Unit 15): 12,870
If NIPSCO selects NOx Option 1 in Table 1 (SCR on Schahfer Unit
15): 11,704 tons
If NIPSCO selects NOx Option 2
in Table 1 (SNCR on Schahfer Unit 15): 12,870
Same as 2016

2018	Same as 2016
2019 and every year thereafter	If NIPSCO selects NOx Option 2
	and NOx Option A in Table 1
	(SNCR on Schahfer Unit 15 and
	SCR on Michigan City Unit 12):
	12,870 tons
	If NIPSCO selects NOx Option 2 and NOx Option B in Table 1
	(SNCR on Schahfer Unit 15 and
	Retirement of Michigan City Unit
	12): 11,470
	If NIPSCO selects NOx Option 1 and NOx Option A in Table 1 (SCR on Schahfer Unit 15 and
	SCR on Michigan City Unit 12):
	11,704 tons
	If NIPSCO selects NOx Option 1
	and NOx Option B in Table 1
	(SCR on Schahfer Unit 15 and
	Retirement of Michigan City Unit
	12): 10,300 tons

68) Except as may be necessary to comply with Section XV (Stipulated Penalties), NIPSCO may not use NO_X Allowances to comply with any requirement of this Consent Decree, including by claiming compliance with any emission limitation required by this Decree by using, tendering, or otherwise applying NO_X Allowances to offset any excess emissions (<u>i.e.</u>, emissions above the limits specified in Table 1, Table 2 and Table 4).

D. <u>Use and Surrender of NO_X Allowances</u>

69) Except as provided in this Consent Decree, NIPSCO shall not sell or trade any NO_X Allowances allocated to the NIPSCO System that would otherwise be available

for sale or trade as a result of the actions taken by NIPSCO to comply with the requirements, as they become due, of this Consent Decree.

- 70) For any given calendar year, provided that NIPSCO is in compliance for that calendar year with all emissions limitations for NOx set forth in this Consent Decree, nothing in this Consent Decree, including the requirement to Surrender NOx allowances under Paragraph 71 of this Consent Decree, shall preclude NIPSCO from selling or trading NO_X Allowances allocated to the NIPSCO System that become available for sale or trade that calendar year solely as a result of:
 - a. the installation and operation at any time of any NOx pollution control
 technology or technique that is not otherwise required by this Consent
 Decree, or the installation and operation of NOx controls prior to the dates
 required under this Section IV of this Consent Decree; or
 - b. achievement and maintenance of a NO_X 30-Day Rolling Average

 Emission Rate at any non-cyclone NIPSCO System Unit, as determined
 on a unit by unit basis, below the emission rate specified for such Unit in
 Table 1; or for any NIPSCO Cyclone-fired Unit, as determined on a unit
 by unit basis, achievement and maintenance of a NO_X 30-Day Rolling
 Average Emission Rate below 0.100 lb/mmBTU for such Cyclone-fired
 Unit, and a NO_X 365-Day Rolling Average Emission Rate below the
 emission rate specified for such Cyclone-fired Unit in Table 2,

so long as NIPSCO timely reports the generation of such surplus NO_X Allowances that occur after the Date of Entry of this Consent Decree in accordance with Section XIII (Periodic Reporting) of this Consent Decree.

- thereafter, NIPSCO shall Surrender to EPA, or transfer to a non-profit third party selected by NIPSCO for Surrender, all NOx Allowances allocated to the NIPSCO System Units for that calendar year that NIPSCO does not need in order to meet its own federal and/or state Clean Air Act statutory or regulatory requirements. This requirement to Surrender all such NOx Allowances allocated to NIPSCO for a given calendar year is subject to Paragraph 70 of this Consent Decree. NIPSCO shall make such Surrender annually, within forty-five (45) days of NIPSCO's receipt of the Annual Deduction Reports for NOx from EPA. Surrender need not include the specific NOx Allowances that were allocated to NIPSCO System Units, so long as NIPSCO Surrenders NOx Allowances that are from the same year or an earlier year and that are equal to the number required to be Surrendered under this Paragraph.
- 72) If any NOx allowances are transferred directly to a non-profit third party, NIPSCO shall include a description of such transfer in the next report submitted to EPA and the State of Indiana pursuant to Section XIII (Periodic Reporting) of this Consent Decree. Such report shall: (i) provide the identity of the non-profit third-party recipient(s) of the NOx Allowances and a listing of the serial numbers of the transferred NOx Allowances; and (ii) include a certification by the third-party recipient(s) stating that the recipient(s) will not sell, trade, or otherwise exchange any of the allowances and will not use any of the NOx Allowances to meet any obligation imposed by any environmental law. No later than the third periodic report due after the transfer of any NOx Allowances, NIPSCO shall include a statement that the third-party recipient(s) Surrendered the NOx Allowances for permanent Surrender to EPA in accordance with the provisions of

Paragraph 71 within one (1) year after NIPSCO transferred the NOx Allowances to them.

NIPSCO shall not have complied with the NOx Allowance Surrender requirements of this

Paragraph until all third-party recipient(s) shall have actually Surrendered the transferred

NOx Allowances to EPA.

- For all NOx Allowances Surrendered to EPA, NIPSCO or the third-party recipient(s) (as the case may be) shall first submit a NOx Allowance transfer request form to the EPA Office of Air and Radiation's Clean Air Markets Division ("CAMD") directing the transfer of such NOx Allowances to the EPA Enforcement Surrender Account or to any other EPA account that EPA may direct in writing. As part of submitting these transfer requests, NIPSCO or the third-party recipient(s) shall irrevocably authorize the transfer of these NOx Allowances and identify by name of account and any applicable serial or other identification numbers or station names the source and location of the NOx Allowances being Surrendered.
- Nothing in this Consent Decree shall prevent NIPSCO from purchasing or otherwise obtaining NO_X Allowances from another source for purposes of complying with state or federal Clean Air Act requirements to the extent otherwise allowed by law. Such allowances will not be used to demonstrate compliance with the annual tonnage caps of this Consent Decree.
- 75) The requirements in Paragraphs 69 through 74 of this Consent Decree pertaining to NIPSCO's use or Surrender of NO_X Allowances are permanent injunctions not subject to any termination provision of this Consent Decree.

V. <u>SO₂ EMISSION REDUCTIONS AND CONTROLS</u>

A. <u>SO₂ Emission Controls</u>

76) Commencing for each Unit on the dates set forth in Table 5 below,
NIPSCO shall Continuously Operate the FGDs at each Unit in the NIPSCO System as
stated in Table 5 and achieve and continuously maintain the 30-Day Rolling Average
Emission Rate or applicable SO₂ 30-Day Rolling Average Removal Efficiency or Monthly
SO₂ Removal Efficiency as set forth in Table 5.

Table 5

Unit	Control Technology	30-Day Rolling Average Emission Rate (lb/mmBTU) / Removal Efficiency & Monthly SO ₂ Removal Efficiency	Date required to meet emission rate/removal efficiency
Bailly Units 7 and 8	Upgrade existing	95.0% Monthly SO ₂ Removal Efficiency	January 1, 2011
	FGD on Bailly 7 and 8 main stack	97.0% 30-Day Rolling Average SO2 Removal Efficiency or 95.0% 30-Day Rolling Average SO ₂ Removal Efficiency if Bailly Units 7 and 8 burn only Low Sulfur Coal for that entire 30-day period	January 1, 2014
Michigan City Unit 12	SO ₂ Option 1: Retire SO ₂ Option 2:	SO ₂ Option 1: N/A SO ₂ Option 2: 0.100 lb/mmbtu 30-Day Rolling Average	December 31, 2018
Schahfer Unit 14	FGD FGD	Emission Rate 0.080 lb/mmbtu 30-Day Rolling Average Emission Rate	December 31, 2013
Schahfer Unit 15	FGD	0.080 lb/mmbtu 30-Day Rolling Average Emission Rate	December 31, 2015
Schahfer Unit 17	Upgrade existing FGD	97.0 % 30-Day Rolling Average Removal Efficiency	January 31, 2011
Schahfer Unit 18	Upgrade	97.0 % 30-Day Rolling Average	January 31, 2011

existing	Removal Efficiency	
FGD		

- 77) By December 31, 2014, NIPSCO shall notify EPA of its decision to implement either SO₂ Option 1 or SO₂ Option 2 for Michigan City Unit 12 as described in Table 5.
- NIPSCO utilizes a main stack (CS00001) through which air emissions from both Bailly Units 7 and 8 are routed. NIPSCO has in place an existing contract with Pure Air, a separate entity, under which Pure Air owns and operates an FGD controlling SO2 emissions from Bailly Units 7 and 8. This FGD controls SO2 emissions from both Bailly Units 7 and 8. During periods of startup, the FGD and the main stack cannot be used for the unit(s) experiencing startup. When either or both Bailly Units 7 and 8 are experiencing startup, emissions from the unit(s) experiencing startup are routed through a bypass stack that serves Bailly Unit 7 and Unit 8 around the FGD and these emissions are not controlled by the FGD. While combusting fuel, emissions from a Bailly unit shall be routed through the FGD unless that unit is experiencing startup. The following restrictions shall apply to NIPSCO's use of the bypass stack:
 - a. While combusting fuel, NIPSCO shall not use the Bailly Unit 7 and Unit 8 bypass stack for any emission purpose other than during periods of startup, and then may only use it for the unit(s) experiencing startup.
 - All SO₂ emissions associated with periods of startup are included in the calculation of the Monthly SO₂ Removal Efficiency and 30-Day Rolling Average SO₂ Removal Efficiency for Bailly Unit 7 and 8 as described in Table 5, except that NIPSCO may exclude from that calculation those

startup emissions from a unit that occur up until that unit reaches a temperature of 280 degrees Fahrenheit as measured at the outlet of the precipitator, not to exceed 16 hours in duration per startup while combusting coal. NIPSCO may however, exclude from the relevant removal efficiency, startup emissions that occur after the 16th hour up to the 24^{th} hour, if NIPSCO Surrenders SO_2 Allowances in an amount equal to the difference between the actual tons of SO₂ emitted from the bypass stack between hour 17 and the point in time NIPSCO ceases use of the bypass stack for startup emissions (but, in any event, no longer than hour 24) and the tons of SO₂ emissions that would have been emitted assuming compliance with the relevant removal efficiency for Bailly Unit 7 and 8 specified in Table 5. In addition, NIPSCO may only exclude these limited unit startup emissions for the Bailly bypass stack if NIPSCO demonstrates to EPA that such emissions otherwise would cause NIPSCO to violate the relevant removal efficiency for Bailly Unit 7 or 8 as described in Table 5. Such demonstration shall require that NIPSCO, at minimum, provide EPA with calculations of emissions with and without bypass stack emissions;

- NIPSCO shall limit the use of the bypass stack to the greatest extent practicable;
- NIPSCO shall operate the bypass stack consistent with good engineering and maintenance practices for minimizing emissions to the extent practicable; and

- e. Annual System Tonnage Limitations in Tables 4 and 6 shall apply during all periods of emissions, including all periods of bypass stack emissions.
- 79) In the event that the Monthly SO2 Removal Efficiency requirements for Bailly Unit 7 and Unit 8 as listed in Table 5 are not achieved for any given Calendar Month prior to January 1, 2014 after applying Paragraph 78, as applicable, NIPSCO may nonetheless remain in compliance with the requirements of this Section V (SO₂ Emissions Reduction and Controls) by Surrendering the number of SO2 Allowances equal to two times (2x) the difference between the actual tons of SO2 emitted from the Bailly main stack (CS001) during such Calendar Month minus the tons of SO2 emissions that would have been emitted from that stack during that Calendar Month had NIPSCO complied with the applicable Monthly SO2 Removal Efficiency specified in Table 5. In all cases where the applicable Monthly SO₂ Removal Efficiency is not achieved for a given Calendar Month prior to January 1, 2014, the difference between the actual SO₂ emissions emitted and the compliance level of SO₂ emissions during such Calendar Month shall be rounded up to the next highest ton (e.g., if the difference is 750 pounds, then the difference shall be rounded up to one ton and SO₂ Allowances equal to two tons would be required to be retired). Any allowances retired under this Paragraph 79 shall be in addition to any allowances that NIPSCO is otherwise required to Surrender to EPA or transfer to a non-profit third party pursuant to Paragraph 86 and 87 of this Consent Decree. After January 1, 2014, the method described in this Paragraph 79 may not be used to comply with the requirements of this Section.
- 80) After prior written notice to the Plaintiffs and prior written approval from EPA (after consultation by EPA with the State of Indiana), NIPSCO may, in lieu of

installing and operating FGD technology at Schahfer Unit 15, install and operate equivalent SO₂ control technology, so long as such equivalent SO₂ control technology has been demonstrated to be capable of achieving and maintaining a 30-Day Rolling Average Rate for SO₂ of not more than 0.080 lb/mmBTU, and so long as NIPSCO commences operation of the equivalent SO₂ control technology by the date specified for FGD installation in Table 5. If it elects to request equivalent SO₂ technology, NIPSCO shall provide the written notice referenced above no later than December 31, 2012. Upon installation of such equivalent SO₂ control technology as a means of complying with Table 5, NIPSCO shall achieve and maintain a 30-Day Rolling Average Emission Rate for SO₂ of not more than 0.080 lb/mmBTU at that Unit.

B. General SO2 Provisions

81) In determining Emission Rates for SO₂, NIPSCO shall use CEMS in accordance with the procedures of 40 C.F.R. Part 75.

C. <u>Annual System Tonnage Limitation for SO₂</u>

82) In addition to meeting the emission limits set forth in Table 5, all Units in the NIPSCO System, collectively, shall not emit SO_2 in excess of the Annual System Tonnage Limitations calculated on a calendar-year basis set forth in Table 6.

Table 6:

Applicable Calendar Year	Annual NIPSCO System Tonnage Limitation for SO ₂
2011	50,200 tons
2012	Same as 2011

2013	Same as 2011
2014	35,900 tons
2015	Same as 2014
2016	25,300 tons
2017	Same as 2016
2018	Same as 2016
2019 and thereafter	If NIPSCO selects SO ₂ Option 2 (Michigan City Unit 12 FGD): 11,600 tons
	If NIPSCO selects SO ₂ Option 1 (Retirement of Michigan City Unit 12): 10,200 tons

83) Except as may be necessary to comply with Section XV (Stipulated Penalties), and except as permitted or required under Paragraphs 78 and 79, NIPSCO may not use SO₂ Allowances to comply with any requirement of this Consent Decree, including by claiming compliance with any emission limitation required by this Decree by using, tendering, or otherwise applying SO₂ Allowances to offset any excess emissions (<u>i.e.</u>, emissions above the limits specified in Table 5 and Table 6).

D. <u>Use and Surrender of SO₂ Allowances</u>

84) Except as provided in this Consent Decree, NIPSCO shall not sell or trade any SO₂ Allowances allocated to the NIPSCO System that would otherwise be available for sale or trade as a result of the actions taken by NIPSCO to comply with the requirements, as they become due, of this Consent Decree.

- 85) For any given calendar year, provided that the NIPSCO System is in compliance for that calendar year with all emissions limitations for SO₂ set forth in this Consent Decree, nothing in this Consent Decree, including the requirement to Surrender SO₂ Allowances under Paragraph 86 of this Consent Decree, shall preclude NIPSCO from selling or trading SO₂ Allowances allocated to the NIPSCO System that become available for sale or trade that calendar year solely as a result of:
 - a. the installation and operation of any pollution control technology or technique that is not otherwise required by this Consent Decree, or the installation and operation of any FGD prior to the dates required by Section V of this Consent Decree; or
 - b. achievement and maintenance of an SO₂ 30-Day Rolling Average
 Removal Efficiency, 30-Day Rolling Average Emission Rate, or Monthly
 SO2 Removal Efficiency at any NIPSCO System Unit, as determined on a
 unit by unit basis, at a higher removal efficiency than the SO₂ 30-Day
 Rolling Average Removal Efficiency or Monthly SO₂ Removal Efficiency
 specified for such Unit, or below the SO₂ 30-Day Rolling Average
 Emission Rate specified for such Unit,

so long as NIPSCO timely reports the generation of such surplus SO₂ Allowances that occur after the Date of Entry of the Consent Decree in accordance with Section XIII (Periodic Reporting) of this Consent Decree.

86) Beginning with calendar year 2011, and continuing each calendar year thereafter, NIPSCO shall Surrender to EPA, or transfer to a non-profit third party selected by NIPSCO for Surrender, all SO₂ Allowances allocated to the NIPSCO System Units for

that calendar year that NIPSCO does not need in order to meet its own federal and/or state Clean Air Act statutory or regulatory requirements. This requirement to Surrender all such SO₂ Allowances is subject to Paragraph 85 of this Consent Decree. NIPSCO shall make such Surrender annually, within forty-five (45) days of NIPSCO's receipt of the Annual Deduction Reports for SO₂ from EPA. Surrender need not include the specific SO₂ Allowances that were allocated to NIPSCO System Units, so long as NIPSCO surrenders SO₂ Allowances that are from the same year or an earlier year and that are equal to the number required to be surrendered under this Paragraph.

87) If any allowances are transferred directly to a non-profit third party, NIPSCO shall include a description of such transfer in the next report submitted to EPA and the State of Indiana pursuant to Section XIII (Periodic Reporting) of this Consent Decree. Such report shall: (i) provide the identity of the non-profit third-party recipient(s) of the SO₂ Allowances and a listing of the serial numbers of the transferred SO₂ Allowances; and (ii) include a certification by the third-party recipient(s) stating that the recipient(s) will not sell, trade, or otherwise exchange any of the allowances and will not use any of the SO₂ Allowances to meet any obligation imposed by any environmental law. No later than the third periodic report due after the transfer of any SO₂ Allowances, NIPSCO shall include a statement that the third-party recipient(s) Surrendered the SO₂ Allowances for permanent surrender to EPA in accordance with the provisions of Paragraph 86 within one (1) year after NIPSCO transferred the SO₂ Allowances to them. NIPSCO shall not have complied with the SO₂ Allowance Surrender requirements of this Paragraph until all third-party recipient(s) shall have actually Surrendered the transferred SO₂ Allowances to EPA.

- For all SO₂ Allowances surrendered to EPA, NIPSCO or the third-party recipient(s) (as the case may be) shall first submit an SO₂ Allowance transfer request form to the EPA Office of Air and Radiation's Clean Air Markets Division ("CAMD") directing the transfer of such SO₂ Allowances to the EPA Enforcement Surrender Account or to any other EPA account that EPA may direct in writing. As part of submitting these transfer requests, NIPSCO or the third-party recipient(s) shall irrevocably authorize the transfer of these SO₂ Allowances and identify by name of account and any applicable serial or other identification numbers or station names the source and location of the SO₂ Allowances being surrendered.
- 89) Nothing in this Consent Decree shall prevent NIPSCO from purchasing or otherwise obtaining SO₂ Allowances from another source for purposes of complying with state or federal Clean Air Act requirements to the extent otherwise allowed by law. Such allowances shall not be used to demonstrate compliance with the annual tonnage caps of this Consent Decree.
- 90) The requirements in Paragraphs 84 through 89 of this Decree pertaining to NIPSCO's surrender of SO₂ Allowances are permanent injunctions not subject to any termination provision of this Decree.

VI. PM EMISSION REDUCTIONS AND CONTROLS

A. Optimization of PM Emission Controls

91) Beginning ninety (90) days after the Date of Entry of this Consent Decree, and continuing thereafter, NIPSCO shall Continuously Operate each PM Control Device on each Unit within the NIPSCO System, to maximize the PM emission reductions at all times when the unit is in operation, provided that such operation of the PM Control Device is

consistent with the technological limitations, manufacturer's specifications and good engineering and maintenance practices for the PM Control Device. During any periods when any section or compartment of the PM control device is not operational, NIPSCO will minimize emissions to the extent practicable (as defined in 40 C.F.R. § 60.11(d)). Notwithstanding the foregoing sentences of this Paragraph 91, NIPSCO shall not be required to operate an ESP on any Unit if a fullstream baghouse is installed and operating to replace the ESP. Specifically, NIPSCO shall, at a minimum, to the extent practicable, and where applicable: (a) energize each available section of the ESP for each Unit, or at each Unit where a baghouse is installed, operate each compartment of the baghouse for each such Unit, regardless of whether that action is needed to comply with opacity limits; (b) maintain the energy or power levels delivered to the ESPs for each Unit to achieve optimal removal of PM, or at each Unit where a baghouse is installed, maintain and replace bags on each baghouse as needed to maximize collection efficiency; (c) at each Unit inspect the ESP or the baghouse (at any Unit where a baghouse is installed) for any openings or leakage in the casings, ductwork and expansion joints, and make best efforts to expeditiously repair and return to service any ESP section or baghouse compartment needing repair; (d) at each Unit where no baghouse is installed or operating, operate automatic control systems on the ESP, including the plate-cleaning and discharge electrode cleaning systems, to maximize control efficiency; and (e) at each Unit where a baghouse is installed and operating, make best efforts to expeditiously repair and return to service any failed baghouse compartment.

B. PM Emissions

Beginning for each Unit on the dates specified in Table 7 below, NIPSCO shall achieve and maintain a PM Emission Rate of no greater than 0.030 lb/mmBTU. If NIPSCO installs a fullstream baghouse on any of the Units identified in Table 7 to replace an existing ESP, pursuant to Paragraph 91 above, NIPSCO shall, upon installation of such baghouse, achieve and maintain a PM Emission Rate of no greater than 0.015 lb/mmBTU.

Table 7

NIPSCO System Unit	Date
Bailly Units 7 and 8 Main Stack (CS001)	December 31, 2010
Michigan City Unit 12	December 31, 2018
Schahfer Unit 14	December 31, 2013
Schahfer Unit 15	December 31, 2015
Schahfer Unit 17	December 31, 2010
Schahfer Unit 18	December 31, 2010

C. PM Emissions Testing

93) Beginning in calendar year 2011 and continuing in each calendar year thereafter, NIPSCO shall conduct a PM performance test on each NIPSCO System Unit identified in Table 7. The annual performance test requirement imposed on NIPSCO by this Paragraph may be satisfied by stack tests conducted by NIPSCO as may be required by its permits from the State of Indiana for any year that such stack tests are required under the permits. NIPSCO may perform testing every other year, rather than every year, provided

that two of the most recently completed test results from tests conducted in accordance with the methods and procedures specified in this Paragraph demonstrate that the PM emissions are equal to or less than 0.015 lb/mmBTU. NIPSCO shall perform testing every year, rather than every other year, beginning in the year immediately following any test result demonstrating that the PM emissions are greater than 0.015 lb/mmBTU.

D. General PM Provision

The reference methods and procedures for determining compliance with PM Emission Rates shall be those specified in 40 C.F.R. Part 60, Appendix A, Method 5, or an alternative method that is promulgated by EPA, requested for use herein by NIPSCO, and approved for use herein by EPA and IDEM. Use of any particular method shall conform to the EPA requirements specified in 40 C.F.R. Part 60, Appendix A and 40 C.F.R. §§ 60.48a (b) and (e), or any federally approved method contained in the Indiana SIP. NIPSCO shall calculate the PM Emission Rates from the stack test results in accordance with 40 C.F.R. § 60.8(f). The results of each PM stack test shall be submitted to EPA and IDEM within forty-five (45) days of completion of each test.

VII. <u>UNIT RETIREMENT</u>

- 95) No later than December 31, 2010, NIPSCO shall Retire Mitchell Units 4, 5, 6, and 11.
- 96) If NIPSCO elects to Retire any Unit within the NIPSCO System other than Michigan City Unit 12 or Mitchell Units 4,5,6, and 11, such Retirement shall not alter the Annual System Tonnage Limitations as described in Tables 4 and 6.

VIII. PROHIBITION ON NETTING CREDITS OR OFFSETS FROM REQUIRED CONTROLS

- 97) Emission reductions that result from actions to be taken by NIPSCO after the Date of Entry of this Consent Decree to comply with the requirements of this Consent Decree shall not be considered as a creditable contemporaneous emission decrease for the purpose of obtaining a netting or offset credit under the Clean Air Act's Nonattainment NSR and PSD programs.
- 98) The limitations on the generation and use of netting credits or offsets set forth in the previous Paragraph 97 do not apply to emission reductions achieved by NIPSCO System Units that are greater than those required under this Consent Decree. For purposes of this Paragraph, emission reductions from a NIPSCO System Unit are greater than those required under this Consent Decree if, for example, they result from NIPSCO's compliance with federally enforceable emission limits that are more stringent than those limits imposed on the NIPSCO System and individual Units under this Consent Decree and under applicable provisions of the Clean Air Act or the Indiana SIP.
- 99) Nothing in this Consent Decree is intended to preclude the emission reductions generated under this Consent Decree from being considered by the State of Indiana or EPA as creditable contemporaneous emission decreases for the purpose of attainment demonstrations submitted pursuant to § 110 of the Act, 42 U.S.C. § 7410, or in determining impacts on NAAQS.
- Nothing in this Consent Decree precludes any emissions from any NIPSCO System Units that occur either prior to the Date of Entry of this Consent Decree or thereafter from being considered in any modeling analyses required pursuant to 40 C.F.R. Part 52 or the Prevention of Significant Deterioration regulations under the Indiana

SIP for purposes of demonstrating compliance with PSD increments or air quality related values, including visibility, in a Class I area.

IX. PM AND MERCURY CONTINUOUS EMISSION MONITORING SYSTEMS (CEMS)

- Within eighteen months after the Date of Entry of this Consent Decree, or within 90 days of EPA's approval of NIPSCO's timely submittal under Paragraph 104, whichever is later, NIPSCO shall install, certify, maintain, and operate two PM CEMS and two mercury CEMS. NIPSCO shall install each PM CEMS and mercury CEMS such that representative measurements of emissions are obtained from the monitored unit(s). Each CEMS shall complete a minimum of one cycle of operations (sampling, analyzing and data recording) for each successive 15-minute period. Except for CEMS breakdowns, repairs, calibration checks, and zero and span adjustments, NIPSCO shall continuously operate the PM CEMS and mercury CEMS consistent with technical limitations and manufacturer specifications.
- NIPSCO's Michigan City Unit 12 and Schahfer Unit 15. The PM CEMS shall comprise a continuous particle mass monitor measuring particulate matter concentration, directly or indirectly, on a continuous basis. NIPSCO shall install a diluent monitoring system on Michigan City Unit 12 and Schahfer Unit 15 such that the PM mass concentration can be converted to units of lb/mmBTU. NIPSCO shall certify the two PM CEMS in accordance with 40 C.F.R. Part 60, Appendix B, Performance Specification 11. NIPSCO shall submit installation plans, operation plans and perform testing and reporting in accordance with Paragraphs 104 through 106 of this Consent Decree. In the event NIPSCO elects to retire

Michigan City Unit 12, PM CEMS shall be installed on Schahfer Unit 14 in accordance with the requirements of this Paragraph prior to the retirement of Michigan City Unit 12.

- NIPSCO's Michigan City Unit 12 and Schahfer Unit 15. The mercury CEMS shall be comprised of a continuous total vapor phase mercury monitoring device which measures total vapor phase mercury concentration, directly or indirectly, on a continuous basis.

 NIPSCO shall install a diluent monitoring system on Michigan City Unit 12 and Schahfer Unit 15, such that the mercury concentrations can be converted to units of pounds per trillion BTU (lb-mercury/TBTU) on an hourly average basis. NIPSCO shall certify the Mercury CEMS in accordance with 40 C.F.R. Part 60, Appendix B, Performance Specification 12a. NIPSCO shall submit installation plans, operation plans and perform testing and reporting in accordance with Paragraphs 104 through 106 of this Consent Decree. In the event NIPSCO elects to retire Michigan City Unit 12, mercury CEMS shall be installed on Schahfer Unit 14 in accordance with the requirements of this Paragraph prior to the retirement of Michigan City Unit 12.
- NIPSCO shall submit to EPA for review and approval pursuant to Section XIV (Review and Approval of Submittals) of this Consent Decree the following information regarding the PM and mercury CEMS: (a) a plan for the installation, certification and operation of the CEMS; and (b) no less than six (6) months prior to conducting tests in accordance with Paragraph 105 of this Consent Decree a proposed QA/QC protocol that shall be followed in calibrating each PM CEMS and mercury CEMS. In developing both the plan for installation and certification of the PM and mercury CEMS and the QA/QC protocol,

NIPSCO shall use the criteria set forth in 40 C.F.R. Part 60, Appendix B (PS 11 and PS 12a). EPA shall expeditiously review such submissions. Following approval by EPA, NIPSCO shall thereafter operate the PM and mercury CEMS in accordance with the approved protocols.

- No later than ninety days (90) after the deadline imposed by Paragraph 101, or within 90 days after EPA's approval of NIPSCO's submittals pursuant to Paragraph 104, whichever is later, NIPSCO shall conduct tests on each PM CEMS and mercury CEMS to demonstrate compliance with the CEMS installation and certification plan submitted to and approved by EPA in accordance with Paragraph 104. NIPSCO shall submit the results of all certification testing (including incomplete testing and associated Reference Method Testing) to EPA and IDEM within forty-five (45) days of completion of certification testing
- 106) Upon completion of testing in accordance with Paragraph 105 above, NIPSCO shall begin and continue to report to EPA, pursuant to Section XIII (Periodic Reporting), the data recorded by the PM and mercury CEMS, expressed in lb-PM/mmBTU and lb-mercury/TBTU, respectively. The data shall be reported as a three-hour rolling average basis in electronic format, as required by Section XIII, and shall include: each exceedance of an applicable PM mass emission limit (including those occurring during startup, shutdown and/or Malfunction), the magnitude of each exceedance, the date and time of commencement and completion of each period of exceedance, the process operating time during the reporting period, the nature and cause of each exceedance, the corrective action(s) taken or preventative measure(s) adopted in response to each exceedance, the date and time of each period during which any of the CEMS were

inoperative (except for zero and span checks), and the nature of system repairs or adjustments. For purposes of this Consent Decree, stack testing pursuant to Paragraph 94 shall be the method to determine compliance with the PM Emission Rate established by this Consent Decree. However, data from the PM CEMS shall be used to, at a minimum, monitor progress in reducing PM emissions.

Nothing in this Consent Decree is intended to, or shall, alter or waive any applicable law (including any defenses, entitlements, challenges, or clarifications related to the Credible Evidence Rule, 40 C.F.R. § 52.12(c) (62 Fed. Reg. 8,315; Feb. 27, 1997)) concerning the use of data for any purpose under the Act.

X. <u>ENVIRONMENTAL MITIGATION PROJECTS</u>

- ("Projects") described in Appendix A to this Consent Decree in compliance with the approved plans and schedules for such Projects and other terms of this Consent Decree.

 NIPSCO shall submit plans for the Projects to Plaintiffs for review and approval pursuant to Section XIV (Review and Approval of Submittals) of this Consent Decree in accordance with the schedules set forth in Appendix A. In implementing the Projects, NIPSCO shall spend no less than \$9.5 million in Project Dollars within five (5) years of the Date of Entry of this Consent Decree. NIPSCO shall maintain, and present to Plaintiffs upon request, all documents to substantiate the Project Dollars expended and shall provide these documents to Plaintiffs within thirty (30) days of a request.
- 109) All plans and reports prepared by NIPSCO pursuant to the requirements of this Section of the Consent Decree and required to be submitted to EPA shall be publicly available from NIPSCO without charge.

- NIPSCO shall certify, as part of each plan submitted to Plaintiffs for any Project, that NIPSCO is not otherwise required by law to perform the Project described in the plan, that NIPSCO is unaware of any other person who is required by law to perform the Project, and that NIPSCO will not use any Project, or portion thereof, to satisfy any obligations that it may have under other applicable requirements of law, including any applicable renewable portfolio standards or energy conservation standards.
- NIPSCO shall use good faith efforts to secure as much benefit as possible for the Project Dollars expended, consistent with the applicable requirements and limits of this Consent Decree.
- Project by contributing funds to another person or entity that will carry out the Project in lieu of NIPSCO, but not including NIPSCO's agents or contractors, that person or instrumentality must, in writing: (a) identify its legal authority for accepting such funding; and (b) identify its legal authority to conduct the Project for which NIPSCO contributes the funds. Regardless of whether NIPSCO elected (where such election is allowed) to undertake a Project by itself or to do so by contributing funds to another person or instrumentality that will carry out the Project, NIPSCO acknowledges that it will receive credit for the expenditure of such funds as Project Dollars only if NIPSCO demonstrates that the funds have been actually spent by either NIPSCO or by the person or instrumentality receiving them (or, in the case of internal costs, have actually been incurred by NIPSCO), and that such expenditures met all requirements of this Consent Decree.
- 113) Beginning six (6) months after the Date of Entry of this Consent Decree, and continuing until completion of each Project (including any applicable periods of

demonstration or testing), NIPSCO shall provide Plaintiffs with semi-annual updates concerning the progress of each Project.

- under this Consent Decree (including any applicable periods of demonstration or testing), NIPSCO shall submit to Plaintiffs a report that documents the date that the Project was completed, NIPSCO's results from implementing the Project, including the emission reductions or other environmental benefits achieved, and the Project Dollars expended by NIPSCO in implementing the Project (including the emission reductions achieved for SO2, NOx, PM, and CO2).
- 115) In connection with any communication to the public or to shareholders regarding NIPSCO's actions or expenditures relating in any way to the Environmental Mitigation Projects in this Consent Decree, NIPSCO shall include prominently in the communication the information that the actions and expenditures were required as part of a consent decree to resolve allegations that NIPSCO violated the Clean Air Act.

XI. CIVIL PENALTY

- 116) Within thirty (30) calendar days after the Date of Entry of this Consent Decree, NIPSCO shall pay to the United States and the State of Indiana a civil penalty in the amount of \$3.5 million, as follows:
 - (a) NIPSCO shall pay a civil penalty of \$ 3.3 million to the United States. The civil penalty to the United States shall be paid by Electronic Funds Transfer ("EFT") to the United States Department of Justice, in accordance with current EFT procedures, referencing DOJ Case Number 90-5-2-1-08417 and the civil action case name and case number of this action. The costs of such

EFT shall be NIPSCO's responsibility. Payment shall be made in accordance with timely instructions provided to NIPSCO by the Financial Litigation Unit of the U.S. Attorney's Office for the Northern District of Indiana. Any funds received after 2:00 p.m. EDT shall be credited on the next business day. At the time of payment, NIPSCO shall provide notice of payment, referencing the USAO File Number, the DOJ Case Number, and the civil action case name and case number, to the Department of Justice and to EPA in accordance with Section XXI (Notices) of this Consent Decree.

(b) NIPSCO shall pay a civil penalty of \$200,000 to the State of Indiana. Payment shall be made by check made out to the "Environmental Management Special Fund" and shall be mailed to:

Indiana Department of Environmental Management Cashier- Mail Code 50-10C 100 North Senate Avenue Indianapolis, IN 46204-2251

- 117) Failure to timely pay the civil penalty shall subject NIPSCO to interest accruing from the date payment is due until the date payment is made at the rate prescribed by 28 U.S.C. § 1961, and shall render NIPSCO liable for all charges, costs, fees, and penalties established by law for the benefit of a creditor or of the United States in securing payment.
- Payments made pursuant to this Section are penalties within the meaning of Section 162(f) of the Internal Revenue Code, 26 U.S.C. § 162(f), and are not tax-deductible expenditures for purposes of federal law.

XII. RESOLUTION OF PAST AND FUTURE CLAIMS

A. Resolution of Plaintiffs' Civil Claims

- 119) <u>Claims of the United States Based on Modifications Occurring Before the Lodging of Decree</u>. Entry of this Consent Decree shall resolve all civil claims of the United States under:
 - a. Parts C and D of Subchapter I of the Clean Air Act, 42 U.S.C. §§ 7470-7492, 7501-7515, and the implementing federal and state rules, including the Indiana SIP approved under Section 110 of the Act implementing Parts C or D of Subchapter I; and
 - b. Title V of the Clean Air Act, 42 U.S.C. §§ 7661-7661f, and the implementing Title V operating permit program, including regulations that EPA has approved and/or promulgated under the Act, but only to the extent that such claims are based on NIPSCO's failure to obtain or amend an operating permit or failure to submit or amend an operating permit application that reflects applicable requirements imposed under Parts C and D of Subchapter I of the Clean Air Act;

that arose from or are based on any modification that commenced at any NIPSCO System Unit prior to the Date of Lodging of this Consent Decree, including but not limited to those claims and modifications alleged in the Complaint filed by the Plaintiffs in this civil action and those claims and modifications asserted in the NOV issued by EPA to NIPSCO.

120) <u>Claims of the State of Indiana Based on Modifications Occurring Before</u>

the Lodging of Decree. Entry of this Decree shall resolve all civil claims of the State of

Indiana under:

- a. Parts C and D of Subchapter I of the Clean Air Act, 42 U.S.C. §§ 7470-7492, 7501-7515, and the implementing federal and state rules, including all civil claims under Indiana regulations at 326 IAC 2-1 et seq.

 (Construction and Operating Permit Requirements), 326 IAC 2-2 et seq.

 (PSD Requirements) and 326 IAC 2-3 et seq. (Emission Offset), and any related Indiana statutes, including all versions of the Indiana major New Source Review program that existed at the time of the modifications alleged in the Complaint to any NIPSCO System Unit;
- b. Indiana regulations at 326 IAC 2 that govern minor New Source Review and any related Indiana statutes, including any Indiana rule governing minor New Source Review that existed at the time of the modifications alleged in the Complaint to any NIPSCO System Unit; and
- Indiana statutes as they specifically apply to the programs implemented pursuant to Subchapter V of the Act, as well as Indiana regulations at 326 IAC 2-7 et seq. (Part 70 Permit Program);

that arose from or are based on any modification that commenced at any NIPSCO System Unit prior to the Date of Lodging of this Consent Decree, including but not limited to those claims and modifications alleged in the Complaint filed by the Plaintiffs in this civil action and those claims and modifications asserted in the NOV issued by EPA to NIPSCO.

Plaintiffs' Claims Based on Modifications After the Lodging of Decree.

Entry of this Consent Decree also shall resolve all civil claims of the United States and of the State of Indiana for pollutants, except sulfuric acid mist, regulated under Parts C and D of Subchapter I of the Clean Air Act, and under regulations promulgated as of the Date of

Lodging of this Consent Decree, where such claims are based on any modification completed before December 31, 2018, and

- a. is commenced at any NIPSCO System Unit after the Date of Lodging; or
- b. that this Consent Decree expressly directs NIPSCO to undertake.

The term "modification" as used in this Paragraph 121 shall have the meaning that term is given under the Clean Air Act or under the regulations promulgated thereunder as of the Date of Lodging of this Consent Decree. For purposes of this Paragraph 121, civil claims shall not include greenhouse gases (carbon dioxide, nitrous oxide, methane, hydroflurorcarbons, perfluorocarbons, and sulfur hexafluoride) even if greenhouse gases are pollutants regulated under Part C or D of Subchapter I of the Act, and under regulations promulgated thereunder.

122) <u>Reopener</u>. The resolution of the civil claims of the United States and the State of Indiana provided by this Subsection is subject to the provisions of Subsection B of this Section.

B. Pursuit of Plaintiffs' Civil Claims Otherwise Resolved

123) Bases for Pursuing Resolved Claims Across NIPSCO System. If NIPSCO violates an Annual Tonnage Limits in Tables 4 or 6, or fails by more than ninety (90) days to complete upgrading of the Bailly FGD or installation and commence operation of any emission control device required pursuant to this Consent Decree; or fails by more than ninety (90) days to retire and permanently cease to operate all Mitchell Units pursuant to Section VII (Unit Retirement), then the United States or the State of Indiana may pursue any claim at any NIPSCO System Unit that has otherwise been resolved under Subsection A of this Section, subject to (a) and (b) below.

- a. For any claims based on modifications undertaken at an Other Unit (i.e. any Unit of the NIPSCO System that is not an Improved Unit for the pollutant in question), claims may be pursued only where the modification(s) on which such claim is based was commenced within the five years preceding the violation or failure specified in this Paragraph.
- b. For any claims based on modifications undertaken at an Improved Unit, claims may be pursued only where the modification(s) on which such claim is based was commenced: (i) after lodging of the Consent Decree, and (ii) within the five years preceding the violation or failure specified in this Paragraph.
- Improved Unit. Solely with respect to Improved Units, the United States or the State of Indiana may also pursue claims arising from a modification (or collection of modifications) at an Improved Unit that have otherwise been resolved under Section XII, Subsection A, if the modification (or collection of modifications) at the Improved Unit on which such claim is based: (i) was commenced after the Date of Lodging, and (ii) individually (or collectively) increased the maximum hourly emission rate of that Unit for NO_x or SO₂ (as measured by 40 C.F.R. § 60.14 (b) and (h)) by more than ten percent (10%).
- Additional Bases for Pursuing Resolved Claims for Modifications at an Other Unit. Solely with respect to Other Units, the United States or the State of Indiana may also pursue claims arising from a modification (or collection of modifications) at an Other Unit that have otherwise been resolved under Section XII, Subsection A, if the

modification (or collection of modifications) on which the claim is based was commenced within the five years preceding any of the following events:

- a. a modification (or collection of modifications) at such Other Unit commenced after the Date of Lodging that increases the maximum hourly emission rate for such Other Unit for the relevant pollutant (only NO_x or SO_2) as measured by 40 C.F.R. § 60.14(b) and (h);
- b. the aggregate of all Capital Expenditures paid at such Other Unit exceed \$150/KW on the Unit's Boiler Island (based on the capacity numbers included in Paragraph 36) during January 1, 2011, through December 31, 2017. (Capital Expenditures shall be measured in calendar year 2009 constant dollars, as adjusted by the McGraw-Hill Engineering News-Record Construction Cost Index); or
- c. a modification (or collection of modifications) at such Other Unit commenced after the Date of Lodging results in an emissions increase of NO_x and/or SO_2 at such Other Unit, and such increase:
 - i. presents, by itself, or in combination with other emissions or sources, "an imminent and substantial endangerment" within the meaning of Section 303 of the Act, 42 U.S.C. §7603;
 - ii. causes or contributes to violation of a NAAQS in any Air QualityControl Area that is in attainment with that NAAQS;
 - iii. causes or contributes to violation of a PSD increment; or
 - iv. causes or contributes to any adverse impact on any formally recognized air quality and related values in any Class I area.

d. The introduction of any new or changed NAAQS shall not, standing alone, provide the showing needed under subparagraph (c) of this Paragraph to pursue any claim for a modification at an Other Unit resolved under Subsection A of this Section.

XIII. PERIODIC REPORTING

- Pursuant to Paragraph 93 of this Consent Decree, NIPSCO shall conduct performance tests for PM that demonstrate compliance with the PM Emission Rate required by this Consent Decree with respect to NIPSCO System Units. Within forty-five (45) days of each such performance test, NIPSCO shall submit the results of the performance test to EPA and IDEM at the address specified in Section XXI (Notices) of this Consent Decree.
- Beginning thirty (30) days after the end of the second calendar quarter following the Date of Entry of this Consent Decree, and continuing on a semi-annual basis until termination of this Consent Decree, and in addition to any other express reporting requirement in this Consent Decree, NIPSCO shall submit to EPA a progress report containing the following information:
 - a. all information necessary to determine compliance with the requirements of the following Tables of this Consent Decree: Tables 1, 2, 3 and 4 concerning NO_X emissions; Tables 5 and 6 concerning SO_2 emissions (including information related to burning of low sulfur coal at Bailly Units 7 and 8); and Table 7 concerning PM emissions;

- documentation of any Capital Expenditures at a Unit's Boiler Island made during the period covered by the progress report and cumulative Boiler Island Capital Expenditures to date;
- c. all information relating to emission allowances and credits that NIPSCO claims to have generated in accordance with Paragraphs 70 and 85, through compliance beyond the requirements of this Consent Decree;
- d. all information indicating the status of installation and commencement of operation of pollution controls, including information that the installation and commencement of operation of a pollution control device may be delayed, including the nature and cause of the delay, and any steps taken by NIPSCO to mitigate such delay;
- e. all affirmative defenses asserted by NIPSCO pursuant to Section XVII

 (Affirmative Defense) for that quarter;
- f. all information relating to excess emissions due to startup, shutdown, and

 Malfunction emissions, including steps taken to minimize the adverse

 effects of such excess emissions; and
- g. information verifying compliance with:
 - i. Continuous Operation of all pollution control equipment,
 - ii. allowance Surrender requirements, including supporting calculations, and
 - iii. optimization of any ESP's, including any periods during which all sections were not in service, the reasons therefore and actions taken to remedy such failure.

- 128) In any periodic progress report submitted pursuant to this Section,
 NIPSCO may incorporate by reference information previously submitted under its Title V
 permitting requirements, provided that NIPSCO attaches the Title V permit report, or the
 relevant portion thereof, and provides a specific reference to the provisions of the Title V
 permit report that are responsive to the information required in the periodic progress report.
- In addition to the progress reports required pursuant to this Section,
 NIPSCO shall provide a written report to EPA of any violation of the requirements of this
 Consent Decree within fifteen (15) calendar days of when NIPSCO knew or should have
 known of any such violation. In this report, NIPSCO shall explain the cause or causes of
 the violation and all measures taken or to be taken by NIPSCO to prevent such violations in
 the future.
- 130) Each NIPSCO report shall be signed by NIPSCO's Vice President of Generation or his or her equivalent or designee of at least the rank of Vice President, and shall contain the following certification:

This information was prepared either by me or under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my evaluation, or the directions and my inquiry of the person(s) who manage the system, or the person(s) directly responsible for gathering the information, I hereby certify under penalty of law that, to the best of my knowledge and belief, this information is true, accurate, and complete. I understand that there are significant penalties for submitting false, inaccurate, or incomplete information to the United States.

131) If any Allowances are Surrendered to any third party pursuant to this

Consent Decree, the third party's certification pursuant to Paragraphs 72 and 87, shall be
signed by a managing officer of the third party and shall contain the following language:

I certify under penalty of law that,_____ [name of third party] will not sell, trade, or otherwise exchange any of the allowances and will not use any of the allowances to meet any obligation imposed by any environmental law. I

understand that there are significant penalties for submitting false, inaccurate, or incomplete information to the United States.

XIV. REVIEW AND APPROVAL OF SUBMITTALS

- Other submission required by this Consent Decree to Plaintiffs whenever such a document is required to be submitted for review or approval pursuant to this Consent Decree.

 Plaintiffs may approve the submittal or decline to approve it and provide written comments explaining the bases for declining such approval. Within sixty (60) days of receiving written comments from Plaintiffs, NIPSCO shall either: (a) revise the submittal consistent with the written comments and provide the revised submittal to Plaintiffs; or (b) submit the matter for dispute resolution, including the period of informal negotiations, under Section XVIII (Dispute Resolution) of this Consent Decree.
- 133) Upon receipt of EPA's final approval of the submittal, or upon completion of the submittal pursuant to dispute resolution, NIPSCO shall implement the approved submittal in accordance with the schedule specified therein or another EPA-approved schedule.

XV. STIPULATED PENALTIES

134) For any failure by NIPSCO to comply with the terms of this Consent Decree, and subject to the provisions of Sections XVI (Force Majeure), VXII (Affirmative Defenses) and XVIII (Dispute Resolution), NIPSCO shall pay, within thirty (30) days after receipt of written demand to NIPSCO by the United States, the following stipulated penalties to the United States:

Table 8

Consent Decree Violation	Stipulated Penalty
a. Failure to pay the civil penalty as specified in Section XI (Civil Penalty) of this Consent Decree.	\$10,000 per day
b. Failure to comply with any applicable 30-Day Rolling Average Emission Rate for SO ₂ or NOx, where the violation is less than 5% in excess of the limits set forth in this Consent Decree.	\$2,500 per day per violation
c. Failure to comply with any applicable 30-Day Rolling Average Emission Rate for SO ₂ or NOx, where the violation is equal to or greater than 5% but less than 10% in excess of the limits set forth in this Consent Decree.	\$5,000 per day per violation
d. Failure to comply with any applicable 30-Day Rolling Average Emission Rate for SO ₂ or NOx, where the violation is equal to or greater than 10% in excess of the limits set forth in this Consent Decree.	\$10,000 per day per violation
e. Failure to comply with any applicable average Removal Efficiency for SO2 where the violation is equal to or less than 0.15% less than the applicable limit.	\$2,500 per day per violation
f. Failure to comply with any applicable average Removal Efficiency for SO2 where the violation is greater than 0.15% but less than 0.3% less than the applicable limit.	\$5,000 per day per violation
g. Failure to comply with any applicable average Removal Efficiency for SO2 where the violation is equal to or greater than 0.3% less than the applicable limit.	\$10,000 per day per violation
h. Failure to comply with any applicable 365-Day Rolling Average Emission Rate for NOx, where the violation is less than 5% in excess of the limits set forth in this Consent Decree.	\$350 per day of violation for a 365-Day Rolling Average Emission Rate violation, plus \$4,000 for each subsequent 365-Day Rolling Average Emission Rate violation that includes any day in a previously assessed 365-Day Rolling Average Emission Rate violation (<i>e.g.</i> , if a violation of the 365-Day Rolling Average

	Emission Rate for a Unit first occurs on June 1, 2010, occurs again on June 2, 2010, and again on May 31, 2011, the total stipulated penalty assessed for these three violations would equal \$135,750).
i. Failure to comply with any applicable 365-Day Rolling Average Emission Rate for NOx, where the violation is equal to or greater than 5% but less than 10% in excess of the limits set forth in this Consent Decree.	\$450 per day of violation for a 365-Day Rolling Average Emission Rate violation, plus \$5,000 for each subsequent 365-Day Rolling Average Emission Rate violation that includes any day in a previously assessed 365-Day Rolling Average Emission Rate violation (e.g., if a violation of the 365-Day Rolling Average Emission Rate for a Unit first occurs on June 1, 2010, occurs again on June 2, 2010, and again on May 31, 2011, the total stipulated penalty assessed for these three violations would equal \$174,250).
j. Failure to comply with any applicable 365-Day Rolling Average Emission Rate for NOx, where the violation is equal to or greater than 10% in excess of the limits set forth in this Consent Decree.	\$600 per day of violation for a 365-Day Rolling Average Emission Rate violation, plus \$6,000 for each subsequent 365-Day Rolling Average Emission Rate violation that includes any day in a previously assessed 365-Day Rolling Average Emission Rate violation (<i>e.g.</i> , if a violation of the 365-Day Rolling Average Emission Rate for a Unit first occurs on June 1, 2010, occurs again on June 2, 2010, and again on May 31, 2011, the total stipulated penalty assessed for these three violations would equal \$231,000).
k. Failure to comply with the Annual Tonnage Limits	\$5,000 per ton for the first 1000 tons, and \$10,000 per ton for each

for SO ₂ .	additional ton above 1000 tons. In addition, NIPSCO shall Surrender, pursuant to the procedures set forth in Paragraph 86, SO ₂ Allowances in an amount equal to two times the number of tons by which the limitation was exceeded
l. Failure to comply with the Annual Tonnage Limits for NO_X .	\$5,000 per ton for the first 1000 tons, and \$10,000 per ton for each additional ton above 1000 tons. In addition, NIPSCO shall Surrender, pursuant to the procedures set forth in Paragraph 71, NO _x Allowances in an amount equal to two times the number of tons by which the limitation was exceeded.
m. Operation of a Unit required under this Consent Decree to be equipped with any NO _X , SO ₂ , or PM control device without the operation of such device, to the extent operation of that control device is required under this Consent Decree.	\$10,000 per day per violation during the first 30 days, \$27,500 per day per violation thereafter
n. Failure to install or operate CEMS as required in this Consent Decree.	\$1,000 per day per violation
o. Failure to conduct performance tests of PM emissions, as required in this Consent Decree.	\$1,000 per day per violation
p. Failure to apply for any permit, or amendment or application therefor, required by Section XIX (Permits and SIP Revisions).	\$1,000 per day per violation
q. Failure to timely submit, modify, or implement, as approved, the reports, plans, studies, analyses, protocols, or other submittals required by this Consent Decree.	\$750 per day per violation during the first ten days, \$1,000 per day per violation thereafter
r. Selling or trading NO_X Allowances except as permitted by Section IV. D (Use and Surrender of NOx Allowances).	The surrender of NO_X Allowances in an amount equal to four times the number of NO_X Allowances used, sold, or transferred in violation of this Consent Decree
s. Selling or trading SO ₂ Allowances except as permitted	The surrender of SO ₂ Allowances

by Section V.D (Use and Surrender of SO ₂ Allowances).	in an amount equal to four times the number of SO ₂ Allowances used, sold, or transferred in violation of this Consent Decree
t. Failure to Surrender NOx Allowances as required by Paragraph 71.	(a) \$27,500 per day plus (b) \$1,000 per NOx Allowance not surrendered
u. Failure to Surrender SO ₂ Allowances as required by Paragraph 86.	(a) \$27,500 per day plus (b) \$1,000 per SO ₂ Allowance not surrendered
v. Failure to demonstrate the third-party Surrender of an NOx Allowance in accordance with Paragraphs 72 and 73.	\$2,500 per day per violation
w. Failure to demonstrate the third-party surrender of an SO ₂ Allowance in accordance with Paragraphs 87 and 88.	\$2,500 per day per violation
x. Failure to undertake and complete any of the Environmental Mitigation Projects in compliance with Section X (Environmental Mitigation Projects) of this Consent Decree.	\$1,000 per day per violation during the first 30 days, \$5,000 per day per violation thereafter
y. Failure to notify EPA of its decision to adopt any NOx or SO2 Option pursuant to Tables 1 and 5.	\$1,000 per day per violation
z. Violating an applicable PM Emission Rate based on the results of a stack test required pursuant to Paragraph 94 of this Consent Decree, where the violation is less than 5% in excess of the limit set forth in this Consent Decree.	\$2,500 per day, starting on the day a stack test result demonstrates a violation and continuing each day thereafter until and excluding such day on which a subsequent stack test* demonstrates compliance with the applicable PM Emission Rate
aa. Violating an applicable PM Emission Rate based on the results of a stack test required pursuant to Paragraph 94 of this Consent Decree, where the violation is equal to or greater than 5% but less than 10% in excess of the limit set forth in this Consent Decree.	\$5,000 per day, starting on the day a stack test result demonstrates a violation and continuing each day thereafter until and excluding such day on which a subsequent stack test* demonstrates compliance with the applicable PM Emission

	Rate
bb. Violating an applicable PM Emission Rate based on the results of a stack test required pursuant to Paragraph 94 of this Consent Decree, where the violation is equal to or greater than 10% in excess of the limits set forth in this Consent Decree.	\$10,000 per day, starting on the day a stack test result demonstrates a violation and continuing each day thereafter until and excluding such day on which a subsequent stack test* demonstrates compliance with the applicable PM Emission Rate
cc. Failure to optimize ESP or Baghouse pursuant to Paragraph 91.	\$2,500 per day
dd. Any other violation of this Consent Decree	\$1,000 per day per violation

^{*}NIPSCO shall not be required to make any submission, including any notice or test protocol, or to obtain any approval to or from EPA or IDEM in advance of conducting such a subsequent stack test.

- 135) Violations of any limit based on a 30-Day Rolling Average constitute thirty (30) days of violation, but where such a violation (for the same pollutant and from the same Unit) recurs within periods less than thirty (30) Operating Days, NIPSCO shall not be obligated to pay a daily stipulated penalty for any day of the recurrence for which a stipulated penalty has already been paid.
- Violations of any limit based on a 365-Day Rolling Average constitute 365 days of violation, but where such a violation (for the same pollutant and from the same Unit) recurs within periods less than 365 Operating Days, NIPSCO shall not be obligated to pay a daily stipulated penalty for any day of the recurrence for which a stipulated penalty has already been paid.
- 137) A violation of the Monthly SO₂ Removal Efficiency for a given Calendar Month shall constitute a violation on each day within the Month. For clarity, if NIPSCO Surrenders SO₂ allowances pursuant to Paragraph 79 of this Consent Decree as a means to

comply with the Monthly SO₂ Removal Efficiency requirement, there is no Monthly SO₂ Removal Efficiency violation.

- All stipulated penalties shall begin to accrue on the day after the performance is due or on the day a violation occurs, whichever is applicable, and shall continue to accrue until performance is satisfactorily completed or until the violation ceases, whichever is applicable. Nothing in this Consent Decree shall prevent the simultaneous accrual of separate stipulated penalties for separate violations of this Consent Decree.
- NIPSCO shall pay all stipulated penalties to the United States within thirty (30) days of receipt of written demand to NIPSCO from the United States, and shall continue to make such payments every thirty (30) days thereafter until the violation(s) no longer continues, unless NIPSCO elects within twenty (20) days of receipt of written demand to NIPSCO from the United States to dispute the obligation to pay or the accrual of stipulated penalties in accordance with the provisions in Section XVIII (Dispute Resolution) of this Consent Decree.
- 140) Stipulated penalties shall continue to accrue as provided in accordance with Paragraph 134 during any dispute, with interest on accrued stipulated penalties payable and calculated at the rate established by the Secretary of the Treasury, pursuant to 28 U.S.C. § 1961, but need not be paid until the following:
 - a. If the dispute is resolved by agreement, or by a decision of Plaintiffs

 pursuant to Section XVIII (Dispute Resolution) of this Consent Decree
 that is not appealed to the Court, accrued stipulated penalties agreed or
 determined to be owing, together with accrued interest, shall be paid

- within thirty (30) days of the effective date of the agreement or of the receipt of Plaintiffs' decision;
- b. If the dispute is appealed to the Court and Plaintiffs prevail in whole or in part, NIPSCO shall, within sixty (60) days of receipt of the Court's decision or order, pay all accrued stipulated penalties determined by the Court to be owing, together with interest accrued on such penalties determined by the Court to be owing, except as provided in subparagraph (c) of this Paragraph; or
- c. If the Court's decision is appealed by any Party, NIPSCO shall, within fifteen (15) days of receipt of the final appellate court decision, pay all accrued stipulated penalties determined to be owing, together with interest accrued on such stipulated penalties determined to be owing by the appellate court.

Notwithstanding any other provision of this Consent Decree, the accrued stipulated penalties agreed by Plaintiffs and NIPSCO, or determined by Plaintiffs through Dispute Resolution, to be owing may be less than the stipulated penalty amounts set forth in Paragraph 134.

- 141) All stipulated penalties shall be paid in the manner set forth in Section XI (Civil Penalty) of this Consent Decree.
- Should NIPSCO fail to pay stipulated penalties in compliance with the terms of this Consent Decree, the United States shall be entitled to collect interest on such penalties, as provided for in 28 U.S.C. § 1961.

addition to any other rights, remedies, or sanctions available to the United States or the State of Indiana by reason of NIPSCO's failure to comply with any requirement of this Consent Decree or applicable law, except that for any violation of this Consent Decree (for which this Consent Decree provides for payment of a stipulated penalty) that is also a violation of the Act, including the implementing Title V operating permit program, regulations EPA has approved and/or promulgated under the Act, the Indiana SIP, including Indiana regulations under 326 IAC Article 2, or of an operable Title V permit, NIPSCO shall be allowed a credit for stipulated penalties paid against any statutory or regulatory penalties also imposed for such violation.

XVI. FORCE MAJEURE

an event that has been or will be caused by circumstances beyond the control of NIPSCO, its contractors, or any entity controlled by NIPSCO that delays compliance with any provision of this Consent Decree or otherwise causes a violation of any provision of this Consent Decree despite NIPSCO's best efforts to fulfill the obligation. "Best efforts to fulfill the obligation" include using best efforts to anticipate any potential Force Majeure Event and to address the effects of any such event: (a) as it is occurring; and (b) after it has occurred, such that the delay and violation are minimized to the greatest extent possible and the emissions during such event are minimized to the greatest extent possible. Specific references to Force Majeure in other parts of this Consent Decree do not restrict the ability of NIPSCO to assert Force Majeure pursuant to the process described in this section.

- 145) Notice of Force Majeure Events. If any event occurs or has occurred that may delay compliance with or otherwise cause a violation of any obligation under this Consent Decree, as to which NIPSCO intends to assert a claim of Force Majeure, NIPSCO shall notify Plaintiffs in writing as soon as practicable, but in no event later than fourteen (14) business days following the date NIPSCO first knew, or by the exercise of due diligence should have known, that the event caused or may cause such delay or violation. In this notice, NIPSCO shall reference this Paragraph of this Consent Decree and describe the anticipated length of time that the delay or violation may persist, the cause or causes of the delay or violation, all measures taken or to be taken by NIPSCO to prevent or minimize the delay or violation, the schedule by which NIPSCO proposes to implement those measures, and NIPSCO's rationale for attributing a delay or violation to a Force Majeure Event. A copy of this notice shall be sent electronically, as soon as practicable, to the U.S. Department of Justice, EPA, and IDEM. NIPSCO shall adopt all reasonable measures to avoid or minimize such delays or violations and any resulting emissions. NIPSCO shall be deemed to know of any circumstance which NIPSCO, its contractors, or any entity controlled by NIPSCO knew or should have known.
- 146) <u>Failure to Give Notice</u>. If NIPSCO fails to comply with the notice requirements of this Section, EPA may void NIPSCO's claim for Force Majeure as to the specific event for which NIPSCO has failed to comply with such notice requirement.
- 147) <u>EPA's Response</u>. EPA shall notify NIPSCO in writing regarding NIPSCO's claim of Force Majeure within twenty (20) business days of receipt of the notice provided under Paragraph 144. If EPA agrees that a delay in performance has been or will be caused by a Force Majeure Event, EPA and NIPSCO shall stipulate to an extension of

deadline(s) for performance of the affected compliance requirement(s) by a period equal to the delay actually caused by the event. In such circumstances, an appropriate modification shall be made pursuant to Section XXV (Modification) of this Consent Decree.

- Disagreement. If EPA does not accept NIPSCO's claim of Force Majeure, or if EPA and NIPSCO cannot agree on the length of the delay actually caused by the Force Majeure Event, the matter shall be resolved in accordance with Section XVIII (Dispute Resolution) of this Consent Decree.
- Burden of Proof. In any dispute regarding Force Majeure, NIPSCO shall bear the burden of proving that any delay in performance or any other violation of any requirement of this Consent Decree was caused by or will be caused by a Force Majeure Event. NIPSCO shall also bear the burden of proving that NIPSCO gave the notice required by this Section and the burden of proving the anticipated duration and extent of any delay(s) attributable to a Force Majeure Event. An extension of one compliance date based on a particular event may, but will not necessarily, result in an extension of a subsequent compliance date.
- 150) <u>Events Excluded</u>. Unanticipated or increased costs or expenses associated with the performance of NIPSCO's obligations under this Consent Decree shall not constitute a Force Majeure Event.
- 151) <u>Potential Force Majeure Events</u>. The Parties agree that, depending upon the circumstances related to an event and NIPSCO's response to such circumstances, the kinds of events listed below are among those that could qualify as Force Majeure Events within the meaning of this Section: construction, labor, or equipment delays; failure of PureAir to agree to modify any contract regarding the operation of the FGD on Bailly Units

7 or 8; Malfunction of a Unit or emission control device; acts of God; acts of war or terrorism; and orders by a government official, government agency, other regulatory authority, or a regional transmission organization, acting under and authorized by applicable law, that directs NIPSCO to supply electricity in response to a system-wide (statewide or regional) emergency or to shut down a Unit or Units. Depending upon the circumstances and NIPSCO's response to such circumstances, failure of a permitting authority to issue a necessary permit in a timely fashion may constitute a Force Majeure Event where the failure of the permitting authority to act is beyond the control of NIPSCO and NIPSCO has taken all steps available to it to obtain the necessary permit, including, but not limited to: submitting a complete permit application; responding to requests for additional information by the permitting authority in a timely fashion; and accepting lawful permit terms and conditions after expeditiously exhausting any legal rights to appeal terms and conditions imposed by the permitting authority.

As part of the resolution of any matter submitted to this Court under Section XVIII (Dispute Resolution) of this Consent Decree regarding a claim of Force Majeure, Plaintiff and NIPSCO by agreement, or this Court by order, may in appropriate circumstances extend or modify the schedule for completion of work under this Consent Decree to account for the delay in the work that occurred as a result of any delay agreed to by the United States or approved by the Court. NIPSCO shall be liable for stipulated penalties for its failure thereafter to complete the work in accordance with the extended or modified schedule (provided that NIPSCO shall not be precluded from making a further claim of Force Majeure with regard to meeting any such extended or modified schedule).

XVII. AFFIRMATIVE DEFENSES

- Affirmative defense as to stipulated penalties for excess emissions

 occurring during Malfunctions. If any of NIPSCO's Units exceeds a unit-specific 30-Day

 Rolling Average Emission Rate, 30-Day Rolling Average Removal Efficiency, or Monthly

 SO2 Removal Efficiency due to a Malfunction, NIPSCO, bearing the burden of proof, has
 an affirmative defense to stipulated penalties under this Consent Decree if NIPSCO

 complies with the reporting requirements of Paragraphs 156, and demonstrates all of the
 following:
 - a. the excess emissions were caused by a sudden, unavoidable breakdown of technology, beyond NIPSCO's control;
 - the excess emissions did not stem from any activity or event that could
 have been foreseen and avoided, or planned for, and could not have been
 avoided by better operation and maintenance practices;
 - to the maximum extent practicable, the air pollution control equipment and processes were maintained and operated in a manner consistent with good practice for minimizing emissions;
 - d. repairs were made in an expeditious fashion when NIPSCO knew or should have known that the applicable 30-Day Rolling Average Emission Rate, 30-Day Rolling Average Removal Efficiency or Monthly SO2 Removal Efficiency was being or would be exceeded. Off-shift labor and overtime must have been utilized, to the greatest extent practicable, to ensure that such repairs were made as expeditiously as practicable;

- e. the amount and duration of the excess emissions (including any bypass)

 were minimized to the maximum extent practicable during periods of such
 emissions;
- f. all possible steps were taken to minimize the impact of the excess emissions on ambient air quality;
- g. all emission monitoring systems were kept in operation if at all possible;
- NIPSCO's actions in response to the excess emissions were documented by properly signed, contemporaneous operating logs, or other relevant evidence;
- the excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance; and
- NIPSCO properly and promptly notified EPA as required by this Consent Decree.
- Affirmative Defenses as to stipulated penalties for excess emissions
 occurring during startup or shutdown. If any of NIPSCO's Units exceed a unit-specific 30Day or 365-Day Rolling Average Emission Rate, 30-Day Rolling Average Removal
 Efficiency, or Monthly SO2 Removal Efficiency due to startup or shutdown, NIPSCO,
 bearing the burden of proof, has an affirmative defense to stipulated penalties under this
 Consent Decree if NIPSCO complies with the reporting requirements of Paragraphs 156,
 and demonstrates all of the following:
 - a. The periods of excess emissions that occurred during startup and shutdown were short and infrequent and could not have been prevented through careful and prudent planning and design;

- b. The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance;
- c. If the emissions were caused by a bypass (an intentional diversion of control equipment), then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
- d. At all times, the facility was operated in a manner consistent with good practice for minimizing emissions;
- e. The frequency and duration of operation in startup or shutdown mode was minimized to the maximum extent practicable;
- f. All possible steps were taken to minimize the impact of the excess emissions on ambient air quality;
- g. All emission monitoring systems were kept in operation if at all possible;
- NIPSCO's actions during the period of excess emissions were documented by properly signed, contemporaneous operating logs, or other relevant evidence; and
- NIPSCO properly and promptly notified EPA as required by this Consent Decree.
- 155) If excess emissions occur due to a Malfunction during startup and/or shutdown, then those instances shall be treated as other Malfunctions subject to Paragraph 153.
- NIPSCO shall provide notice to the United States in writing of NIPSCO's intent to assert an affirmative defense as to stipulated penalties for Malfunction, startup, or shutdown in NIPSCO's semi-annual progress reports as required by Paragraph 127(e).

This notice shall be submitted to EPA pursuant to the provisions of Section XXI (Notices).

The notice shall contain:

- a. The identity of each stack or other emission point where the excess emissions occurred;
- The magnitude of the excess emissions expressed in the units of the
 applicable emissions limitation and the operating data and calculations
 used in determining the magnitude of the excess emissions;
- c. The time and duration or expected duration of the excess emissions;
- d. The identity of the equipment from which the excess emissions emanated;
- e. The nature and cause of the emissions;
- f. The steps taken, if the excess emissions were the result of a Malfunction, to remedy the Malfunction and the steps taken or planned to prevent the recurrence of the Malfunctions;
- g. The steps that were or are being taken to limit the excess emissions; and
- h. If NIPSCO's permit contains procedures governing source operation during periods of startup, shutdown, or Malfunction and the excess emissions resulted from startup, shutdown, or Malfunction, a list of the steps taken to comply with the permit procedures.
- 157) A Malfunction, startup, or shutdown shall not constitute a Force Majeure Event unless the Malfunction, startup, or shutdown also meets the definition of a Force Majeure Event, as provided in Section XVI (Force Majeure).

XVIII. DISPUTE RESOLUTION

- 158) The dispute resolution procedure provided by this Section shall be available to resolve all disputes arising under this Consent Decree, provided that the Party invoking such procedure has first made a good faith attempt to resolve the matter with the other Party.
- Party giving written notice to the other Party advising of a dispute pursuant to this Section. The notice shall describe the nature of the dispute and shall state the noticing Party's position with regard to such dispute. The Party receiving such a notice shall acknowledge receipt of the notice, and the Parties in dispute shall expeditiously schedule a meeting to discuss the dispute informally not later than fourteen (14) days following receipt of such notice.
- Disputes submitted to dispute resolution under this Section shall, in the first instance, be the subject of informal negotiations among the disputing Parties. Such period of informal negotiations shall not extend beyond thirty (30) calendar days from the date of the first meeting among the disputing Parties' representatives unless they agree in writing to shorten or extend this period. During the informal negotiations period, the disputing Parties may also submit their dispute to a mutually agreed upon alternative dispute resolution ("ADR") forum if the Parties agree that the ADR activities can be completed within the 30-day informal negotiations period (or such longer period as the Parties may agree to in writing).
- 161) If the disputing Parties are unable to reach agreement during the informal negotiation period, Plaintiffs shall provide NIPSCO with a written summary of their

position regarding the dispute. The written position provided by Plaintiffs shall be considered binding unless, within forty-five (45) calendar days thereafter, NIPSCO seeks judicial resolution of the dispute by filing a petition with this Court. Plaintiffs may respond to the petition within forty-five (45) calendar days of filing. In their initial filings with the Court under this Paragraph, the disputing Parties shall state their respective positions as to the applicable standard of law for resolving the particular dispute. The Court shall decide all disputes pursuant to applicable principles of law for resolving such disputes.

- 162) The time periods set out in this Section may be shortened or lengthened upon motion to the Court of one of the Parties to the dispute, explaining the Party's basis for seeking such a scheduling modification.
- 163) This Court shall not draw any inferences nor establish any presumptions adverse to any disputing Party as a result of invocation of this Section or the disputing Parties' inability to reach agreement.
- As part of the resolution of any dispute under this Section, in appropriate circumstances the disputing Parties may agree, or this Court may order, an extension or modification of the schedule for the completion of the activities required under this Consent Decree to account for the delay that occurred as a result of dispute resolution.

 NIPSCO shall be liable for stipulated penalties for its failure thereafter to complete the work in accordance with the extended or modified schedule, provided that NIPSCO shall not be precluded from asserting that a Force Majeure Event has caused or may cause a delay in complying with the extended or modified schedule.

XIX. PERMITS AND SIP REVISIONS

- Unless expressly stated otherwise in this Consent Decree, in any instance where otherwise applicable law or this Consent Decree requires NIPSCO to secure a permit to authorize construction or operation of any device contemplated herein, including all preconstruction, construction, and operating permits required under state law, NIPSCO shall make such application in a timely manner. EPA and the State of Indiana shall use their best efforts to review expeditiously all permit applications submitted by NIPSCO to meet the requirements of this Consent Decree.
- Notwithstanding the previous paragraphs, nothing in this Consent Decree shall be construed to require NIPSCO to apply for, amend or obtain (1) a PSD or Nonattainment NSR permit or permit modification for any physical change in, or any change in the method of operation of, any NIPSCO System Unit that would give rise to claims resolved by Section XII (Resolution of Claims) of this Consent Decree; or (2) any Title V Permit or other operating permit or permit modification, or application therefore, related to or arising from any physical change in, or change in the method of operation of, any NIPSCO System Unit that would give rise to claims resolved by Section XII (Resolution of Claims) of this Consent Decree.
- When permits are required as described in Paragraph 165, NIPSCO shall complete and submit applications for such permits to the appropriate authorities to allow time for all legally required processing and review of the permit request, including requests for additional information by the permitting authorities. Any failure by NIPSCO to submit a timely permit application for NIPSCO System Units shall bar any use by NIPSCO of

Section XVI (Force Majeure) of this Consent Decree, where a Force Majeure claim is based on permitting delays.

- 168) Notwithstanding the reference to Title V permits in this Consent Decree, the enforcement of such permits shall be in accordance with their own terms and the Act. The Title V permits shall not be enforceable under this Consent Decree, although any term or limit established by or under this Consent Decree shall be enforceable under this Consent Decree regardless of whether such term has or will become part of a Title V permit, subject to the terms of Section XXIX (Conditional Termination of Enforcement Under Decree) of this Consent Decree.
- Consent Decree, NIPSCO shall amend any Title V permit application, or apply for modifications to its Title V permits to include a schedule for implementation of all Annual System Tonnage Limitations, as well as all Unit-specific performance, operational, maintenance, and control technology requirements established by this Consent Decree including, but not limited to, any required 30- or 365-Day Rolling Average Emission Rate or Removal Efficiency and the requirements pertaining to the Surrender of Allowances. Any modifications to the Title V permits or Title V permit applications pursuant to this Paragraph shall include a provision that recognizes that any noncompliance with Annual System Tonnage Limitation requirements constitutes a single violation for the NIPSCO System as a whole and does not create separate violations for each Unit or each facility within the NIPSCO System.
- 170) Within one (1) year from the Date of Entry of this Consent Decree,

 NIPSCO shall submit a written request that IDEM amend the Indiana SIP to incorporate all

of the following Consent Decree requirements: performance, operational, maintenance, and control technology requirements; emission rates; removal efficiencies; system-wide Annual Tonnage Limitations; allowance surrenders; limits on use of emission credits; and operation, maintenance and optimization requirements. Such request shall include not only requirements related to particular Units in the NIPSCO System but also those related to the NIPSCO System as a whole.

- As soon as practicable, but in no event later than ninety (90) days after the Indiana SIP is amended to include the requirements set forth in Paragraph 170 above, NIPSCO shall file a complete application to IDEM to incorporate the requirements of the Indiana SIP, as amended, into the Title V operating permit for each Facility. In making such an application, NIPSCO shall request that the Title V operating permit for each Facility: (i) refer to the section of the amended Indiana SIP that incorporates the system-wide requirements to comply with the Annual System Tonnage Limitation for NOx in Table 4, and the Annual System Tonnage Limitation for SO₂ in Table 6; and (ii) include a provision that recognizes that any noncompliance with any Annual System Tonnage Limitation constitutes a single violation for the NIPSCO System as a whole and does not create separate violations for each Unit or each facility within the NIPSCO System. The requirement to comply with the system-wide Annual System Tonnage Limitations for NOx and SO₂ shall continue to apply after the termination of the Consent Decree.
- NIPSCO shall provide Plaintiffs with a copy of its request for SIP amendment (as required in Paragraph 170, above) and its applications for Title V Permit modifications (as required in Paragraph 169 and 171, above), as well as a copy of any

permit proposed as a result of such application, to allow for timely participation in any public comment opportunity.

173) If NIPSCO sells or transfers to an entity unrelated to NIPSCO ("Third Party Purchaser") part or all of its Ownership Interest in the NIPSCO System or individual Units, NIPSCO shall comply with the requirements of Section XXII (Sales or Transfers of Ownership Interests) with regard to such Unit or Units prior to any such sale or transfer unless, following any such sale or transfer, NIPSCO remains the holder of the federally enforceable permit for such facility.

XX. INFORMATION COLLECTION AND RETENTION

- Any authorized representative of the United States, including its attorneys, contractors, and consultants, upon presentation of credentials, shall have a right of entry upon the premises of any facility in the NIPSCO System at any reasonable time for the purpose of:
 - a. monitoring the progress of activities required under this Consent Decree;
 - verifying any data or information submitted to the United States in accordance with the terms of this Consent Decree;
 - obtaining samples and, upon request, splits of any samples taken by
 NIPSCO or its representatives, contractors, or consultants; and
 - d. assessing NIPSCO's compliance with this Consent Decree.
- NIPSCO shall retain, and instruct its contractors and agents to preserve, all non-identical copies of all records and documents (including records and documents in electronic form) now in its or its contractors' or agents' possession or control, and that directly relate to NIPSCO's performance of its obligations under this Consent Decree for

the following periods: (a) until December 31, 2023, for records concerning physical or operational modifications that are subject to reopener provisions of Section XII, Subsection B of this Consent Decree; and (b) until December 31, 2019, for all other records. This record retention requirement shall apply regardless of any corporate document retention policy to the contrary.

All information and documents submitted by NIPSCO pursuant to this Consent Decree shall be subject to any requests under applicable law providing public disclosure of documents unless: (a) the information and documents are subject to legal privileges or protection; or (b) NIPSCO claims and substantiates in accordance with 40 C.F.R. Part 2 that the information and documents contain confidential business information.

177) Nothing in this Consent Decree shall limit the authority of the EPA to conduct tests and inspections at NIPSCO's facilities under section 114 of the Act, 42 U.S.C. § 7414, or any other applicable federal or state laws, regulations or permits.

XXI. NOTICES

178) Unless otherwise provided herein, whenever notifications, submissions, or communications are required by this Consent Decree, they shall be made in writing and addressed as follows:

As to the United States Department of Justice:

Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice P.O. Box 7611, Ben Franklin Station Washington, D.C. 20044-7611 DJ# 90-5-2-1-08417

As to EPA:

Director, Air Enforcement Division
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
Ariel Rios Building [2242A]
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

and

George Czerniak Chief, Air Enforcement and Compliance Assurance Branch EPA Region 5 (AE-17J) 77 West Jackson St. Chicago, IL 60604

As to the State of Indiana:

Phil Perry
Indiana Department of Environmental Management
Chief, Air Compliance Branch
100 North Senate Avenue
MC-61-53, IGCN 1003
Indianapolis, IN 46204-2251

As to the Northern Indiana Public Service Company:

Vice President, Operations NIPSCO 801 East 86th Ave. Merrillville, IN 46410

and

Chief Legal Officer NiSource, Inc. 801 East 86th Ave. Merrillville, IN 46410

- All notifications, communications or submissions made pursuant to this Section shall be sent either by: (a) overnight mail or overnight delivery service; or (b) certified or registered mail, return receipt requested. All notifications, communications and transmissions sent by overnight, certified or registered mail shall be deemed submitted on the date they are postmarked. If sent by overnight delivery service, they shall be deemed submitted on the date they are delivered to the delivery service.
- 180) Any Party may change the notice recipient, the address for providing notices or the means of transmittal to it by serving the other Party with a notice setting forth such new notice recipient, such new address or such changed means of transmittal (e.g., to electronic format).

XXII. SALES OR TRANSFERS OF OWNERSHIP INTERESTS

- 181) If NIPSCO proposes to sell or transfer any Ownership Interest in any System Unit to an entity unrelated to NIPSCO ("Third Party Purchaser"), it shall advise the Third Party Purchaser in writing of the existence of this Consent Decree prior to such sale or transfer, and shall send a copy of such written notification to Plaintiffs pursuant to Section XXI (Notices) of this Consent Decree at least sixty (60) days before such proposed sale or transfer.
- No sale or transfer of an Ownership Interest shall take place before the Third Party Purchaser and EPA have executed, and the Court has approved, a modification pursuant to Section XXV (Modification) of this Consent Decree making the Third Party Purchaser a party to this Consent Decree and jointly and severally liable with NIPSCO for all the requirements of this Decree that may be applicable to the transferred or purchased Ownership Interests.

- Ownership Interests between NIPSCO and any Third Party Purchaser so long as the requirements of this Consent Decree are met. This Consent Decree shall not be construed to prohibit a contractual allocation as between NIPSCO and any Third Party Purchaser of Ownership Interests of the burdens of compliance with this Decree, provided that both NIPSCO and such Third Party Purchaser shall remain jointly and severally liable to EPA for the obligations of the Decree applicable to the transferred or purchased Ownership Interests.
- 184) If EPA agrees, EPA, NIPSCO, and the Third Party Purchaser that has become a party to this Consent Decree, pursuant to Paragraph 182, may execute a modification that relieves NIPSCO of its liability under this Consent Decree for, and makes the Third Party Purchaser liable for, all obligations and liabilities applicable to the purchased or transferred Ownership Interests. Notwithstanding the foregoing, however, NIPSCO may not assign, and may not be released from, any obligation under this Consent Decree that is not specific to the purchased or transferred Ownership Interests, including the obligations set forth in Sections X (Environmental Mitigation Projects) and XI (Civil Penalty). NIPSCO may propose and EPA may agree to restrict the scope of the joint and several liability of any purchaser or transferee for any obligations of this Consent Decree that are not specific to the transferred or purchased Ownership Interests, to the extent such obligations may be adequately separated in an enforceable manner.
- 185) Paragraphs 182 and 184 of this Consent Decree does not apply if an Ownership Interest is sold or transferred solely as collateral security in order to consummate a financing arrangement (not including a sale-leaseback), so long as NIPSCO:

(a) remains the operator (as that term is used and interpreted under the Clean Air Act) of the NIPSCO System Units; (b) remains subject to and liable for all obligations and liabilities of this Consent Decree; and (c) supplies Plaintiffs with the following certification within 30 days of the sale or transfer:

Certification of Change in Ownership Interest Solely for Purpose of Consummating Financing. We, the Chief Executive Officer and General Counsel of the Northern Indiana Public Service Co., jointly certify under Title 18 U.S.C. section 1001, on our own behalf and on behalf of Northern Indiana Public Service Co. ("NIPSCO"), that any change in NIPSCO's Ownership Interest in any Unit that is caused by the sale or transfer as collateral security of such Ownership Interest in such Unit(s) pursuant to the financing agreement consummated on [insert applicable date] between NIPSCO and [insert applicable entity]: (a) is made solely for the purpose of providing collateral security in order to consummate a financing arrangement; (b) does not impair NIPSCO's ability, legally or otherwise, to comply timely with all terms and provisions of the Consent Decree entered in United States of America v. Northern Indiana Public Service Co.., Civil Action No. ; c) does not affect NIPSCO's operational control of any Unit covered by that Consent Decree in a manner that is inconsistent with NIPSCO's performance of its obligations under the Consent Decree; and d) in no way affects the status of NIPSCO's obligations or liabilities under that Consent Decree.

XXIII. EFFECTIVE DATE

The effective date of this Consent Decree shall be the Date of Entry as defined by Paragraph 19. If this Consent Decree is not entered by the Court in the form presented to the Court or the United States or the State of Indiana withhold consent to this Consent Decree before filing, its terms shall be null and void and the Parties shall have no obligation or rights hereunder and the terms of this Consent Decree shall not be used as evidence in any litigation between or among the parties to the Consent Decree.

XXIV. RETENTION OF JURISDICTION

187) The Court shall retain jurisdiction of this case after entry of this Consent

Decree to enforce compliance with the terms and conditions of this Consent Decree and to

take any action necessary or appropriate for its interpretation, construction, execution, modification, or adjudication of disputes. During the term of this Consent Decree, any Party to this Consent Decree may apply to the Court for any relief necessary to construe or effectuate this Consent Decree.

XXV. MODIFICATION

188) The terms of this Consent Decree may be modified only by a subsequent written agreement signed by the Plaintiffs and NIPSCO. Where the modification constitutes a material change to any term of this Consent Decree, it shall be effective only upon approval by the Court.

XXVI. GENERAL PROVISIONS

- This Consent Decree is not a permit. Compliance with the terms of this Consent Decree does not guarantee compliance with all applicable federal, state, or local laws or regulations. The emission rates set forth herein do not relieve Defendant from any obligation to comply with other state and federal requirements under the Clean Air Act, including Defendant's obligation to satisfy any state modeling requirements set forth in the Indiana State Implementation Plan.
- 190) This Consent Decree does not apply to any claim(s) of alleged criminal liability.
- 191) In any subsequent administrative or judicial action initiated by Plaintiffs for injunctive relief or civil penalties relating to the facilities covered by this Consent Decree, Defendant shall not assert any defense or claim based upon principles of waiver, res judicata, collateral estoppel, issue preclusion, claim preclusion, or claim splitting, or any other defense based upon the contention that the claims raised by Plaintiffs in the

subsequent proceeding were brought, or should have been brought, in the instant case; provided, however, that nothing in this Paragraph is intended to affect the validity of Section XII (Resolution of Claims).

- Except as specifically provided by this Consent Decree, nothing in this Consent Decree shall relieve Defendant of its obligation to comply with all applicable federal, state, and local laws and regulations. Subject to the provisions in Sections XII (Resolution of Claims), nothing contained in this Consent Decree shall be construed to prevent or limit the rights of Plaintiffs to obtain penalties or injunctive relief under the Act or other federal, state, or local statutes, regulations, or permits.
- 193) Every term expressly defined by this Consent Decree shall have the meaning given to that term by this Consent Decree and, except as otherwise provided in this Consent Decree, every other term used in this Consent Decree that is also a term under the Act or the regulations implementing the Act shall mean in this Consent Decree what such term means under the Act or those implementing regulations.
- Nothing in this Consent Decree is intended to, or shall, alter or waive any applicable law (including but not limited to any defenses, entitlements, challenges, or clarifications related to the Credible Evidence Rule, 40 C.F.R. § 52.12(c) (62 Fed. Reg. 8314; Feb. 24, 1997)) concerning the use of data for any purpose under the Act.
- 195) Each limit and/or other requirement established by or under this Consent Decree is a separate, independent requirement.
- 196) Performance standards, emissions limits, and other quantitative standards set by or under this Consent Decree must be met to the number of significant digits in which the standard or limit is expressed. For example, an Emission Rate of 0.070

lb/mmBTU is not met if the actual Emission Rate is 0.071 lb/mmBTU. NIPSCO shall round the fourth significant digit to the nearest third significant digit, or the third significant digit to the nearest second significant digit, depending upon whether the limit is expressed to three or two significant digits. For example, if an actual Emission Rate is 0.0704, that shall be reported as 0.070, and shall be in compliance with an Emission Rate of 0.070, and if an actual Emission Rate is 0.0705, that shall be reported as 0.071, and shall not be in compliance with an Emission Rate of 0.070. NIPSCO shall report data to the number of significant digits in which the standard or limit is expressed.

- 197) This Consent Decree does not limit, enlarge or affect the rights of any Party to this Consent Decree as against any third parties.
- agreement and understanding among the Parties with respect to the settlement embodied in this Consent Decree, and supercedes all prior agreements and understandings among the Parties related to the subject matter herein. No document, representation, inducement, agreement, understanding, or promise constitutes any part of this Consent Decree or the settlement it represents, nor shall they be used in construing the terms of this Consent Decree.
 - 199) Each Party to this action shall bear its own costs and attorneys' fees.
- 200) The Parties expressly recognize that whenever this Consent Decree specifies that a 30- Day Rolling Average Emission Rate or a 30-Day Rolling Average Removal Efficiency shall be achieved and/or maintained commencing or starting by or no later than a certain day or date, then compliance with such Rate or Removal Efficiency shall commence immediately upon the date specified, and that compliance as of such

specified date (e.g. December 30) shall be determined based on data from that date and the 29 prior Unit Operating Days (e.g. December 1-29).

- 201) The Parties expressly recognize that whenever this Consent Decree specifies that a Monthly SO₂ Removal Efficiency shall be achieved and/or maintained at Bailly commencing or starting by or no later than a certain month, then that certain month shall be the first month included in the specified Monthly SO₂ Removal Efficiency (e.g., where the Decree specifies that a 95% Monthly SO₂ Removal Efficiency is to be achieved and maintained no later than January 2011, then January 2011 shall be the first month included in the first Monthly SO₂ Removal Efficiency period, and no day or month prior to January 2011 shall be subject to the Monthly SO₂ Removal Efficiency requirement or included in any calculation to determine compliance with such removal efficiency).
- 202) The Parties expressly recognize that whenever this Consent Decree specifies that a 365-Day Rolling Average Emission Rate shall be achieved and/or maintained commencing or starting by, on, or no later than a certain day or date, then that certain day or date, if it is an Operating Day, or if it is not an Operating Day then the first Operating Day thereafter, shall be the first day subject to that specified 365-Day Rolling Average Emission Rate (e.g., if the specified 365-Day Rolling Average Emission Rate is to be achieved and maintained from January 1, 2014 through December 31, 2014, and January 1, 2014 is an Operating Day, then January 1, 2014 shall be the first day included in the first 365-Day Rolling Average Emission Rate period, and no day prior to January 1, 2014 shall be subject to that specified 365-Day Rolling Average Emission Rate requirement or included in any calculation to determine compliance with such rate).

XXVII. SIGNATORIES AND SERVICE

- 203) Each undersigned representative of the Parties certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind to this document the Party he or she represents.
- 204) This Consent Decree may be signed in counterparts, and such counterpart signature pages shall be given full force and effect.
- 205) Each Party hereby agrees to accept service of process by mail with respect to all matters arising under or relating to this Consent Decree and to waive the formal service requirements set forth in Rule 4 of the Federal Rules of Civil Procedure and any applicable Local Rules of this Court including, but not limited to, service of a summons.
- 206) Unless otherwise ordered by the Court, the Plaintiffs agree that the Defendant will not be required to file any answer or other pleading responsive to the Complaint in this matter until and unless the Court expressly declines to enter this Consent Decree, in which case Defendant shall have no less than thirty (30) days after receiving notice of such express declination to file an answer or other pleading in response to the Complaint.

XXVIII. PUBLIC COMMENT

207) The Parties agree and acknowledge that final approval by the United States and entry of this Consent Decree is subject to the procedures of 28 C.F.R. § 50.7, which provides for notice of the lodging of this Consent Decree in the Federal Register, an opportunity for public comment, and the right of the United States to withdraw or withhold consent if the comments disclose facts or considerations which indicate that the Consent Decree is inappropriate, improper or inadequate. Defendant shall not oppose entry of this

Consent Decree by this Court or challenge any provision of this Consent Decree unless the United States or the State of Indiana has notified Defendant, in writing, that the United States or the State of Indiana no longer supports entry of the Consent Decree.

XXIX. CONDITIONAL TERMINATION OF ENFORCEMENT UNDER DECREE

- 208) Termination as to Completed Tasks. As soon as NIPSCO completes a construction project or any other requirement of this Consent Decree that is not ongoing or recurring, NIPSCO may, by motion to this Court, seek termination of the provision or provisions of this Consent Decree that imposed the requirement.
- 209) Conditional Termination of Enforcement Through the Consent Decree.

 After NIPSCO:
 - has successfully completed construction, and has maintained operation, of all pollution controls as required by this Consent Decree;
 - b. has obtained final permits and SIP revisions that incorporate the
 requirements of this Consent Decree, as enforceable permit terms or
 enforceable SIP terms, of all of the Unit performance and other
 requirements specified in Section XIX (Permits and SIP Revisions) of this
 Consent Decree; and
 - c. certifies that the date is later than December 31, 2018, then NIPSCO may so certify these facts to Plaintiffs and this Court. If Plaintiffs do not object in writing with specific reasons within forty-five (45) days of receipt of NIPSCO's certification, then, for any Consent Decree violations that occur after the filing of notice, Plaintiffs shall pursue enforcement of the requirements contained in the Indiana SIP and Title V permit through the

United States of America v. Northern Indiana Public Service Co.

FOR THE UNITED STATES OF AMERICA:

Susan Hedman

Regional Administrator

United States Environmental Protection Agency Region 5

Robert A. Kaplan

Regional Counsel

United Stated Environmental Protection Agency Region 5

Louise C. Gross

Associate Regional Counsel

United States Environmental Protection Agency Region 5

United States of America v. Northern Indiana Public Service Co.

FOR THE UNITED STATES OF AMERICA:

Cynthia Giles

Assistant Administrator

Office of Enforcement and Compliance Assurance United States Environmental Protection Agency

Phillip A. Brooks

Director, Air Enforcement Division

Office of Enforcement and Compliance Assurance United States Environmental Protection Agency

Seema Kakade

Attorney Advisor, Air Enforcement Division Office of Enforcement and Compliance Assurance United States Environmental Protection Agency

United States of America Northern Indiana Public Service Co.

FOR THE UNITED STATES OF AMERICA:

David Capp United States Attorney Northern District of Indiana

Wayne T. Ault

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Hammond, Indiana 46320

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United States of America v.
Northern Indiana Public Service Co.

FOR THE UNITED STATES OF AMERICA:

Ignaeia S. Moreno

Assistant Attorney General

Environmental and Natural Resources Division

United States Department of Justice

Jerome W. MacLaughlin

Trial Attorney

Environmental Enforcement Section

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Indiana SIP and applicable Title V permit, and not through this Consent Decree.

Paragraph 209 above, if enforcement of a provision in this Consent Decree cannot be pursued by a party under the Indiana SIP or applicable Title V permit, or if a Consent Decree requirement was intended to be part of the Indiana SIP or the applicable Title V Permit and did not become or remain part of such SIP or permit, then such requirement may be enforced under the terms of this Consent Decree at any time.

XXX. FINAL JUDGMENT

211) Upon approval and entry of this Consent Decree by the Court, this Consent Decree shall constitute a final judgment among Plaintiffs and NIPSCO.

SO ORDERED, THIS	DAY OF	
	HONORABLE	

UNITED STATES DISTRICT COURT JUDGE

United States of America Northern Indiana Public Service Co.

FOR THE STATE OF INDIANA:

FOR THE STATE OF INDIANA, ON BEHALE OF THE INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

Thomas W. Easterly Commissioner

Indiana Department of Environmental Management

As to form and legality:

Gregory F. Zoeller

Indiana Attorney/General

Patricia Orloff Erdmann Chief Counsel for Litigation

Office of the Attorney General

Indiana Government Center South

5th Floor

302 West Washington Street

Indianapolis, Indiana 46204

APPENDIX A: ENVIRONMENTAL MITIGATION PROJECTS

In compliance with and in addition to the requirements in Section XI of this Consent Decree (Environmental Mitigation Projects), NIPSCO shall comply with the requirements of this Appendix to ensure that the benefits of the \$9.5 million in federally directed Environmental Mitigation Projects (Projects) are achieved.

I. Overall Environmental Projects Schedule

- A. Within the specified time delineated for each Project, as further described below, NIPSCO shall submit proposed Project plan(s) to EPA for review and approval pursuant to Section XIV of the Consent Decree (Review and Approval of Submittals) for expenditure of the Project Dollars specified in this Appendix in accordance with the deadlines established in this Appendix. EPA shall determine, prior to approval, that all Projects are consistent with federal law.
- B. Beginning one hundred and twenty (120) days from the Date of Entry, and continuing annually thereafter until completion of each Project (including any applicable periods of demonstration or testing), NIPSCO shall provide EPA with written reports detailing the progress of each Project, including an accounting of Project Dollars spent to date.
- C. All proposed Project plans shall include the following:
 - 1. A plan for implementing the Project;
 - 2. A summary-level budget for the Project;
 - 3. A time-line for implementation of the Project; and
 - 4. A description of the anticipated environmental benefits of the Project, including an estimate of emission reductions (e.g., SO₂, NOx, PM, CO₂) expected to be realized.
- D. Upon approval by EPA of the plan(s) required by this Appendix, NIPSCO shall complete the approved Project(s) according to the approved plan(s). Nothing in this Consent Decree shall be interpreted to prohibit NIPSCO from completing the Project(s) ahead of schedule.
- E. In accordance with the requirements of Paragraph 114, within 60 days following the completion of each Project, NIPSCO shall submit to EPA for approval a report that documents:
 - 1. The date the Project was completed;
 - 2. The results of implementation of the Project, including the estimated emission reductions or other environmental benefits achieved; and
 - 3. The Project Dollars incurred by NIPSCO in implementing the Project.

II. Environmental Mitigation Projects

A. <u>Clean Diesel Retrofit Project</u>

- 1. Within 120 day of the Date of Entry, NIPSCO shall propose to EPA for review and approval a plan, in consultation with IDEM, to retrofit in-service diesel engines with emission control equipment further described in this Section, designed to reduce emissions of particulates and/or ozone precursors (the "Clean Diesel Retrofit Project") and to fund the operation and maintenance of the retrofit equipment for the time-period described below. The Project shall include, where necessary, techniques and infrastructure needed to support such retrofits. NIPSCO shall ensure, or direct any third party contractor or partner to ensure, that the recipients operate and maintain the retrofit equipment for five years from the date of installation by providing funding for operation and maintenance as described in Section II.A.2.g, below.
- 2. In addition to the requirements of Section I. C. of this Appendix, the plan shall also satisfy the following criteria:
 - a. Involve vehicles based in and equipment located in NIPSCO's service territory in northern Indiana, bordered by the cities of Gary-Hammond, Michigan City, South Bend-Elkhart, and Fort Wayne.
 - b. Provide for the retrofit of public diesel engines with EPA or California Air Resources Board ("CARB") verified emissions control technologies to achieve the greatest reasonably possible mass reductions of particulates and/or ozone precursors for the fleet(s) that participate(s) in the Clean Diesel Retrofit Project. Depending upon the particular EPA or CARB verified emissions control technology selected, the retrofit diesel engines will be expected to achieve emission reductions of particulates and/or ozone precursors by 30%-90%.
 - c. Describe the process NIPSCO will use to determine the most appropriate emissions control technology for each particular diesel engine that will achieve the greatest reasonably possible mass reduction of particulates and/or ozone precursors. In making this determination, NIPSCO must take into account the particular operating criteria required for the EPA or CARB verified emissions control technology to achieve the verified emissions reductions.
 - d. Provide for the retrofit of diesel engines with either: (a) diesel particulate filters (DPF); (b) diesel oxidation catalysts (DOC); or (c) closed crankcase ventilation systems with either DPF or DOC.
 - e. Describe the process NIPSCO will use to notify fleet operators and owners within the geographic area specified in Section II.A.2.a that their fleet of vehicles may be eligible to participate in the Clean Diesel Retrofit Project and to solicit their interest in participating in the Project.

- f. Describe the process and criteria NIPSCO will use to select the particular fleet operator and owner to participate in this Project, consistent with the requirements of this Section.
- For each of the recipient fleet owners and operators, describe the amount of Project Dollars that will cover the costs associated with: (a) purchasing the verified emissions control technology, (b) installation of the verified emissions control technology (including datalogging), (c) training costs associated with repair and maintenance of the verified emissions control technology (including technology cleaning and proper disposal of waste generated from cleaning), and (d) the incremental costs for repair and maintenance of the retrofit equipment (i.e., DPF, DOC, closed crankcase ventilation system) for five years from the date of installation, including the costs associated with the proper disposal of the waste generated from cleaning the verified emissions control technology. This Project shall not include costs for normal repair or operation of the retrofit diesel fleet. Include a mechanism to ensure that recipients of the retrofit equipment will bind themselves to follow the operating criteria required for the verified emissions control technology to achieve the verified emissions reductions and properly maintain the retrofit equipment installed in connection with the Project for the period beginning on the date the installation is complete through December 31, 2015.
- h. Describe the process NIPSCO will use for determining which diesel engines in a particular fleet will be retrofitted with the verified emissions control technology, consistent with the criteria specified in Section II.A.2.b.
- i. Ensure that recipient fleet owners and/or operators, or their funders, do not otherwise have a legal obligation to reduce emissions through the retrofit of diesel engines.
- j. For any third party with whom NIPSCO might contract to carry out this Project, establish minimum standards that include prior experience in arranging retrofits, and a record of prior ability to interest and organize fleets, school districts, and community groups to join a clean diesel program.
- k. Direct the recipient fleet(s) to comply with local, state, and federal requirements for the disposal of the waste generated from the verified emissions control technology and follow CARB's guidance for the proper disposal of such waste, provided however, that NIPSCO shall not be a guarantor of or responsible for the actions or omissions of the recipients.
- l. Include a schedule and budget for completing each portion of the Project, including funding for operation and maintenance of the retrofit equipment through December 31, 2015.

3. In addition to the information required to be included in the report pursuant to Section I.C, NIPSCO shall also describe the fleet owner/operator; where it implemented this Project; the particular types of verified emissions control technology (and the number of each type) that it installed pursuant to this Project; the type, year, and horsepower of each vehicle; an estimate of the number of citizens affected (if applicable) by this Project, and the basis for this estimate; and an estimate of the emission reductions for Project or engine, as appropriate (using the manufacturer's estimated reductions for the particular verified emissions control technology), including particulates, hydrocarbons, carbon monoxide, and nitrogen oxides.

B. Wood Stove and Wood Outdoor Boiler Changeout Project

- 1. Within 120 days of the Date of Entry, NIPSCO shall propose a plan to sponsor a Wood-burning Changeout and Retrofit Project ("Wood Stove/Boiler Changeout and Retrofit Project") that a state or local government agency ("air pollution control agency") or third-party non-profit will agree to implement in an area that would benefit from reductions of fine particle pollution and/or hazardous air pollutants by replacing, or retrofitting or upgrading inefficient, higher polluting wood-burning stoves and outdoor boilers with Energy Star qualified Heat Pumps, EPA Phase 2 hydronic heaters, natural gas boilers of 90% or higher AFUE, natural gas furnaces of 92% or higher AFUE or EPA-certified wood-stoves and/or cleaner burning, more energy-efficient hearth appliances (e.g., wood pellet, gas, or propane stove).
- 2. Any Wood Stove/Boiler Changeout and Retrofit Project that NIPSCO sponsors shall provide educational information (including, energy efficiency, health and safety benefits, and outreach regarding cleaner-burning alternatives and proper operation of the new technology) and incentives through rebates, discounts, or in some instances, actual replacement of the old technology wood-burning stoves or boilers for income-qualified residential homeowners, to encourage residential homeowners to replace their old, higher polluting and less energy efficient wood stoves or outdoor boilers.
- 3. NIPSCO shall sponsor the implementation of any Wood Stove/Boiler Changeout and Retrofit Project in NIPSCO's service area(s) in northern Indiana, bordered by the cities of Gary-Hammond, Michigan City, South Bend-Elkhart, and Fort Wayne that promise significant environmental benefit from the Wood Stove/Boiler Changeout and Retrofit Project. The Wood Stove/Boiler Changeout and Retrofit Project shall also include the counties of LaPorte, Lake, and Porter. In determining the specific areas to implement this Project within the aforementioned geographic area, NIPSCO shall give priority to areas with high amounts of air pollution, especially particle pollution and/or hazardous air pollutants, areas located within a geography and topography that makes it susceptible to high levels of particle pollution, or areas that have a significant number of old and/or higher polluting wood-burning stoves or outdoor boilers.
- 4. The air pollution control agency(ies) and/or non-profit(s) that NIPSCO selects shall consult with EPA's wood smoke team and implement any Wood Stove/Boiler Changeout and Retrofit Project consistent with the materials available on EPA's Burn

Wise website at http://www.epa.gov/burnwise.

- 5. In addition to the requirements of Section I.C, any plan to implement this Project shall also satisfy the following criteria:
 - a. Identify the air pollution control agency(ies) and/or non-profit(s) selected to implement the Wood Stove/Boiler Changeout and Retrofit Project.
 - b. Describe the schedule and budgetary increments in which NIPSCO shall provide the necessary funding to the air pollution control agency(ies) and/or non-profits(s) to implement any Wood Stove/Boiler Changeout and Retrofit Project.
 - c. Ensure that the air pollution control agency(ies) and/or non-profit(s) will implement any Wood Stove/Boiler Changeout and Retrofit Project in accordance with the requirements of this Appendix, and that the Project Dollars will be used to support the actual replacement, upgrade or retrofit of stoves/boilers currently used as the primary or secondary source of residential heat with a cleaner, more energy efficient stove/boiler (i.e., geothermal heat pump, wood pellet stove, EPAcertified wood stove, gas stove, EPA Phase 2 qualified hydronic heater, natural gas boiler of 90% or higher AFUE, natural gas furnace of 92% or higher AFUE or propane stove). To enable the project to carry on in the future, funds may be used to support changeout/upgrades through revolving loan programs or other lowinterest loan programs. NIPSCO shall limit the use of Project Dollars for administrative costs associated with implementation of the program to no greater than 10% of the Project Dollars NIPSCO provides to a specific air pollution control agency and/or non-profit. Up to 7% can be used for personnel cost and the remaining 3 % for other (e.g., outreach materials, training, studies/surveys, travel) project support costs.
 - d. Describe all of the elements of any Wood Stove/Boiler Changeout and Retrofit Project that the air pollution control agency(ies) and/or nonprofit(s) will implement. NIPSCO shall describe and estimate the number of energy efficient appliances it intends to make available, the cost per unit, and the criteria the air pollution control agency(ies) and/or nonprofit(s) will use to determine which residential homeowners should be eligible for actual stove replacement.
 - e. If applicable, identify any organizations with which the air pollution control agency(ies) and/or non-profit(s) will partner to implement the Project, including such organizations as: the Hearth, Patio, and Barbecue Association of America, the Chimney Safety Institute of America, a local chapter of the American Lung Association, individual stove retailers, propane dealers, facilities that will dispose of old stoves so that they cannot be resold or reused, housing assistance agencies, local fire departments, local health organizations, and local green energy organizations.

f. Describe how the air pollution control agency(ies) and/or non-profit(s) will ensure that the old and/or higher polluting wood-burningstove/boiler will be properly recycled or disposed.

C. <u>Land Acquisition and Restoration Project in Northwest Indiana</u>

- 1. Within 45 days from the Date of Entry, NIPSCO shall establish a stakeholder process to solicit input into the funding of land acquisition or restoration Project(s) of lands adjacent to, or near, the Indiana Dunes National Lakeshore, and may include other lands in the northwest Indiana area, potentially affected by emissions form one or more of the NIPSCO Units. The stakeholder process will consist of a maximum of five members and, at minimum, shall include a representative from The Indiana Dunes National Lakeshore, a representative from Indiana Department of Natural Resources, and a representative from an environmental organization such as the Nature Conservancy.
- 2. The goal of this Project will be the protection through acquisition and/or restoration of ecologically significant land, watersheds, vegetation, and forests within northwest Indiana using adaptive management techniques designed to improve ecosystem health and mitigate harmful effects from air pollution. For purposes of this Appendix and Section XI of this Consent Decree (Environmental Mitigation Projects), land acquisition means purchase or transfer of interests in land, including fee ownership, easements, or other restrictions that run with the land that provide for perpetual protection of the acquired land. The transfer of property or land interests by NIPSCO to any governmental or nongovernmental organization shall be credited at fair market value and must provide for perpetual protection of the land. Restoration may include, by way of illustration, direct reforestation (particularly of tree species that may be affected by acidic deposition) and soil enhancement. Any restoration action must also incorporate the acquisition of an interest in the restored lands sufficient to ensure perpetual protection of the restored land, unless the land restored is already under the ownership of a governmental entity that has a legal duty to conserve the land in perpetuity. Any proposal for acquisition of land must identify fully all owners of the interests in the land. Every proposal for acquisition or transfer of land must identify the ultimate holder of the interests to be acquired and provide a basis for concluding that the proposed holder of title is appropriate for longterm protection of the ecological and/or environmental benefits sought to be achieved through the acquisition.
- 3. The Project(s) will focus on lands adjacent to, or near, the Indiana Dunes National Lakeshore, and may include other lands in the northwest Indiana area, potentially affected by emissions from one or more of the NIPSCO Units. Examples of Projects include:
 - a. Acquire and Restore Disturbed Land at NIPSCO Michigan City Plant and Crescent Dune Area: Funding this Project would provide for acquisition, cleanup, invasive species control, and restoration of approximately 246 acres at and around the NIPSCO Michigan City site; and

- b. Acquire, Restore, and Donate Land Adjacent to Indiana Dunes National Lakeshore: Funding for this Project would provide for acquisition and restoration of lands adjacent to the National Lakeshore and would include the transfer of title to such lands, or the granting of an easement over such lands, to the National Park Service.
- 4. Within one year of Date of Entry of this Consent Decree, through the stakeholder process described in II.C.1 above, NIPSCO will identify and provide recommendations for specific Projects to EPA for approval.

D. Funding Obligations for Section II Environmental Projects

- 1. Within three years of the Date of Entry of this Consent Decree, NIPSCO will have completed the expenditure of a minimum of \$3,500,000 to fund and implement the approved Clean Diesel and Wood Stove Changeout Projects as described in II.A and II.B. NIPSCO shall retain the discretion to determine how best to allocate the minimum \$3,500,000 in Project Dollars between the approved Clean Diesel and Wood Stove Changeout Projects.
- 2. Within three years of the Date of Entry of this Consent Decree, NIPSCO will have completed the expenditure of a minimum of \$1,500,000 and a maximum of \$2,000,000 to fund and implement the approved Land Acquisition and Restoration Project as described in II.C.

III. Additional Environmental Mitigation Projects

- A. Within 1 year of the Date of Entry, as further described below, NIPSCO shall submit proposed Project plan(s) to EPA for review and approval pursuant to Section XIV of the Consent Decree (Review and Approval of Submittals) for expenditure of the remaining Project Dollars over a period of not more than five years from the Date of Entry, except as provided below. NIPSCO shall not spend more than \$2 million of the remaining Project Dollars on a single project in this Section III "Additional Environmental Mitigation Projects." The Parties agree, subject to the requirements of this Appendix, that NIPSCO may in its discretion decide which of the Projects specified in Sections III.C, and D, of this Appendix to propose for EPA approval. NIPSCO may, at its election, consolidate the plans required by this Appendix into a single plan. In addition, NIPSCO may propose during the five year period to make amendments or modifications to the plan or plans for EPA review and approval. NIPSCO has no current obligation to undertake any of the Projects described below in Sections III.C, D, and E.
- B. The Parties agree that NIPSCO is entitled to spread its payments for Projects over the five-year period commencing upon the Date of Entry. NIPSCO is not, however, precluded from accelerating payments to better effectuate a proposed mitigation plan, provided that NIPSCO shall not be entitled to any reduction in the nominal amount of the required payments by virtue of the early expenditures. EPA shall determine prior to approval that all Projects are consistent with federal law.

C. <u>Hybrid Fleet Project</u>

- 1. NIPSCO may elect to submit a plan for a hybrid and/or electric fleet project to reduce emissions from NIPSCO's fleet of motor vehicles. NIPSCO has a substantial fleet of motor vehicles where it operates. These motor vehicles are generally powered by conventional diesel or gasoline engines and include vehicles such as diesel "bucket" trucks. The use of hybrid engine technologies in NIPSCO's motor vehicles, such as diesel-electric engines, will improve fuel efficiency and reduce emissions of NOx, PM, VOCs, and other air pollutants.
- 2. As part of any plan for the Hybrid Fleet Project, assuming that NIPSCO elects to undertake this Project, NIPSCO may elect to spend Project Dollars on the replacement of conventional motor vehicles in its fleet with newly manufactured hybrid and/or electric vehicles.
- 3. In addition to the requirements of Section I.C of this Appendix, any plan for the Hybrid Fleet Project shall:
 - a. Propose the replacement of convention diesel engines in bucket trucks or other mobile sources with hybrid or electric engines, and/or propose the replacement of portions of NIPSCO's fleet (including cars, vans, and pickup trucks) with hybrid and/or electric vehicles. For purposes of this subsection of this Appendix, "hybrid and/or electric vehicle" means a vehicle that can generate and/or utilize electric power to reduce the vehicles consumption of diesel or gasoline fuel. Any such vehicle proposed for inclusion in the Hybrid Fleet Project shall meet all applicable engine standards, certifications, and/or verifications.
 - b. Propose a method to account for the amount of Project Dollars that will be credited for each replacement made under subparagraph (a) above, taking into account the incremental cost of such engines or vehicles as compared to conventional engines or vehicles and potential savings associated with the replacement;
 - c. Prioritize the replacement of diesel-powered vehicles in NIPSCO's fleet. Certify that NIPSCO will use the Hybrid Vehicles for their useful life (as defined in the proposed Plan).
- 4. Notwithstanding any other provision of this Consent Decree, including this Appendix, NIPSCO shall only receive credit toward Project Dollars for the incremental cost of hybrid and/or electric vehicles as compared to the cost of a newly manufactured, similar motor vehicle powered by conventional diesel or gasoline engines.

D. Electric Vehicle Infrastructure Enhancement

- 1. NIPSCO may undertake enhancements to the electric vehicle charging infrastructure by funding creation of one or more charging stations for electric vehicles in the Northwest Indiana area bordered by the cities of Gary-Hammond, Michigan City, South Bend-Elkhart, and Fort Wayne. Battery powered and some hybrid vehicles need plug-in infrastructure to recharge the batteries. Establishment of electric vehicle charging stations in Northwest Indiana could expand the useful driving range of electric vehicles in the Chicago metropolitan area as well as encourage Northwest Indiana drivers to purchase electric vehicles for local use as well as commutes to Chicago. Locations for such charging stations would be targeted for areas where vehicles could be left for several hours to fully charge the electric vehicle's battery system.
- 2. If NIPSCO elects to undertake this Project, it may partner with third party organizations (e.g., NIRPC, SSCC) to handle funding and selection of locations in Northwest Indiana. Locations would be sought to maximize the number of vehicles that could utilize the chargers while striving to expand into Northwest Indiana the network of electric vehicle charging stations currently in the Illinois portion of the greater Chicago metropolitan area. Potential sites could consist of locations that provide public access, including parking lots at mass transit terminals/stops (such as South Shore Commuter Rail stations, RDA bus stops), large industrial facilities or similar employers (NIPSCO, Methodist Hospital, steel mills), residences, and and shopping malls in Lake and Porter counties.
- 3. Emission reductions overall emissions reductions would depend upon the number of vehicles utilizing the facilities and would be based upon the type of vehicle the electric vehicle replaces in the general geographic area, the emissions characteristics and the annual vehicle miles traveled (VMT). For the term of this project NIPSCO would commit to effectively supply the vehicle charging station with zero emission renewable energy sources through the use of renewable energy credits (RECs). Therefore the usage would be considered emission free. NIPSCO will report the expected and achieved environmental benefits.
- 4. NIPSCO may consider and implement additional options to enhance electric vehicle usage, such as to:
 - a. Provide a purchase incentive for acquisition of plug-in hybrid electric vehicle (PHEV), pure battery electric vehicle (EV), or lesser incentive to a conventional vehicle converted to a plug-in
 - b. Fund low-interest loans through banks and dealers for plug-in vehicles
 - c. Provide direct cash incentives to consumers for vehicle purchase.

E. Residential and Commercial Electric to Natural Gas Conversion Project

- 1. NIPSCO may submit a plan to EPA to implement a Residential and Commercial Electric to Natural Gas Conversion Project ("Conversion Project") to reduce life cycle SO₂, NOx, and PM and other air emissions resulting from residential and commercial space and water heating energy usage. If NIPSCO elects to perform this Conversion Project, the Conversion Project will consist of specific measures that will produce long-term, permanent, environmental benefits by the removal and replacement of electric resistance furnaces and water heaters with new high efficiency natural gas furnaces (92% or higher AFUE) and natural gas water heaters. The reduction in emissions of SO₂, NOx, PM, and other air emissions would occur based on the more efficient energy delivery by natural gas compared to electricity (approximately 92% delivery efficiency for natural gas versus 32% delivery efficiency for electricity) and the use of inherently cleaner burning natural gas compared to the overall predominance of coal based fuels in this subregion. The Conversion Project will be performed in and demonstrate SO₂, NOx, PM and other air emission benefits to communities in northern Indiana, bordered by the cities of Gary-Hammond, Michigan City, South Bend-Elkhart, and Fort Wayne area and provide benefits beyond what is required of NIPSCO under any Indiana Utility Regulatory Commission statewide mandate.
- 2. If NIPSCO elects to undertake this Conversion Project, it may partner with third party organizations to handle funding and selection of residences and commercial establishments for the removal of electric resistance furnaces and water heaters and replacement with natural gas-fired units.

IN THE UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF OHIO EASTERN DIVISION

UNITED STATES OF AMERICA, et al.,)	
Plaintiffs,)	
V.))	Civil Action No: 2:99-CV-1181 JUDGE EDMUND A. SARGUS, JR.
OHIO EDISON COMPANY and PENNSYLVAN POWER COMPANY, subsidiary of Ohio Edison,	IA)	
Defendants.)	

CONSENT DECREE

March 18, 2005

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CONSENT DECREE

WHEREAS, Plaintiff, the United States of America ("the United States"), on behalf of the United States Environmental Protection Agency ("EPA"), and Plaintiffs-Intervenors, the States of New York, New Jersey and Connecticut ("States"), filed complaints or amended complaints for injunctive relief and civil penalties pursuant to Sections 113(b)(2) and 167 of the Clean Air Act (the "Act"), 42 U.S.C. §§ 7413(b)(2) and 7477, and Section 304(a) of the Act, 42 U.S.C. § 7604(a), alleging that Defendants, Ohio Edison Company and Pennsylvania Power Company, a subsidiary of Ohio Edison ("Ohio Edison"), which in turn is a subsidiary of FirstEnergy Corp. ("FirstEnergy"), undertook construction projects at major emitting facilities in violation of the Prevention of Significant Deterioration provisions of Part C of Subchapter I of the Act, 42 U.S.C. §§ 7470-7492, the New Source Review provisions of the Act, 42 U.S.C. §§ 7501-7515, and in violation of the federally approved and enforceable Ohio State Implementation Plan;

WHEREAS, in its Amended Complaint, the United States and the States ("Plaintiffs") allege, inter alia, that Ohio Edison failed to obtain the necessary permits and install the controls necessary under the Act to reduce its sulfur dioxide, nitrogen oxides, and/or particulate matter emissions;

WHEREAS, the Amended Complaint alleges claims upon which relief can be granted against Ohio Edison under Sections 113 and 167 of the Act, 42 U.S.C. §§ 7413 and 7477;

WHEREAS, the United States and some or all of the States provided Ohio Edison and the State of Ohio with actual notice of Ohio Edison's alleged violations in accordance with Section 113(a)(1) of the Act, 42 U.S.C. § 7413(a)(1);

WHEREAS, on August 7, 2003, the United States District Court for the Southern District of Ohio, Eastern Division, issued an opinion in the liability phase of this matter holding that Ohio Edison failed to obtain pre-construction permits for eleven projects it undertook at its Sammis Plant; and further held that the projects were "major modifications" and that Ohio Edison had violated 42 U.S.C. § 7475 and associated regulations; but did not reach the remedy phase of the trial and did not address the level of air pollution controls or other remedies required, if any, or the level of impact, if any, to public health or the environment;

WHEREAS, there are unique difficulties associated with retrofitting SCRs and FGDs at the smaller units (Units 1-5) at the Sammis Plant, due to the location of the Sammis Plant between State Route 7 and the Ohio River to the east and steep terrain to the west, prior retrofitting of particulate emission control devices located on decking built over State Route 7, existing facilities to the north and south of the plant, and the close proximity between the seven Sammis Plant units, and the Parties have considered these circumstances and overall benefit to the environment in reaching agreement herein;

WHEREAS, the Clean Air Interstate Rule ("CAIR") was proposed on January 30, 2004 and a Supplemental Proposal was proposed on June 10, 2004 (69 Fed. Reg. 4,566 (Jan. 30, 2004); 69 Fed. Reg. 32,684 (June 10, 2004)); and CAIR was promulgated as a final rule on March 9, 2005, it is anticipated that under CAIR, other owners of electric generating units in affected areas also will reduce their emissions of NO_X and SO_2 ;

WHEREAS, the Parties recognize, and the Court by entering this Consent Decree finds, that this Consent Decree has been negotiated in good faith and at arm's length and that this Consent Decree is fair, reasonable, consistent with the goals of the Act, and in the public interest;

WHEREAS, the Parties have consented to entry of this Consent Decree without trial on remedy;

WHEREAS, the Parties have agreed that settlement of this action is in the best interest of the Parties and in the public interest, and that entry of this Consent Decree without further litigation is the most appropriate means of resolving this matter;

NOW, THEREFORE, without any admission of fact or law or concession of any liability on the part of Ohio Edison but solely for purposes of resolving this case, it is hereby ORDERED, ADJUDGED, AND DECREED as follows:

I. JURISDICTION AND VENUE

1. This Court has jurisdiction over this action, the subject matter herein, and the Parties consenting hereto, pursuant to 28 U.S.C. §§ 1331, 1345, 1355, and 1367, and pursuant to Sections 113 and 167 of the Act, 42 U.S.C. §§ 7413 and 7477. Venue is proper under Section 113(b) of the Act, 42 U.S.C. § 7413(b), and under 28 U.S.C. § 1391(b) and (c). Solely for the purposes of this Consent Decree and the underlying Complaint, Ohio Edison waives all objections and defenses that it may have to the Court's jurisdiction

over this action, to the Court's jurisdiction over Ohio Edison, and to venue in this District. The Parties shall not challenge the terms of this Consent Decree or this Court's jurisdiction to enter and enforce this Consent Decree. For purposes of the Amended Complaints filed by the Plaintiffs in this matter and resolved by the Consent Decree, and for purposes of entry and enforcement of this Consent Decree, Ohio Edison waives any defense or objection based on standing as to the Plaintiffs. Except as expressly provided for herein, this Consent Decree shall not create any rights in any party other than the Parties to this Consent Decree. Except as provided in Section XXVI (Public Comment) of this Consent Decree, the Parties consent to entry of this Consent Decree without further notice.

II. APPLICABILITY

- 2. Upon entry, the provisions of this Consent Decree shall apply to and be binding upon the Plaintiffs and Ohio Edison and their successors and assigns, and upon Ohio Edison's officers, employees and agents solely in their capacities as such.
- Ohio Edison shall provide notice of and access to a copy of this Consent Decree to all vendors, suppliers, consultants, contractors, agents, and any other company or other organization retained to perform any of the work required by this Consent Decree. Notwithstanding any retention of contractors, subcontractors, or agents to perform any work required under this Consent Decree, Ohio Edison shall be responsible for ensuring that all work is performed in accordance with the requirements of this Consent Decree. In any action to enforce this Consent Decree, Ohio Edison shall not assert as a defense the failure of its officers, directors, employees, servants, agents, or contractors to take actions necessary to comply with this Consent Decree, unless Ohio Edison establishes that such failure resulted from a Force Majeure Event, as defined in Paragraph 157.

III. DEFINITIONS

4. "30-Day Rolling Average Emission Rate" shall be determined in accordance with 40 C.F.R. Part 60, subpart Da, except that in calculating all 30-Day Rolling Average Emission Rates Ohio Edison:

- A. shall include all emissions and Btus from startup and shutdown events from the time the unit is synchronized with a utility electric distribution system through the time that the unit ceases to combust fossil fuel and the fire is out in the boiler, except as provided by Subparagraph B or C;
- B. may exclude emissions of NO_X and Btus occurring during the fifth and subsequent Cold Start Up Period(s) that occur in any 30-Day period if inclusion of such emissions would result in a violation of any applicable 30-Day Rolling Average Emission Rate, and if Ohio Edison has installed, operated and maintained the SCR, ECO, or other approved NO_X control technology in question consistent with good engineering practices. A "Cold Start Up Period" occurs whenever there has been no fire in the boiler of a unit (no combustion of any fossil fuel) for a period of six hours or more. The emissions to be excluded during the fifth and subsequent Cold Start Up Period(s) shall be the lesser of: (1) those NO_X emissions emitted during the eight-hour period commencing when the unit is synchronized with a utility electric distribution system and concluding eight hours later; or (2) those emitted prior to the time that the flue gas has achieved the SCR operational temperature range as specified by the catalyst manufacturer; and C. may exclude NO_X and SO₂ emissions and Btus occurring during any period of Malfunction as defined at 40 C.F.R.§ 60.2, provided Ohio Edison (1) makes reasonable best efforts to correct the Malfunction and (2) provides notice to the United States and the States in writing containing the information specified in Paragraph 158 of this Consent Decree as soon as practicable, but in no event later than fourteen (14) business days following the date Ohio Edison first knew or by the exercise of due diligence should have known of the Malfunction.
- 5. "Additional Burger Plant NO_X Reductions" shall be expressed as tons of NO_X and calculated in accordance with the following procedure: first, sum the total mmBtu heat input for Burger Units 4 and 5 measured by the CEMS for the subject year; second, multiply the total mmBtu heat input for Burger Units 4 and 5 by 0.411 lbs/mmBtu; third, divide the total number of pounds of NO_X for Burger Units 4 and 5 by 2,000 to calculate NO_X tons for the subject year; fourth, subtract the sum of the total NO_X tons for Burger Units 4 and 5 measured by the CEMS for the subject year.

- 6. "Additional Burger Plant SO₂ Reductions" shall be expressed as tons of SO₂ and calculated in accordance with the following procedure: first, sum the total mmBtu heat input for Burger Units 4 and 5 measured by the CEMS for the subject year; second, multiply the total mmBtu heat input for Burger Units 4 and 5 by 3.45 lbs/mmBtu; third, divide the total number of pounds of SO₂ for Burger Units 4 and 5 by 2,000 to calculate SO₂ tons for the subject year; fourth, subtract the sum of the total SO₂ tons for Burger Units 4 and 5 measured by the CEMS for the subject year.
- 7. "Additional Eastlake Plant NO_X Reductions" shall be expressed as tons of NO_X and calculated in accordance with the following procedure: first, sum the total mmBtu heat input for Eastlake Unit 5 measured by the CEMS for the subject year; second, multiply the total mmBtu heat input for Eastlake Unit 5 by 0.894 lbs/mmBtu; third, divide the total number of pounds of NO_X for Eastlake Unit 5 by 2,000 to calculate NO_X tons for the subject year; fourth, subtract the sum of the total NO_X tons for Eastlake Unit 5 measured by the CEMS for the subject year.
- 8. "Additional Mansfield Plant SO₂ Reductions" shall be expressed as tons of SO₂ and calculated in accordance with the following procedure: first, sum the total mmBtu heat input for Mansfield Units 1, 2 and 3 measured by the CEMS for the subject year; second, multiply the total mmBtu heat input for Mansfield Units 1, 2 and 3 by 0.43 lbs/mmBtu; third, divide the total number of pounds of SO₂ for Mansfield Units 1, 2 and 3 by 2,000 to calculate SO₂ tons for the subject year; fourth, subtract the sum of the total SO₂ tons for Mansfield Units 1, 2 and 3 measured by the CEMS for the subject year.
- 9. "Additional Reductions" means the additional tons reduced at the Burger Plant, Mansfield Plant, and Eastlake Plant.
- 10. "Annual Average Removal Efficiency" shall be determined in accordance with 40 C.F.R. Part 60, subpart Da, provided that ASTM fuel sampling and analysis may be used in lieu of inlet SO₂ emission monitoring where the inlet sampling location does not meet the minimum requirements specified in 40 C.F.R. Part 60, Appendix A, EPA Reference Method 1.
- 11. "Burger Plant" means the R.E. Burger Plant located near Shadyside, Ohio.
- 12. "CEMS" or "Continuous Emission Monitoring System," means, for obligations involving NO_X and SO₂ under this Consent Decree, the devices defined in 40 C.F.R. § 72.2 and

- installed and maintained (including quarterly quality assurance procedures) as specified by 40 C.F.R. Part 75 except as provided for in Paragraphs 80 and 109 relating to data substitution provisions.
- 13. "Consent Decree" means this Consent Decree and the Appendices hereto, which are incorporated into this Consent Decree.
- 14. "Design Removal Efficiency" means the minimum removal efficiency for which a design is developed for a new or modified air pollution control device, when operating at full load maximum continuous rating ("MCR") of the boiler. The design removal efficiency shall provide the capability of attaining and maintaining at least the specified removal efficiency at MCR.
- 15. "Eastlake Plant" means the Eastlake Plant located near Eastlake, Ohio.
- 16. "Electric-Catalytic Oxidation" or "ECO" means a barrier discharge reactor, wet flue gas desulfurization and wet electrostatic precipitator ("wet ESP"), which combine to remove multiple pollutants from flue gas.
- 17. "Emission Rate" for a given pollutant means the number of pounds of that pollutant emitted per million British thermal units of heat input (lb/mmBtu), measured in accordance with this Consent Decree.
- 18. "EPA" means the United States Environmental Protection Agency.
- 19. "ESP" means electrostatic precipitator, a pollution control device for the reduction of PM.
- 20. "FirstEnergy System" means, collectively, the Ohio Edison System, any existing units owned by a FirstEnergy subsidiary, and any new or existing units that might be built or acquired by a FirstEnergy subsidiary, provided that FirstEnergy and/or a subsidiary has a greater than 50% ownership interest in such newly-built or acquired units.
- 21. "Flash Dryer Absorber" means a flue gas desulfurization technology employing a fluidized bed-type absorber utilizing recycled fly ash and lime injection for SO₂ removal upstream of a pollution control device for the reduction of PM.
- 22. "Flue Gas Desulfurization System" or "FGD" means a pollution control device that employs flue gas desulfurization technology, including absorber(s) for the reduction of sulfur dioxide emissions.

- 23. "Fossil Fuel" means any hydrocarbon fuel, including coal, petroleum coke, petroleum oil, or natural gas.
- 24. "Induct Scrubber" means a flue gas desulfurization technology in which an atomized lime slurry is injected into the ductwork for SO₂ removal upstream of a pollution control device for the reduction of PM.
- 25. "KW" means kilowatt or one thousand Watts.
- 26. "lb/mmBtu" means pound of a pollutant per million British thermal units of heat input.
- 27. "Malfunction" means malfunction as that term is defined under 40 C.F.R. § 60.2.
- 28. "Mansfield Plant" means the Bruce Mansfield Plant located near Shippingport, PA.
- 29. "MW" means a megawatt or one million Watts.
- 30. "Monthly Cap" means the sum of the tons of the pollutant in question emitted during all periods of operation from Sammis Units 1 through 5 in a calendar month, including the pollutants emitted during periods of startup and shutdown, and Malfunction.
- 31. "NO_X" means oxides of nitrogen, measured in accordance with the provisions of this Consent Decree.
- 32. "NO_X Allowance" means an authorization or credit to emit a specified amount of NO_X that is allocated or issued under an emissions trading or marketable permit program of any kind that has been established under the Clean Air Act or a State Implementation Plan.
- 33. "Ohio Edison System" means, collectively, the Sammis Plant, Mansfield Plant and Burger Plant.
- 34. "Operational needs" means the allowances needed to comply with federal and/or State Clean Air Act regulatory requirements for the units at the Sammis Plant and any other existing, new, and newly acquired unit in the FirstEnergy system.
- 35. "Parties" means the United States of America; the States of New York, New Jersey and Connecticut; and Ohio Edison and Pennsylvania Power Company. "Party" means one of the six named "Parties."
- 36. "Plant-Wide Annual Cap" means the sum of the tons of the pollutant in question emitted during all periods of operation from the Sammis Plant in a calendar year, including the pollutants emitted during periods of startup and shutdown, and Malfunction.

- 37. "PM" means total particulate matter, measured in accordance with the provisions of this Consent Decree.
- 38. "PM Emission Rate" means pounds of PM emitted per million Btu of heat input (lb/mmBtu), as measured in annual stack tests, in accordance with the reference methods set forth in 40 C.F.R. Part 60, Appendix A, Method 5 or Method 5B if allowed by the State of Ohio or local authority.
- 39. "Prevention of Significant Deterioration" or "PSD" means the prevention of significant deterioration of air quality program under Part C of Subchapter I of the Clean Air Act, 42 U.S.C. §§ 7470 7492, and 40 C.F.R. Part 52.
- 40. "Removal Efficiency" means the percent of an air pollutant removed from flue gas by an air pollution control device based on the mass emission rate before and after the air pollution control device.
- 41. "Renewable Energy Sources" means wind, solar power, or landfill gas or any other approved project.
- 42. "Restricted NO_X Allowances" means the NO_X Allowances allocated annually to Ohio Edison that were made available for sale, trade, or transfer after the date of entry of this Consent Decree as a result of the requirements of this Consent Decree, but the use of which is restricted by this Consent Decree.
- 43. "Restricted SO₂ Allowances" means (1) the SO₂ Allowances resulting from the one-time Additional Mansfield Plant Reductions required by Paragraph 92 for calendar years 2006 of 4,000 tons and for 2007 of 8,000 tons; (2) the SO₂ Allowances resulting from the one-time SO₂ Interim Emission Reductions required by Paragraph 97 of 35,000 tons and by Paragraph 98 of 24,600 tons; and (3) 67,503 SO₂ Allowances allocated annually to the Sammis Plant beginning January 2011.
- 44. "Sammis Plant" means the W. H. Sammis Plant, located along the Ohio River on State Route 7 in the Village of Stratton, Saline Township, Jefferson County, Ohio.
- 45. "Selective Catalytic Reduction System" or "SCR" means a pollution control device that employs selective catalytic reduction technology for the reduction of NO_X emissions.
- 46. "SNCR" means a pollution control device that employs selective non-catalytic reduction, utilizing ammonia or urea injection in the boiler, for the reduction of NO_X emissions.

- 47. "SO₂" means sulfur dioxide, measured in accordance with the provisions of this Consent Decree.
- 48. "SO₂ Allowance" means "allowance" as defined at 42 U.S.C. § 7651a(3): "an authorization, allocated to an affected unit by the Administrator of EPA under Subchapter IV of the Act, to emit, during or after a specified calendar year, one ton of sulfur dioxide."
- 49. "Super-compliant NO_X Allowances" means those allowances attributable to reductions beyond the requirements of this Consent Decree and in accordance with Paragraph 76. NO_X allowances that become available as a result of emission reductions used to demonstrate compliance with Paragraph 72 shall not be Super-compliant NO_X Allowances.
- 50. "Super-compliant SO₂ Allowances" means those allowances attributable to reductions beyond the requirements of this Consent Decree and in accordance with Paragraph 106. SO₂ allowances that become available as a result of emission reductions used to demonstrate compliance with Paragraph 97 shall not be Super-compliant SO₂ Allowances.
- 51. "Surrender" means permanently surrendering allowances from the accounts administered by EPA for the Ohio Edison System so that such allowances can no longer be used to meet any compliance requirement under the Clean Air Act.
- 52. "NO_X System-Wide Annual Emission Rate" means the annual average emission rate for NO_X from the FirstEnergy System during a calendar year calculated in accordance with the procedures and equation set forth in 40 C.F.R. § 76.11 (d)(1)(ii)(A).
- 53. "Title V Permit" means the permit required of each of Ohio Edison's major sources under Subchapter V of the Act, 42 U.S.C. §§ 7661-7661e.

IV. NO_X EMISSION REDUCTIONS AND CONTROLS

A. NO_X Emission Controls

1. SCRs on Sammis Units 6 and 7

54. Ohio Edison shall install an SCR (or the equivalent NO_X control technology approved by Plaintiffs pursuant to Paragraph 55) at either Sammis Unit 6 or Unit 7 no later than December 31, 2010, and install a second SCR at either Sammis Unit 6 or 7 no later than

December 31, 2011. Each SCR to be installed by Ohio Edison under this paragraph shall have at least a 90% Design Removal Efficiency for NO_X. Upon operation of the unit with the installed SCR and thereafter, Ohio Edison shall continuously operate each SCR at Sammis Units 6 and 7 at all times that each unit the SCR serves is combusting Fossil Fuel, consistent with good engineering practices for NO_X control, to minimize NO_X emissions to the extent practicable. The preceding sentence shall not be construed to require that Ohio Edison achieve a more stringent unit emission rate than required by this Consent Decree. No later than 180 days after the installation date required above and thereafter, Ohio Edison shall operate each SCR so as to achieve and thereafter maintain a 30-Day Rolling Average Emission Rate for NO_X of 0.100 lb/mmBtu.

- With prior written notice to and written approval from EPA and the States, Ohio Edison may, in lieu of installing and operating an SCR (or ECO, if approved pursuant to Section VII) at any unit specified in Paragraph 54, install and operate equivalent NO_X control technology, so long as such equivalent NO_X control technology is designed for a 90% Removal Efficiency for NO_X and achieves and thereafter maintains a 30-Day Rolling Average Emission Rate for NO_X not greater than 0.100 lb/mmBtu.
 - 2. SNCRs at Sammis Units 1 -7, Eastlake Unit 5 and Burger Units 4-5
- 56. No later than thirty days after entry of the Consent Decree, Ohio Edison shall continuously operate each SNCR at Sammis Units 2 and 7 at all times that each unit the SNCR serves is combusting Fossil Fuel, consistent with good engineering practices for NO_X control, to minimize NO_X emissions to the extent practicable. The preceding sentence shall not be construed to require that Ohio Edison achieve more stringent unit emission rate(s) than required by this Consent Decree. No later than 210 days after entry of this Consent Decree, Ohio Edison shall operate the SNCR so as to achieve and thereafter maintain a 30-Day Rolling Average Emission Rate for NO_X of 0.250 lb/mmBtu at Sammis Unit 2.
- 57. Ohio Edison shall install an SNCR (or equivalent NO_X control technology approved pursuant to Paragraph 68) at either Sammis Unit 1, Unit 3, or Unit 4, no later than October 31, 2006; and install a second SNCR at either Sammis Unit 1, Unit 3, or Unit 4 no later than October 31, 2007; and install one additional SNCR at Sammis Unit 1, Unit

- 3, or Unit 4 no later than December 31, 2007. Upon operation of the unit with the installed SNCR and thereafter, Ohio Edison shall continuously operate each SNCR at Sammis Units 1, 3 and 4 at all times that each unit the SNCR serves is combusting Fossil Fuel, consistent with good engineering practices for NO_X control, to minimize NO_X emissions to the extent practicable. The preceding sentence shall not be construed to require that Ohio Edison achieve more stringent unit emission rate(s) than required by this Consent Decree. No later than 180 days after the installation date required above and thereafter, Ohio Edison shall operate each SNCR so as to achieve and thereafter maintain a 30-Day Rolling Average Emission Rate for NO_X of 0.250 lb/mmBtu.
- No later than December 31, 2007, Ohio Edison shall install an SNCR (or equivalent NO_X control technology approved pursuant to Paragraph 68) at Sammis Unit 5. Upon operation of the unit with the installed SNCR and thereafter, Ohio Edison shall continuously operate the SNCR at Sammis Unit 5 at all times that the unit the SNCR serves is combusting Fossil Fuel, consistent with good engineering practices for NO_X control, to minimize NO_X emissions to the extent practicable. The preceding sentence shall not be construed to require that Ohio Edison achieve more stringent unit emission rate(s) than required by this Consent Decree. No later than 180 days after the installation date required above and thereafter, Ohio Edison shall operate the SNCR so as to achieve and thereafter maintain a 30-Day Rolling Average Emission Rate for NO_X of 0.290 lb/mmBtu.
- 59. No later than June 30, 2005, Ohio Edison shall install an SNCR at Sammis Unit 6. Ohio Edison shall continuously operate the SNCR at Sammis Unit 6 at all times that the unit the SNCR serves is combusting Fossil Fuel, consistent with good engineering practices for NO_X control, to minimize NO_X emissions to the extent practicable. The preceding sentence shall not be construed to require that Ohio Edison achieve more stringent unit emission rate(s) than required by this Consent Decree.
- 60. No later than December 31, 2006, Ohio Edison shall cause the FirstEnergy System to install low NO_X burners, overfired air and SNCR (or equivalent NO_X control technology approved pursuant to Paragraph 68) at Eastlake Unit 5. Upon operation of the unit with the installed NO_X controls referred to above and thereafter, Ohio Edison shall cause the FirstEnergy System to continuously operate the NO_X controls referred to above at

- Eastlake Unit 5 at all times that the unit is combusting Fossil Fuel, consistent with good engineering practices for NO_X control, to minimize NO_X emissions to the extent practicable. The preceding sentence shall not be construed to require Ohio Edison to cause the FirstEnergy System to achieve more stringent unit emission rate(s) than required by this Consent Decree.
- 61. If the FirstEnergy System does not install and commence continuous operation of low NO_X burners, overfired air, and SNCR (or equivalent NO_X control technology approved pursuant to Paragraph 68) as required in Paragraph 60, Ohio Edison shall submit to the Plaintiffs for approval, and implement upon approval, a substitute compliance plan that would provide for an alternative means of achieving emission reductions within the FirstEnergy System units located in Ohio and/or Pennsylvania in the same time frame through use of post-combustion NO_X emission control devices, equivalent to or exceeding the emission reductions that Ohio Edison anticipated achieving by installation and operation of the low NO_X burners, overfired air, and SNCR at Eastlake Unit 5.
- 62. Ohio Edison shall cause the FirstEnergy System to achieve Additional Eastlake Plant NO_X Reductions of 11,000 tons of NO_X per year commencing in calendar year 2007 provided, however, that this obligation shall be eliminated upon permanent shutdown in which Eastlake Unit 5 has been permanently retired from service and has been physically disabled. If Ohio Edison determines that it will be unable to achieve any portion of the reductions of 11,000 tons of NO_X at Eastlake Unit 5 in any calendar year due to planned or unplanned outages, or any combination thereof, Ohio Edison shall submit to the Plaintiffs for approval, and upon approval, shall implement or cause to be implemented, a substitute compliance plan ("plan"). The plan shall demonstrate how Ohio Edison will achieve elsewhere in the FirstEnergy System and within the same year (or if that is not possible, within the next succeeding calendar year) all the remaining Additional Eastlake Plant NO_X Reductions. The plan must identify the plant(s) in Pennsylvania and/or Ohio where any remaining Additional Eastlake Plant NO_X Reductions are to be achieved. Ohio Edison shall use best efforts to submit the plan no later than 30 days after Ohio Edison determines that it will be unable to achieve Additional Eastlake Plant NO_X Reductions, but in no event later than January 31 of the year following the year in which Ohio Edison makes such determination. For purposes of this paragraph, the amount of

- Additional Eastlake Plant NO_X Reductions to be achieved at such other FirstEnergy plant(s) shall be calculated based on the decrease from that plant's 2003 actual emission rate (lb/mmBtu). Compliance with the approved plan shall be considered compliance with the Additional Eastlake Plant NO_X Reductions requirement. The terms of this provision are in addition to, and shall not alter or affect, the provisions of Section XV relating to Force Majeure.
- 63. Subject to Paragraph 62, Ohio Edison shall cause the FirstEnergy System to use reasonable best efforts to achieve Additional Eastlake Plant NO_X Reductions of 11,000 tons of NO_X per year commencing in calendar year 2007, but in no case shall the Additional Eastlake Plant NO_X Reductions be less than 10,000 tons in any given year commencing in 2007. In the event that Ohio Edison expects to be unable to achieve Additional Eastlake Plant NO_X Reductions of at least 11,000 tons of NO_X in 2007 or any year thereafter, Ohio Edison shall submit to the Plaintiffs for approval, and upon approval, shall implement or cause to be implemented, a substitute compliance plan to achieve elsewhere in the FirstEnergy system and within the same calendar year all the remaining Additional Eastlake Plant NO_X Reductions up to 1,000 tons of NO_X that will not be realized that year at the Eastlake Plant. Such a plan must identify the plants, in Pennsylvania and/or Ohio, and the controls at those plants where any remaining Additional Eastlake Plant NO_X Reductions that will not be realized that year at the Eastlake Plant are to be achieved.
- 64. No later than December 31, 2008, Ohio Edison shall install SNCRs (or equivalent NO_X control technology approved pursuant to Paragraph 68) at Burger Unit 4 and Unit 5. Upon operation of the unit with the installed SNCR and thereafter, Ohio Edison shall continuously operate each SNCR at the Burger Units 4 and 5 at all times that each unit the SNCR serves is combusting Fossil Fuel, consistent with good engineering practices for NO_X control, to minimize NO_X emissions to the extent practicable. The preceding sentence shall not be construed to require that Ohio Edison achieve more stringent unit emission rate(s) than required by this Consent Decree.
- 65. Ohio Edison shall achieve Additional Burger Plant NO_X Reductions of 1,400 tons of NO_X per year commencing in calendar year 2009 provided, however, that this obligation shall be eliminated upon permanent shutdown in which one or more of the Burger units

has been permanently retired from service and has been physically disabled. If Ohio Edison determines that it will be unable to achieve any portion of the reductions of 1,400 tons at the Burger Plant in any calendar year due to planned or unplanned outages, or any combination thereof, Ohio Edison shall submit to the Plaintiffs for approval, and upon approval, shall implement or cause to be implemented, a substitute compliance plan ("plan"). The plan shall demonstrate how Ohio Edison will achieve elsewhere in the FirstEnergy System and within the same year (or if that is not possible, within the next succeeding calendar year) all the remaining Additional Burger Plant NO_X Reductions. The plan must identify the plant(s) in Pennsylvania and/or Ohio where any remaining Additional Burger Plant NO_X Reductions are to be achieved. Ohio Edison shall use best efforts to submit the plan no later than 30 days after Ohio Edison determines that it will be unable to achieve Additional Burger Plant NO_X Reductions, but in no event later than January 31 of the year following the year in which Ohio Edison makes such determination. For purposes of this paragraph, the amount of Additional Burger Plant NO_X Reductions to be achieved at such other FirstEnergy plant(s) shall be calculated based on the decrease from that plant's 2003 actual emission rate (lb/mmBtu). Compliance with the approved plan shall be considered compliance with the Additional Burger Plant NO_X Reductions requirement. The terms of this provision are in addition to, and shall not alter or affect, the provisions of Section XV relating to Force Majeure. Subject to Paragraph 65, Ohio Edison shall use reasonable best efforts to achieve Additional Burger Plant NO_X Reductions of 1,400 tons of NO_X per year commencing in calendar year 2009, but in no case shall the Additional Burger Plant NO_X Reductions be less than 1,300 tons in any given year commencing in 2009. In the event that Ohio Edison expects to be unable to achieve Additional Burger Plant NO_X Reductions of at least 1,400 tons of NO_X in 2009 or any year thereafter, Ohio Edison shall submit to the Plaintiffs for approval, and upon approval implement, a substitute compliance plan to achieve elsewhere in the FirstEnergy system and within the same calendar year all the remaining Additional Burger Plant NO_X Reductions up to 100 tons of NO_X that will not be realized that year at the Burger Plant. Such a plan must identify the plants, in

66.

Pennsylvania and/or Ohio, and the controls at those plants where any remaining

- Additional Burger Plant NO_X Reductions that will not be realized that year at the Burger Plant are to be achieved.
- 67. No later than thirty days following entry of this Consent Decree, Ohio Edison shall complete installation and operation of low NO_X burners on Sammis Units 1, 2, 4, 5, 6, and 7 and overfired air on Sammis Units 1, 2, 4, 6 and 7. No later than December 1, 2005, Ohio Edison shall complete installation and operation of low NO_X burners and overfired air on Sammis Unit 3, and advanced combustion control optimization with software to minimize NO_X emissions from Sammis Units 1 through 5.
- 68. With prior written notice to and written approval from EPA and the States, Ohio Edison may, in lieu of installing and operating an SNCR at any unit specified in Paragraphs 56, 57, 58, 60, and 66, install and operate equivalent NO_X control technology, so long as such equivalent NO_X control technology achieves and thereafter maintains a 30-Day Rolling Average Emission Rate for NO_X not greater than 0.250 lb/mmBtu, or 0.290 lb/mmBtu for Sammis Unit 5.

B. <u>Plant-Wide Annual Cap for NO_X</u>

69. Ohio Edison shall comply with the following Plant-Wide Annual Cap for the Sammis Plant for NO_X, which applies collectively to all units within the Sammis Plant:

For the Periods Commencing on the Dates Specified Below:	Plant-Wide Annual Cap For NO _X
July 1, 2005 through December 31, 2005	11,371 tons
January 1, 2006 through December 31, 2006	21,251 tons
January 1, 2007 through December 31, 2007	20,596 tons
January 1, 2008 through December 31, 2008	18,903 tons
January 1, 2009 through December 31, 2009	17,328 tons
January 1, 2010 through December 31, 2010	17,328 tons
January 1, 2011 through December 31, 2011	14,845 tons

January 1, 2012 and every calendar year thereafter	January 1, 2012 and every calendar year thereafter	11,863 tons
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- 70. Compliance with the Plant-Wide Annual Cap in Paragraph 69 shall be determined by calculating actual annual emissions during all periods of operation from the Sammis plant using CEMS. The amount of NO_X allowances in the possession of Ohio Edison shall not be used in determining compliance with the Plant-Wide Annual Cap in Paragraph 69.
- 71. Periods of nonoperation of a unit are not violations of a unit specific emission obligation of this Consent Decree. If Ohio Edison ceases operations for more than 12 months, the Plant-Wide Annual Cap in Paragraph 69 shall be reduced by one-half of the shutdown unit's(s') pro rata nameplate MW share of the Plant-Wide Annual Cap for the Sammis Plant for NO_X, unless Ohio Edison demonstrates to Plaintiffs that it intends to start up the unit(s) within the following 12 months and actually starts up in the following 12 months.

C. Interim NO_X Emission Reductions

72. Between July 1, 2005 and no later than December 31, 2010, Ohio Edison shall achieve reductions in the amount of 2,483 tons of NO_X using any combination of the following: (1) using a low sulfur coal at Burger Units 4 and 5; (2) operating the SCRs currently installed at Mansfield Units 1 through 3 during the months of October through April; and/or (3) emitting fewer tons than the Plant-Wide Annual Cap for NO_X required under Paragraph 69 in a given year at the Sammis Plant. For purposes of determining that amount of reductions achieved at Burger, Ohio Edison shall use the procedure for determining Additional Burger Plant NO_X Reductions. For purposes of this paragraph, the amount of NO_X emission reductions to be achieved at the Mansfield Plant shall be calculated based on the decrease from that plant's 2003 actual emission rate (lb/mmBtu).

D. <u>Use of NO_X Allowances</u>

- 73. Except as provided in this Consent Decree, Ohio Edison shall not sell, trade, or transfer any Restricted NO_X Allowances.
- 74. Restricted NO_X Allowances resulting from actions taken by Ohio Edison to comply with the requirements of this Consent Decree may be used by Ohio Edison to meet the Operational Needs of the plant to which they were allocated but not at any other plant or

to sell, trade, or transfer to a third-party. In addition, Restricted NO_X Allowances resulting from actions taken by Ohio Edison to comply with the requirements of this Consent Decree may be used by Ohio Edison and/or FirstEnergy to meet the Operational Needs of the FirstEnergy System but not to sell, trade, or transfer to a third-party, provided that commencing January 1, 2015, and continuing thereafter, actual NO_X emissions from the FirstEnergy System do not exceed a NO_X System-Wide Annual Emission Rate of 0.15 lb/mmBtu. For purposes of this paragraph, the FirstEnergy System is limited to the coal-fired units listed below less any of these units FirstEnergy or its subsidiaries sells.

Current FirstEnergy Coal-Fired Units
Mansfield 1
Mansfield 2
Mansfield 3
Sammis 1
Sammis 2
Sammis 3
Sammis 4
Sammis 5
Sammis 6
Sammis 7
Burger 1
Burger 2
Burger 3
Burger 4
Burger 5
Ashtabula 5
Bay Shore 1
Bay Shore 2

Bay Shore 3
Bay Shore 4
Eastlake 1
Eastlake 2
Eastlake 3
Eastlake 4
Eastlake 5
Lake Shore 18
Toronto 5
Toronto 6
Toronto 7

- 75. If Ohio Edison installs SCR, ECO if approved pursuant to Section VII, or equivalent control technology on any unit in the FirstEnergy System that is not required by this Consent Decree, the difference between the average annual NO_X emissions of the 2 years before the control device is installed and the NO_X Allowances allocated to such unit shall no longer be considered Restricted NO_X Allowances.
- 76. After Ohio Edison reports the generation of Super-compliant NO_X Allowances in accordance with Section XII (Periodic Reporting), nothing in this Consent Decree shall preclude Ohio Edison from selling, trading, or transferring these reported NO_X Allowances that become available for sale or trade as a result of:
 - a. the installation and operation of any NO_X pollution control technology or technique that is not otherwise required under this Consent Decree;
 - b. the installation and operation of any SCR (or ECO if approved pursuant to Section VII or other approved equivalent NO_X control technology pursuant to Paragraph 55) or SNCR, prior to the date required under this Consent Decree; or
 - c. achievement and maintenance of NO_X emission rates that are below the 30-Day Rolling Average Emission Rate of 0.100 lb/mmBtu for Sammis Units 6 and 7, the 30-Day Rolling Average Emission Rate of 0.250 lb/mmBtu for Sammis Units 1 through 4, and the 30-Day Rolling Average Emission Rate of 0.290

lb/mmBtu for Sammis Unit 5, and the applicable Plant-wide Annual Cap of 11,863 tons.

- 77. Except as provided in Paragraph 121, Ohio Edison may not purchase or otherwise obtain NO_X Allowances from another source for purposes of complying with the requirements of this Consent Decree. However, nothing in this Consent Decree shall prevent Ohio Edison from purchasing or otherwise obtaining NO_X Allowances from another source for purposes of complying with state or federal Clean Air Act requirements to the extent otherwise allowed by law.
- 78. If Ohio Edison transfers Restricted NO_X Allowances to a unit within the FirstEnergy System not covered by this Consent Decree, Ohio Edison must provide or cause to provide right of entry as required by Paragraph 181.

E. <u>General NO_X Provisions</u>

- 79. In determining 30-Day Rolling Average Emission Rates for NO_X, Ohio Edison shall operate CEMS at each unit, provided, however, that due to the common stack CEMS at Sammis Units 1 to 4, NO_X pollutant concentration monitors certified in accordance with 40 C.F.R. Part 60 shall determine the 30-Day Rolling Average Emission Rates for NO_X at each of Sammis Units 1 to 4. In determining compliance with the Plant-Wide Annual NO_X Cap, Ohio Edison shall operate CEMS at each stack (including the common stacks that serve Sammis Units 1 and 2 and Units 3 and 4).
- 80. If both primary and secondary CEMS have a missing data event, Ohio Edison shall use 40 C.F.R. Part 60 to show compliance with a 30-Day Rolling Average Emission Rate for NO_X, provided that Ohio Edison (1) has secondary CEMS installed, and (2) places them in service within one hour of a missing data event from the primary CEMS but the secondary CEMS also fails. If Ohio Edison does not meet conditions in (1) and (2) above, Ohio Edison shall use 40 C.F.R. § 75.33 to determine compliance with the 30-Day Rolling Average Emission Rate for NO_X. If there is a missing data event, Ohio Edison shall use the data substitution provisions in 40 C.F.R. § 75.33 to show compliance with the Plant-Wide Annual Cap for NO_X.

V. <u>SO₂ EMISSION REDUCTIONS AND CONTROLS</u>

A. SO₂ Emission Controls

- 1. New FGD Installations at Sammis Units 6-7 and Burger Units 4-5
- 81. Ohio Edison shall install an FGD (or equivalent SO₂ control technology approved pursuant to Paragraph 84) at each Sammis Unit 6 and Unit 7 no later than December 31, 2010. Each FGD to be installed by Ohio Edison under this paragraph shall have at least a 95% Design Removal Efficiency for SO₂. Upon operation of the unit with the installed FGD and thereafter, Ohio Edison shall continuously operate each FGD at Sammis Units 6 and 7 at all times that each unit the FGD serves is combusting Fossil Fuel, consistent with good engineering practices for SO₂ control, to minimize SO₂ emissions to the extent practicable. The preceding sentence shall not be construed to require that Ohio Edison achieve more stringent unit emission rate(s) than required by this Consent Decree. No later than 180 days after the installation date required above and thereafter, Ohio Edison shall operate each FGD so as to achieve and thereafter maintain a 30-Day Rolling Average Emission Rate for SO₂ of 0.130 lb/mmBtu.
- 82. Subject to Paragraph 83 below, no later than December 31, 2010, Ohio Edison shall install and commence continuous operation of wet FGDs or ECO (or equivalent SO₂) control technology approved pursuant to Paragraph 85) on Burger Units 4 and 5, which shall have at least a 95% Design Removal Efficiency. Ohio Edison shall achieve Additional Burger Plant SO₂ Reductions of 25,000 tons of SO₂ per year commencing on or before calendar year 2011 provided, however, that this obligation shall be eliminated upon permanent shutdown in which one or more of the Burger units is permanently retired from service and has been physically disabled. If Ohio Edison determines that it will be unable to achieve any portion of the reductions of 25,000 tons of SO₂ at the Burger Plant in any calendar year due to planned or unplanned outages, or any combination thereof, Ohio Edison shall submit to the Plaintiffs for approval, and upon approval, shall implement or cause to be implemented, a substitute compliance plan ("plan"). The plan shall demonstrate how Ohio Edison will achieve elsewhere in the FirstEnergy System and within the same year (or if that is not possible, within the next succeeding calendar year) all the remaining Additional Burger Plant SO₂ Reductions.

The plan must identify the plant(s) in Pennsylvania and/or Ohio where any remaining Additional Burger Plant SO₂ Reductions are to be achieved. Ohio Edison shall use best efforts to submit the plan no later than 30 days after Ohio Edison determines that it will be unable to achieve Additional Burger Plant SO₂ Reductions, but in no event later than January 31 of the year following the year in which Ohio Edison makes such determination. For purposes of this paragraph, the amount of Additional Burger Plant SO₂ Reductions to be achieved at such other FirstEnergy plant(s) shall be calculated based on the decrease from that plant's 2003 actual emission rate (lb/mmBtu). Compliance with the approved plan shall be considered compliance with the Additional Burger Plant SO₂ Reductions requirement. The terms of this provision are in addition to, and shall not alter or affect, the provisions of Section XV relating to Force Majeure.

- 83. No later than December 31, 2008, Ohio Edison shall elect either to satisfy the emission control requirements of Paragraph 82 for Burger Units 4 and 5, or:
 - a. Shut down Burger Units 4 and 5 no later than December 31, 2010; or
 - Repower Burger Units 4 and 5 no later than December 31, 2012, including b. through construction of circulating fluidized bed boilers or other clean coal technologies of equivalent environmental performance that at a minimum achieve and maintain a 30-Day Rolling Average Emission Rate not greater than 0.100 lb/mmBtu for SO₂ or a Removal Efficiency of at least ninety-five percent (95%) for SO₂; a 30-Day Rolling Average Emission Rate not greater than 0.100 lb/mmBtu for NO_X; and a PM Emission Rate not greater than 0.015 lb/mmBtu. In measuring the PM Emission Rate, Ohio Edison shall conduct periodic stack tests in accordance with 40 C.F.R. Part 60, Appendix A, Method 5, or Method 5B if allowed by the State of Ohio or local authority, or alternative methods requested by Ohio Edison and approved by EPA. For units that are required to be equipped with SO₂ control equipment and that are subject to the percent removal efficiency requirements of this Consent Decree, the outlet SO₂ Emission Rate and the inlet SO₂ Emission Rate shall be determined based on the data generated in accordance with 40 C.F.R. Part 75 (using SO₂ CEMS data from both the inlet and outlet of the control device), except that, if it is not feasible to install SO₂ CEMS at the inlet of the control device, Ohio Edison may use fuel sampling consistent with ASTM protocols and standards to compute the inlet SO₂ Emission Rate.

- 84. With prior written notice to and written approval from EPA and the States, Ohio Edison may, in lieu of installing and operating wet FGDs at Sammis Units 6 and 7 (or ECO, if approved pursuant to Section VII), install and operate equivalent SO₂ control technology at Sammis Units 6 and 7 so long as such equivalent SO₂ control technology is designed for at least a 95% removal efficiency for SO₂ and achieves and thereafter maintains a 30-Day Rolling Average Emission Rate for SO₂ not greater than 0.130 lb/mmBtu.
- With prior written notice to and written approval from EPA and the States, Ohio Edison may, in lieu of installing and operating wet FGDs or ECO at Burger Units 4 and 5, install and operate equivalent SO₂ control technology so long as such equivalent SO₂ control technology is designed for at least a 95% Removal Efficiency for SO₂.

2. Flash Dryer Absorber at Sammis Unit 5

86. No later than December 31, 2008, Ohio Edison shall install a Flash Dryer Absorber or ECO (or equivalent SO₂ control technology approved pursuant to Paragraph 90) at Sammis Unit 5, which shall have at least a 50% Design Removal Efficiency for SO₂. Upon operation of the unit with the installed Flash Dryer or ECO and thereafter, Ohio Edison shall continuously operate the Flash Dryer at Sammis Unit 5 at all times that the unit the Flash Dryer or ECO serves is combusting Fossil Fuel, consistent with good engineering practices for SO₂ control, to minimize SO₂ emissions to the extent practicable. The preceding sentence shall not be construed to require that Ohio Edison achieve more stringent unit emission rate(s) than required by this Consent Decree. No later than 180 days after the installation date required above and thereafter, Ohio Edison shall operate the Flash Dryer Absorber or ECO so as to achieve and thereafter maintain a 30-Day Rolling Average Emission Rate for SO₂ of 1.100 lb/mmBtu. If Ohio Edison cannot install the Flash Dyer (or ECO, if so elected) on Sammis Unit 5 because of a failure to obtain a necessary permit, Ohio Edison shall submit to the Plaintiffs for approval, and implement upon approval, a substitute compliance plan that would provide for an alternative means of achieving emission reductions within the FirstEnergy System units located in Ohio and/or Pennsylvania in the same time frame through use of postcombustion SO₂ emission control devices, equivalent to or exceeding the emission

- reductions that Ohio Edison anticipated achieving by installation and operation of the Flash Dryer at Sammis Unit 5.
- 87. With prior written notice to and written approval from EPA and the States, Ohio Edison may, in lieu of installing and operating a Flash Dryer Absorber or ECO at Sammis Unit 5, install and operate equivalent SO₂ control technology so long as such equivalent SO₂ control technology has at least a 50% Design Removal Efficiency and attains a 30-Day Rolling Average Emission Rate for SO₂ of 1.100 lb/mmBtu.
- 88. No later than July 1, 2007, Ohio Edison may seek written approval from the EPA and the States of a plan to install and operate an improved SO₂ control technology at Sammis Unit 5 by no later than December 31, 2010. If Ohio Edison demonstrates that the improved SO₂ control technology is designed to meet a 75% or greater Design Removal Efficiency, Plaintiffs will approve the plan to install and operate an improved SO₂ control technology, in lieu of installing and operating a Flash Dryer Absorber or ECO at Sammis Unit 5. If Plaintiffs approve the plan, Ohio Edison shall implement and complete construction of the improved SO₂ control technology no later than December 31, 2010. No later than 180 days after the installation date required above and thereafter, Ohio Edison shall achieve and maintain at Sammis Unit 5 a 30-Day Rolling Average Emission Rate for SO₂ as defined by the following formula:

2.3 lbs/mmBtu x (100% - % Design Removal Efficiency as approved).

In no event shall the 30-Day Rolling Average Emission Rate requirement for SO₂ be greater than 0.550 lb/mmBtu or below 0.130 lb/mmBtu for Sammis Unit 5.

3. Induct Scrubbing at Sammis Units 1-4

89. Ohio Edison shall install an Induct Scrubber (or equivalent SO₂ control technology approved pursuant to Paragraph 90) at Sammis Unit 1, Unit 2, Unit 3, or Unit 4 no later than September 30, 2008; and install a second Induct Scrubber at either Sammis Unit 1, Unit 2, Unit 3, or Unit 4 no later than December 31, 2008; and install two additional Induct Scrubbers at Sammis Unit 1, Unit 2, Unit 3 or Unit 4 no later than December 31, 2009. Each Induct Scrubber to be installed by Ohio Edison under this paragraph shall

have at least a 50% Design Removal Efficiency for SO₂. Upon operation of the unit with the installed Induct Scrubber and thereafter, Ohio Edison shall continuously operate the Induct Scrubber at the unit at all times that the unit the Induct Scrubber serves is combusting Fossil Fuel, consistent with good engineering practices for SO₂ control, to minimize SO₂ emissions to the extent practicable. The preceding sentence shall not be construed to require that Ohio Edison achieve more stringent unit emission rate(s) than required by this Consent Decree. No later than 180 days after the installation date required above and thereafter, Ohio Edison shall operate each Induct Scrubber so as to achieve and thereafter maintain a 30-Day Rolling Average Emission Rate for SO₂ of 1.100 lb/mmBtu.

90. With prior written notice to and written approval from EPA and the States, Ohio Edison may, in lieu of installing and operating Induct Scrubbers at Sammis Units 1 through 4, install and operate equivalent SO₂ control technology so long as such equivalent SO₂ control technology is designed for at least a 50% removal efficiency for SO₂ and a 30-Day Rolling Average Emission Rate for SO₂ of 1.100 lb/mmBtu.

4. FGD Upgrades for Mansfield Units 1-3

91. No later than the dates specified below, Ohio Edison shall upgrade the FGDs currently installed at Mansfield Units 1, 2 and 3 according to the following schedule:

Mansfield Unit	Upgrade Date
Unit 1	December 31, 2005
Unit 2	December 31, 2006
Unit 3	October 31, 2007

The upgrade of the Mansfield FGDs shall be designed to achieve at least a 95% Design Removal Efficiency on Mansfield Units 1, 2 and 3. No later than 180 days after the upgrade dates specified above, Ohio Edison shall conduct a performance test to demonstrate a 95% Removal Efficiency. Every subsequent year, Ohio Edison shall either conduct a performance test or submit CEMS data (or combination of CEMS data and coal sampling) equivalent to the sampling period of a performance test that show that each FGD has achieved a 95% Removal Efficiency. If Ohio Edison cannot demonstrate a 95%

Removal Efficiency during a performance test, Ohio Edison shall modify the equipment as necessary and re-test to demonstrate a 95% Removal Efficiency.

92. Ohio Edison shall achieve Additional Mansfield Plant SO₂ Reductions on or before the following dates:

Calendar Year	Additional Mansfield Plant SO ₂ Reductions (tons per year)
2006	4,000
2007	8,000
2008 and every calendar year thereafter	12,000

This obligation shall be eliminated upon permanent shutdown in which one or more of the Mansfield units is permanently retired from service and has been physically disabled. If Ohio Edison determines that it will be unable to achieve any portion of the reductions of 12,000 tons of SO₂ at the Mansfield Plant in any calendar year due to planned or unplanned outages, or any combination thereof, Ohio Edison shall submit to the Plaintiffs for approval, and upon approval, shall implement or cause to be implemented, a substitute compliance plan ("plan"). The plan shall demonstrate how Ohio Edison will achieve elsewhere in the FirstEnergy System and within the same year (or if that is not possible, within the next succeeding calendar year) all the remaining Additional Mansfield Plant SO₂ Reductions. The plan must identify the plant(s) in Pennsylvania and/or Ohio where any remaining Additional Mansfield Plant SO₂ Reductions are to be achieved. Ohio Edison shall use best efforts to submit the plan no later than 30 days after Ohio Edison determines that it will be unable to achieve Additional Mansfield Plant SO₂ Reductions, but in no event later than January 31 of the year following the year in which Ohio Edison makes such determination. For purposes of this paragraph, the amount of Additional Mansfield Plant SO₂ Reductions to be achieved at such other FirstEnergy plant(s) shall be calculated based on the decrease from that plant's 2003 actual emission rate (lb/mmBtu). Compliance with the approved plan shall be considered compliance with the Additional Mansfield Plant SO₂ Reductions requirement. The terms of this

provision are in addition to, and shall not alter or affect, the provisions of Section XV relating to Force Majeure.

B. Plant-Wide Annual and Monthly Caps for SO₂

93. Ohio Edison shall comply with the following Plant-Wide Annual Cap for the Sammis Plant for SO₂, which applies to all units collectively within the Sammis Plant:

For the Periods Commencing on the Dates Specified Below:	Plant-Wide Annual Cap for SO ₂
July 1, 2005 through December 31, 2005	58,000 tons
January 1, 2006 through December 31, 2006	116,000 tons
January 1, 2007 through December 31, 2007	116,000 tons
January 1, 2008 through December 31, 2008	114,000 tons
January 1, 2009 through December 31, 2009	101,500 tons
January 1, 2010 through December 31, 2010	101,500 tons
January 1, 2011 and every calendar year thereafter	29,900 tons

- 94. Ohio Edison shall comply with the following Monthly Caps, which applies to Sammis Units 1 through 5 collectively:
 - a. May 1, 2010 to September 30, 2010:
 - 1) If Plaintiffs approve an improved SO₂ control technology under Paragraph 88:

Calendar Months	Sammis Units 1 through 5 Monthly Cap for SO ₂
May, July, August	3,242 tons
June, September	3,137 tons

2) If Ohio Edison installs the SO₂ control technology otherwise required under Paragraph 86:

Calendar Months	Sammis Units 1 through 5 Monthly Cap for SO ₂
May, July, August	2,533 tons
June, September	2,451 tons

b. May 1, 2011 to September 30, 2011 and thereafter:

Calendar Months	Sammis Units 1 through 5 Monthly Cap for SO ₂
May, July, August	2,533 tons
June, September	2,451 tons

- 95. Compliance with the Plant-wide Annual and Monthly Caps in Paragraphs 93 and 94 shall be determined by calculating actual annual or monthly emissions from the Sammis plant using CEMS in accordance with the reference methods specified in 40 C.F.R. Part 75 except as provided for in Paragraphs 80 and 109 relating to data substitution provisions. The SO₂ Allowances in the possession of Ohio Edison shall not be used in determining compliance with the Plant-wide Annual and Monthly Caps in Paragraphs 93 and 94.
- 96. Periods of non-operation of a unit are not violations of a unit specific emission obligation of this Consent Decree. If Ohio Edison ceases operations for more than 12 months, the Plant-Wide Annual Cap in Paragraph 93 shall be reduced by one-half of the shutdown unit's(s') pro rata nameplate MW share of the Plant-Wide Annual Cap for the Sammis Plant for SO₂ unless Ohio Edison demonstrates to Plaintiffs that it intends to start up the unit(s) within the following 12 months and actually starts up in the following 12 months.

C. <u>SO₂ Interim Emission Reductions</u>

97. Beginning on January 1, 2006, and ending on December 31, 2010, Ohio Edison shall achieve reductions of SO₂ emissions in the amount of 35,000 tons by achieving reductions of SO₂ emissions in the amount of 7,000 tons per year on a rolling average basis during the applicable five-year period through the use of low sulfur coal at Burger Units 4 and 5. For purposes of determining the amount of reductions achieved at Burger

- Units 4 and 5 through the use of low sulfur coal, Ohio Edison shall use the procedure for determining Additional Burger Plant SO₂ Reductions.
- 98. No later than December 31, 2007, Ohio Edison shall submit to the Plaintiffs for approval, and upon approval, shall implement or cause to be implemented a plan to achieve a reduction of SO₂ emissions from the FirstEnergy System in the amount of 24,600 tons by or before December 31, 2010. The plan must identify the plant(s) in Pennsylvania and/or Ohio where the SO₂ reductions will be achieved. The plan may provide that some or all of the 24,600-ton reduction will be achieved through emitting fewer tons than the Plant-Wide Annual Cap for SO₂ required under Paragraph 93 in a given year at the Sammis Plant. For purposes of determining any amount of the 24,600-ton reduction achieved at Mansfield and/or Burger, Ohio Edison shall use the procedure for determining Additional Burger Plant SO₂ Reductions and Additional Mansfield Plant SO₂ Reductions. If emission reductions from other FirstEnergy plants are used to achieve the SO₂ emission reductions to be achieved at such other FirstEnergy plant(s) shall be calculated based on the decrease from that plant's 2003 actual emission rate (lb/mmBtu).

D. Surrender of SO₂ Allowances

- 99. Beginning on January 1, 2006 and every year thereafter, Ohio Edison may use, sell or transfer any Restricted SO₂ Allowances only to satisfy the Operational Needs at the Sammis Plant, Burger Plant, Mansfield Plant and/or the Operational Needs of existing and new units within the FirstEnergy System that are equipped with emission controls for SO₂ that are operated year-round and that meet an Annual Average Removal Efficiency of 96% or a Annual Average Emission Rate of 0.100 lb/mmBtu for SO₂ ("SO₂ Emission Control Standards").
- 100. For calendar years 2006 through 2017, Ohio Edison may accumulate for its own use Restricted SO₂ Allowances for use at the Sammis Plant, Burger Plant, and Mansfield Plant, and for use at units within the FirstEnergy System that are equipped with "SO₂ Emission Control Standards." Notwithstanding this provision, however:
 - 1. Ohio Edison cannot use, sell or transfer Restricted SO₂ Allowances to meet the Operational Needs of an existing unit equipped with "SO₂ Emission Control Standards"

- until after such unit first uses all of the SO₂ Allowances allocated in that given year to such unit to meet the operational needs of that unit; and
- 2. If Ohio Edison, in advance of compliance with this Consent Decree, sells or transfers to a third party SO₂ Allowances that, if such SO₂ Allowances had not been sold would be classified as Restricted SO₂ Allowances, Ohio Edison cannot use Restricted SO₂ Allowances to meet the Operational Needs of the Sammis Plant or any other plant that is allowed to use Restricted SO₂ Allowances under this Consent Decree until it first buys back or re-transfers all of those sold or transferred SO₂ Allowances and uses them to meet the Operational Needs of that unit.
- 101. If Ohio Edison installs an FGD, ECO if approved pursuant to Section VII, or equivalent control technology on any unit in the FirstEnergy System that is not required by this Consent Decree, the difference between the average annual SO₂ emissions of the 2 years before the control device is installed and the SO₂ Allowance allocation of such unit shall be deducted and no longer be considered Restricted SO₂ Allowances.
- 102. For each calendar year beginning with calendar year 2018, Ohio Edison shall surrender to EPA any Restricted SO₂ Allowances that were not used pursuant to Paragraphs 99 or 100. Surrender of unused Restricted SO₂ Allowances shall occur annually thereafter and within 45 days of Ohio Edison's receipt from EPA of the Annual Deduction Reports for SO₂.
- 103. Ohio Edison shall surrender Restricted SO₂ Allowances by the use of applicable United States Environmental Protection Agency Acid Rain Program Allowance Transfer Form or transfer to a nonprofit third party selected by Ohio Edison for surrender.
- 104. If any Restricted SO₂ Allowances are transferred directly to a third party, Ohio Edison shall include a description of such transfer in the next report submitted to the Plaintiffs pursuant to Section XII (Periodic Reporting) of this Consent Decree. Such report shall:

 (i) provide the identity of the non-profit third-party recipient(s) of the Restricted SO₂
 Allowances and a listing of the serial numbers of the transferred SO₂ Allowances; and (ii) include a certification by the third-party recipient(s) stating that the recipient will not sell, trade, or otherwise exchange any of the allowances and will not use any of the Restricted SO₂ Allowances to meet any obligation imposed by any environmental law. No later than the next Section XII periodic report due 12 months after the first report due after the

- transfer, Ohio Edison shall include in a statement that the third-party recipient(s) surrendered the Restricted SO₂ Allowances for permanent surrender to EPA within one year after Ohio Edison transferred the Restricted SO₂ Allowances to them. Ohio Edison shall not have complied with the Restricted SO₂ Allowance surrender requirements of this Paragraph until all third-party recipient(s) have actually surrendered the transferred Restricted SO₂ Allowances to EPA.
- 105. The requirements in Paragraphs 99-102 of this Consent Decree pertaining to Ohio Edison's use and surrender of Restricted SO₂ Allowances are permanent injunctions not subject to any termination provision of this Decree. These provisions shall survive any termination of this Consent Decree in whole or in part.
- 106. After Ohio Edison reports the generation of Super-compliant SO₂ Allowances in accordance with Section XII (Periodic Reporting), nothing in this Consent Decree shall preclude Ohio Edison from selling, trading, or transferring these reported Super-compliant SO₂ Allowances that become available for sale or trade as a result of:
 - a. activities that occur prior to the date of entry of this Consent Decree;
 - b. Ohio Edison's achieving SO₂ emissions at Sammis Plant that are below the 30-Day Rolling Average Emission Rate of 0.130 lb/mmBtu for Sammis Units 6 and 7 and the 30-Day Rolling Average Emission Rate of 1.100 lb/mmBtu for Sammis Units 1 through 5 (or the applicable rate for Sammis Unit 5 as determined under Paragraph 88), and the applicable Plant-wide Annual Cap of 29,900 tons; or
 - the installation and operation of SO₂ pollution controls at units covered under this
 Consent Decree prior to the dates required under Section V (SO₂ Emission
 Reductions and Controls) of this Consent Decree.
- 107. If Ohio Edison transfers Restricted SO₂ Allowances to a unit within the FirstEnergy System not covered by this Consent Decree, Ohio Edison must provide or cause to provide right of entry as required by Paragraph 181.

E. General SO₂ Provisions

108. In determining 30-Day Rolling Average Emission Rates for SO₂, Ohio Edison shall operate CEMS at each unit; provided, however, that due to the common stacks CEMS at Sammis Units 1 to 4, SO₂ pollutant concentration monitors certified in accordance with

- 40 C.F.R. Part 60 shall determine the 30-Day Rolling Average Emission Rates for SO₂ at each of Sammis Units 1 to 4. In determining compliance with the Plant-Wide Annual SO₂ Cap and the Monthly Cap, Ohio Edison shall operate CEMS at each stack (including the common stacks that serve Sammis Units 1 and 2 and Units 3 and 4).
- 109. If both primary and secondary CEMS have a missing data event, Ohio Edison shall use 40 C.F.R. Part 60 to show compliance with a 30-Day Rolling Average Emission Rate for SO₂, provided that Ohio Edison (1) has secondary CEMS installed, and (2) places them in service within one hour of a missing data event from the primary CEMS but the secondary CEMS also fails. If Ohio Edison does not meet conditions in (1) and (2) above, Ohio Edison shall use 40 C.F.R. § 75.33 to determine compliance with the 30-Day Rolling Average Emission Rate for SO₂. If there is a missing data event, Ohio Edison shall use the data substitution provisions in 40 C.F.R. § 75.33 to show compliance with the Plant-Wide Annual Caps and Monthly Caps for SO₂.

VI. PM EMISSION REDUCTIONS AND CONTROLS

A. <u>Demonstration and Compliance with PM Emission Limit</u>

- 110. No later than January 1, 2010, Ohio Edison shall achieve and maintain a PM Emission Rate of no greater than 0.030 lb/mmBtu at Sammis Units 6 and 7.
- 111. Ohio Edison shall continuously operate each ESP at Sammis Units 6 and 7 at all times that each unit the ESP serves is combusting Fossil Fuel, consistent with good engineering practices for PM control, to minimize PM emissions to the extent practicable. The preceding sentence shall not be construed to require that Ohio Edison achieve more stringent unit emission rate(s) than required by this Consent Decree.

B. PM Monitoring

- 112. By no later than December 31, 2005, and continuing annually thereafter, Ohio Edison shall conduct PM performance testing on Sammis Units 6 and 7. Such annual performance tests may be satisfied by stack tests conducted in a given year, in accordance with Ohio Edison's permit from the State of Ohio.
- 113. In determining the PM Emission Rate, Ohio Edison shall use the reference methods specified in 40 C.F.R. Part 60, Appendix A, Method 5, or Method 5B if allowed by the

State of Ohio or local authority, or alternative methods requested by Ohio Edison and approved by EPA. Ohio Edison shall also calculate the PM Emission Rates from annual stack tests in accordance with 40 C.F.R. § 60.8(f). The results of each PM stack test shall be submitted to EPA within 30 days of completion of each test.

VII. SUBSTITUTION OF ECO TECHNOLOGY

- 114 Overview of ECO. The Parties recognize the significant potential environmental and economic benefits that may be available if Electro-Catalytic Oxidation ("ECO") pollution control technology, which is currently being demonstrated at Ohio Edison's Burger Plant, becomes sufficiently reliable and effective to enable it to be used as substitute technology for control of nitrogen oxide, sulfur dioxide and particulate matter emissions from Sammis Units 6 and 7 in accordance with the requirements of this Consent Decree. ECO uses a form of wet scrubber technology to control SO₂ and a form of wet electrostatic precipitator technology to control PM, and it is a promising technology to control NO_X. ECO is anticipated to have the additional environmental benefits of controlling mercury, preventing a visible stack plume, and producing a commercially valuable fertilizer that minimizes waste disposal requirements, none of which is required by this Consent Decree or sought in this action. ECO is expected to be at least as effective as the conventional technology required by Sections V and VI of this Consent Decree in reducing emissions of sulfur dioxide and particulate matter; further development of the ECO technology will be required before it can provide the level of reduction of nitrogen oxides required by this Consent Decree. The performance goals for the ECO technology include emission rates of 0.010 lb/mmBtu for particulate matter, 98% removal of sulfur dioxide, 90% removal of nitrogen oxide, and 90% removal of mercury from power plant emissions. If the ECO technology achieves these goals, installation of that technology at Sammis Units 6 and 7 will provide greater reduction of emissions of pollutants specified by this Consent Decree than the conventional technology, at a potentially lower cost with the added benefits of significant reduction of mercury emissions.
- 115. <u>Demonstration Requirements for Substitution of ECO Control Technology on Sammis</u>

 <u>Units 6 and 7</u>. No later than December 31, 2007, Ohio Edison may seek Plaintiffs'

 approval to install ECO control technology on both Sammis Units 6 and 7 by December

- 31, 2010 in lieu of the requirements of Paragraphs 54 and 81 of the Consent Decree to install two FGDs by December 31, 2010 and one SCR control system for NO_X by December 31, 2010. Ohio Edison shall make a good faith effort to submit the data necessary for such demonstration by December 31, 2006 and shall have the right to supplement this data until December 31, 2007. To obtain Plaintiffs' approval, Ohio Edison must demonstrate that ECO technology installed at the Burger plant or another full scale commercial facility:
- a. has achieved the reliability criterion set forth in Paragraph 116 below on a consistent basis for a period of no less than 180 consecutive calendar days that ends within a year of seeking approval;
- b. has met the emission reduction requirements for SO₂ and PM set forth in Paragraph 117 below continuously, *i.e.* at least 95% of the time that the control equipment is running; and
- c. for at least a 135 consecutive calendar day test period, has achieved a 30-Day Rolling Average Emission Rate of NO_X such that operation of ECO at both Sammis Units 6 and 7 would reduce total NO_X emissions by at least ten percent (10%) more than the 30-Day Rolling Average Emission Rate for a single SCR at either Sammis Unit 6 or 7 as required in Paragraph 54 of this Consent Decree for 95% of the time that the control equipment is running at the Burger plant or any other plant in full-scale commercial operation.
- 116. Reliability Criteria. The reliability criterion for Plaintiffs' approval of the substitution of the ECO technology on Sammis Units 6 and 7, for purposes of Paragraph 115.a., is 95% availability, *i.e.* Ohio Edison must demonstrate that the ECO control itself has not caused outages on the unit(s) on which it has been installed more than 5% of the time those units were in operation or called upon to operate.
- 117. Emission Reduction Requirements for SO₂ and PM. The SO₂ and PM emission reduction requirements for demonstration of ECO technology under this paragraph shall be the limitations set forth in this Consent Decree for the emission of such pollutants from Sammis Units 6 and 7. The limitation for SO₂ emissions from Units 6 and 7, as provided in Paragraph 81 of this Consent Decree, is a 30-Day Rolling Average Emission Rate for

- SO₂ of 0.130 lb/mmBtu. The limitation for PM emissions from Units 6 and 7, as provided in Paragraph 110 of this Consent Decree, is 0.030 lb/mmBtu.
- 118. <u>Plaintiffs' Review and Approval</u>. Plaintiffs shall review Ohio Edison's proposal for substitution of ECO technology on Sammis Units 6 and 7 in accordance with Section XIII of this Consent Decree (Review and Approval of Submissions) and this paragraph, as follows:
 - a. Substitution of ECO Technology From December 31, 2010 to December 31, 2011. If Ohio Edison demonstrates that ECO has met the requirements of Paragraph 115, Plaintiffs will approve the substitution of ECO controls at Sammis Units 6 and 7 in lieu of the requirements of Sections IV and V of this Consent Decree that one SCR and two conventional FGDs be installed by December 31, 2010.
 - b. <u>Dispute Resolution</u>. If Plaintiffs do not grant their approval, Ohio Edison may seek dispute resolution from the Court pursuant to Section XVI of this Consent Decree. Ohio Edison shall have the burden of demonstrating that ECO meets the approval criteria of Paragraph 115. If Plaintiffs do not agree that ECO meets the requirements of Paragraph 115, Plaintiffs nonetheless reserve the right to grant their approval if, based on the facts and circumstances then appearing, including but not limited to engineering concerns involving scale-up and reliability, they conclude that there is a substantial likelihood that ECO will meet the requirements of this Consent Decree at the Sammis plant on a reliable and consistent basis. If the criteria set forth in Paragraph 115 are not met and Plaintiffs do not otherwise grant approval in accordance with the preceding sentence, such denial shall not be reviewable and not subject to dispute.
- 119. Adjustment of Installation Dates. In the event that Plaintiffs approve the installation of ECO on both Sammis Units 6 and 7, or the Court reverses Plaintiffs' denial of approval, the schedule and requirements for installation of controls at Sammis Units 6 and 7 shall be adjusted as follows: Ohio Edison shall install ECO control technology on Units 6 and 7 by December 31, 2010. This shall be in lieu of the requirements of Sections IV and V of this Consent Decree to install two FGDs and one SCR on those units by that date. By December 31, 2010, Ohio Edison shall complete such engineering for installation of

- SCRs on Units 6 and 7, so that Ohio Edison is prepared, if necessary, to install such SCRs expeditiously in the event that such installation is required by December 31, 2011 under Paragraph 123 below.
- 120. At all times that ECO is installed, Ohio Edison shall use reasonable best efforts to meet a 30-Day Rolling Average Emission Rate of 0.100 lb/mmBtu for NO_X at Sammis Units 6 and 7. Reasonable best efforts shall include operation of SNCR and any other NO_X controls, consistent with good engineering practices, at Sammis Units 6 and 7. The preceding two sentences shall not be construed to require that Ohio Edison achieve a more stringent unit emission rate than required by this Consent Decree.
- 121. Penalties and Makeup Tons for Failure to Achieve NO_X Emission Limitations Between December 31, 2010 and December 31, 2011. If Ohio Edison elects to install ECO technology on Sammis Units 6 and 7 and fails to achieve the emission limitation for NO_X of 0.100 lb/mmBtu on a 30-day rolling average basis as required under this Consent Decree, it shall be subject to the stipulated penalties requirements of Section XIV of this Consent Decree. If Ohio Edison fails to achieve a 30-Day Rolling Average Emission Rate for NO_X of 0.100 lb/mmBtu or the Plant-Wide Annual Cap for NO_X provided under Section IV of this Consent Decree, Ohio Edison, in addition to paying stipulated penalties under Section XIV of this Consent Decree, shall purchase and retire NO_X credits from the market equivalent to 1.25 times the excess tons emitted by any violation. The assessment of stipulated penalties in accordance with this paragraph is not subject to the Dispute Resolution procedures of Section XVI of this Consent Decree. In order to assure that the makeup tons are obtained from an area that is upwind from and impacts the air quality in Plaintiffs' States to the maximum extent practicable, Ohio Edison further agrees to seek to purchase such credits from facilities in Ohio or Pennsylvania, and to pay up to a 5% premium for such credits if necessary.
- Evaluation. By July 31, 2011, Ohio Edison shall submit a certified report to Plaintiffs and the Court demonstrating that ECO has continuously met the emission limitation requirements of Sections IV, V, and VI of this Consent Decree for emissions from Sammis Units 6 and 7, *i.e.*, 30-Day Rolling Average Emission Rate of 0.130 lb/mmBtu for SO₂, 0.030 lb/mmBtu for PM and 30-Day Rolling Average Emission Rate of 0.100 lb/mmBtu for NO_X, for 98% of the time that the control equipment is running following a

- shakedown period of not more than 180 days, and meeting the reliability criteria in Paragraph 116 above. The report shall include all emission data and all data showing the performance of the ECO technology at Units 6 and 7 during the evaluation period. The report shall also include reliability data identifying all outages of the ECO control system, the duration of such outages, and the causes or reasons for such outages.
- 123. <u>Final Approval of ECO or Installation of SCRs.</u> If Plaintiffs agree that Ohio Edison's report, submitted pursuant to the preceding paragraph, demonstrates that the ECO and the combination of other pollution control technologies installed on Sammis Units 6 and 7 have continuously met the 30-Day Rolling Average Emission Rate of 0.130 lb/mmBtu for SO₂, 30-Day Rolling Average Emission Rate of 0.100 lb/mmBtu for NO_X, and PM Emission Rate of 0.030 lb/mmBtu at Sammis Units 6 and 7 as required by this Consent Decree, and has proven to be reliable, installation of SCRs shall not be required on Units 6 and 7. If Plaintiffs do not agree that Ohio Edison has made and adequately supported this demonstration for NO_X, Ohio Edison shall install SCRs on Units 6 and 7 as expeditiously as possible, but in no event later than December 31, 2011. Any dispute as to whether Ohio Edison has made the required demonstration shall be subject to the Dispute Resolution procedures of Section XVI of this Consent Decree. Until the SCRs are installed, Ohio Edison shall continue to operate the ECO and other pollution control technologies to maximize reductions of emissions from Sammis Units 6 and 7, consistent with good engineering practices.

VIII. PROHIBITION ON NETTING CREDITS OR OFFSETS FROM REQUIRED CONTROLS

- 124. Emission reductions generated by Ohio Edison to comply with the requirements of this Consent Decree shall not be considered as a creditable contemporaneous emission decrease for the purpose of obtaining a netting credit under the Clean Air Act's PSD program.
- 125. Nothing in this Consent Decree is intended to preclude the emission reductions generated under this Consent Decree from being considered by EPA as creditable contemporaneous emission decreases for the purpose of attainment demonstrations submitted pursuant to Section 110 of the Act, 42 U.S.C. § 7410, or in determining impacts on NAAQS, PSD increment, visibility, air quality related values, or any other air quality impact assessment.

IX. ENVIRONMENTALLY BENEFICIAL PROJECTS

- 126. Ohio Edison shall fund and/or implement the Environmentally Beneficial Projects ("Projects") described in this Section in compliance with the terms of this Consent Decree. In funding and/or implementing the Projects, Ohio Edison shall expend moneys and/or implement Projects cumulatively valued at \$25 million as allocated below.
- 127. All plans and reports prepared by Ohio Edison pursuant to the requirements of this Section of the Consent Decree shall be publicly available electronically without charge.
- 128. Ohio Edison shall certify for each Project that Ohio Edison is not otherwise required by law to perform the Project, that Ohio Edison is unaware of any other person who is required by law to perform the Project, and that Ohio Edison will not use any Project, or portion thereof, to satisfy any obligations that it may have under other applicable requirements of law in effect at the time of lodging of this Consent Decree.
- 129. Cash Contribution to States: The States shall jointly submit environmentally beneficial projects to Ohio Edison for funding in amounts not to exceed \$2 million per calendar year for up to five (5) years following the entry of the Consent Decree beginning as early as calendar year 2005. The funds for these projects will be apportioned by and among the States, and Ohio Edison shall not have approval rights for the projects or the apportionment. Ohio Edison shall pay proceeds as designated by the States in accordance with the environmentally beneficial projects submitted for funding each year within 75 calendar days after being notified in writing by the States. Notwithstanding the \$2 million and 5-year limitations above, if the total costs of the projects submitted in any one or more years are less than \$2 million, the difference between that amount and \$2 million will be available for funding by Ohio Edison of new or previously submitted projects in the following years, except that all amounts not designated by the States within ten (10) years after entry of this Consent Decree shall expire.
- 130. Renewable Energy Development Projects. Within three and a half years after entry of this Consent Decree, Ohio Edison shall provide proof to the Plaintiffs that it has entered into one or more contracts with providers of wind energy for purchase of at least 93 megawatts if federal tax credits are applicable to a project (or 23 megawatts if federal tax credits are not applicable). These renewable energy development projects have a net

- present value of \$14.385 million. Such power purchase contracts shall be for 20 years of electric generation capacity generated by wind in Pennsylvania, New Jersey and/or western New York at such megawattage described above. Ohio Edison shall enter into one or more power purchase contracts within one year of entry of the Consent Decree for a minimum of 15 megawatts if federal tax credits are applicable to a project (or a minimum of 3.7 megawatts if tax credits are not applicable). The amount of megawatts shall be adjusted pro rata depending on the proportion of megawatts for which tax credits are or are not applicable.
- 131. With Plaintiffs' written approval, Ohio Edison may, in lieu of some or all of the wind projects under Paragraph 130, enter into contract(s) for electricity from new landfill gas projects in New Jersey, Connecticut, or New York.
- Allegheny County Project(s). Ohio Edison shall provide to the Allegheny County Clean Air Fund \$400,000 for municipal clean energy projects, as more fully described in Appendix A. Ohio Edison shall pay proceeds as designated by Allegheny County within 75 calendar days after being notified in writing by Allegheny County.
- National Park Service Project(s). The National Park Service shall submit to Ohio Edison a plan for using \$215,000 in accordance with the Park System Resource and Protection Act, 16 U.S.C. § 19jj, for a project or projects to improve air quality by addressing air quality and/or air deposition issues in and about the Shenandoah National Park. Ohio Edison shall not have approval rights for the plan or these projects. Ohio Edison shall transfer the sum of \$215,000 to the Natural Resource Damage and Assessment Fund (instructions to be provided in the National Park Service plan) within 75 calendar days after receipt of the plan.
- 134. Ohio Edison agrees that neither it, its affiliates nor the project developer shall sell, transfer, or otherwise use any renewable energy credits or any other benefits from the purchase power agreements for the wind and/or landfill gas projects undertaken (except for the federal tax credit if applicable) under any law or program enacted, adopted or promulgated on or before the date of lodging of the Consent Decree and any re-enacted or amended versions of such programs that come into effect thereafter, including, but not limited to, the Renewable Portfolio Standards enacted in Connecticut, New York, New Jersey and Pennsylvania.

X. CIVIL PENALTY

- 135. Within thirty (30) calendar days after entry of this Consent Decree, Ohio Edison shall pay to the United States a civil penalty in the amount of \$8.5 million. The civil penalty shall be paid by Electronic Funds Transfer ("EFT") to the United States Department of Justice, in accordance with current EFT procedures, referencing USAO File Number 2003v02237 and DOJ Case Number 90-5-2-1-06894 and the civil action case name and case number of this action. The costs of such EFT shall be Ohio Edison's responsibility. Payment shall be made in accordance with instructions provided to Ohio Edison by the Financial Litigation Unit of the U.S. Attorney's Office for the Southern District of Ohio. Any funds received after 2:00 p.m. EDT shall be credited on the next business day. At the time of payment, Ohio Edison shall provide notice of payment, referencing the USAO File Number, the DOJ Case Number, and the civil action case name and case number, to the Department of Justice and to EPA in accordance with Section XIX (Notices) of this Consent Decree.
- 136. Failure to timely pay the civil penalty shall subject Ohio Edison to interest accruing from the date payment is due until the date payment is made at the rate prescribed by 28 U.S.C. § 1961, and shall render Ohio Edison liable for all charges, costs, fees, and penalties established by law for the benefit of a creditor or of the United States in securing payment.
- 137. Payments made pursuant to this Section are penalties within the meaning of Section 162(f) of the Internal Revenue Code, 26 U.S.C. § 162(f), and are not tax-deductible expenditures for purposes of federal law.

XI. <u>RESOLUTION OF CLAIMS</u>

138. Entry of this Consent Decree shall resolve all civil claims of the Plaintiffs that arose from any modifications that commenced at Sammis Units 1 through 7 prior to the date of lodging of this Consent Decree (including but not limited to those modifications alleged in the Complaint in this civil action) under Parts C or D of Subchapter I of the Clean Air Act, under the New Source Performance Standard program of Section 111 of the Clean Air Act, or under the relevant provisions of the federally approved and enforceable Ohio State Implementation Plan (Ohio Admin. Code Chapter 3745-31).

- 139. Entry of this Consent Decree also shall resolve all civil claims of the United States under Parts C or D of Subchapter I of the Clean Air Act and regulations promulgated as of the date of lodging of this Consent Decree, where such claims are based on a modification, completed before December 31, 2012, that this Consent Decree directs Ohio Edison to undertake.
- 140. <u>Upgrades of Units 6 and 7.</u> The United States agrees that, in conjunction with the installation of emission controls on Sammis Units 6 and 7 pursuant to this Consent Decree, Ohio Edison may make modifications to one or both of those units that increase each of their maximum hourly emission rates by up to 10%, provided that:
 - a. any modifications for each unit occur simultaneously with, or no more than one year after, the installation and operation of the last of the controls as required under this Consent Decree for that unit, pursuant to Paragraphs 54, 81, and 118;
 - b. Ohio Edison is in compliance with all of the requirements of the Consent Decree for installation of emission controls pursuant to Paragraphs 54, 81, and 118, and for achieving and maintaining levels of emissions reductions pursuant to Paragraphs 69 and 93 (Plant-Wide Annual Caps for NO_X and SO₂); and
 - c. the modifications for each unit, either individually or collectively, do not increase the maximum hourly emission rate of each unit for NO_X or SO_2 (as measured by 40 C.F.R. § 60.14(b) and (h)) by more than 10%.

If modifications occur in compliance with this paragraph, the United States agrees not to assert any claims for these modifications under Parts C and D of Subchapter I of the Clean Air Act, seeking the installation of additional NO_X, SO₂, and PM pollution controls on Units 6 and 7, other than those required by this Consent Decree. Nothing herein shall affect Ohio Edison's obligations under Ohio law, including any permitting requirements.

XII. PERIODIC REPORTING

141. Beginning forty-five (45) days after the end of the first full calendar quarter following the entry of this Consent Decree, continuing on a semi-annual basis until December 31, 2015, Ohio Edison shall submit to EPA and the States a periodic report in compliance with Appendix B.

- 142. In any periodic report submitted pursuant to this Section, Ohio Edison may incorporate by reference information previously submitted under its Title V permitting requirements, provided that Ohio Edison attaches the Title V permit report (or pertinent portions of such report) and provides a specific reference to the provisions of the Title V permit report that are responsive to the information required in the periodic progress report.
- 143. In addition to the periodic reports required pursuant to this Section, Ohio Edison shall provide a written report to Plaintiffs of the following violations of the requirements of this Consent Decree: (1) the 30-Day Rolling Average Emission Rates, (2) PM Emission Rates, (3) Annual and Monthly Caps, (4) Additional and Interim Reductions, and (5) Restricted SO₂ Allowance surrender within ten (10) business days of when Ohio Edison knew or should have known of any such violation. In this report, Ohio Edison shall explain to the best of its knowledge the cause or causes of the violation and all measures taken or to be taken by Ohio Edison to prevent such violations in the future. Pursuant to Section XXVII (Conditional Termination of Enforcement Under Consent Decree), when provisions of the Consent Decree are included in Title V Permits, the deviation reports required under applicable Title V regulations shall be deemed to satisfy all requirements of this paragraph.
- 144. Each Ohio Edison report shall be signed by Ohio Edison's Manager, Environmental Reporting and Compliance or, in his or her absence, Ohio Edison's Vice President of Environmental, or higher ranking official, and shall contain the following certification:

his information was prepared either by me or under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my evaluation, or the direction and my inquiry of the person(s) who manage the system, or the person(s) directly responsible for gathering the information, I hereby certify under penalty of law that, to the best of my knowledge and belief, this information is true, accurate, and complete. I understand that there are significant penalties for submitting false, inaccurate, or incomplete information to the United States.

XIII. REVIEW AND APPROVAL OF SUBMITTALS

- 145. Ohio Edison shall submit each plan, report, or other submission to EPA and the States on or before the date that document is required or allowed to be submitted for review or approval pursuant to this Consent Decree. Plaintiffs shall within ninety (90) days of receipt of a plan, report, or other submission approve or decline to approve it and provide written comments. Plaintiffs' failure to respond within ninety (90) days shall not be construed as an approval or a disapproval of the submission, a wavier of the right to review the submission, or a basis to excuse compliance with the Consent Decree. Within sixty (60) days of receiving written comments from Plaintiffs, Ohio Edison shall either:

 (a) revise the submittal consistent with the written comments and provide the revised submittal for final approval to Plaintiffs; or (b) submit the matter for dispute resolution, including the period of informal negotiations, under Section XVI (Dispute Resolution) of this Consent Decree.
- 146. Upon receipt of Plaintiffs' final approval of the submittal or upon completion of the submittal pursuant to dispute resolution, Ohio Edison shall implement the approved submittal in accordance with the schedule specified therein.

XIV. STIPULATED PENALTIES

147. For any failure by Ohio Edison to comply with the terms of this Consent Decree, and subject to the provisions of Sections XV (Force Majeure) and XVI (Dispute Resolution) of this Consent Decree, Ohio Edison shall pay, within thirty (30) days after receipt of written demand to Ohio Edison by the United States, the following stipulated penalties to the United States:

Consent Decree Violation	Stipulated Penalty (Per day per violation, unless otherwise specified)
a. Failure to pay the civil penalty as specified in Section X (Civil Penalty) of this Consent Decree	\$10,000

Consent Decree Violation	Stipulated Penalty (Per day per violation, unless otherwise specified)
b. Failure to comply with any applicable 30-Day Rolling Average Emission Rate for NO _X or SO ₂ , or Emission Rate for PM, where the violation is less than 5% in excess of the limits set forth in this Consent Decree	\$2,500
c. Failure to comply with any applicable 30-Day Rolling Average Emission Rate for NO _X or SO ₂ , or Emission Rate for PM, where the violation is equal to or greater than 5% but less than 10% in excess of the limits set forth in this Consent Decree	\$5,000
d. Failure to comply with any applicable 30-Day Rolling Average Emission Rate for NO _X or SO ₂ , or Emission Rate for PM, where the violation is equal to or greater than 10% in excess of the limits set forth in this Consent Decree	\$10,000
e. Failure to comply with the Plant-Wide Annual Caps for SO_2 and NO_{X_1} and the Sammis Units 1 through 5 Monthly Cap for SO_2	\$60,000 per ton for the first 100 tons over the limit, and \$120,000 per ton for each additional ton over the limit.
f. Failure to achieve the required Additional Reductions for SO_2 and NO_X	\$30,000 per ton for the first 100 tons not achieved, and \$60,000 per ton for each additional ton not achieved.
g. Failure to achieve the required Interim Reductions for SO_2 and NO_X	\$30,000 per ton for the first 100 tons not achieved, and \$60,000 per ton for each additional ton not achieved.
h. Failure to install, commence operation, or continue operation of the NO _X , SO ₂ , and PM pollution control devices on any unit, or failure to cease operations of a unit. This stipulated penalty will only accrue if the unit is operated without the required control device after the date by which the control device was required to be installed under this Consent Decree.	\$10,000 during the first 30 days, \$27,000 thereafter.

Consent Decree Violation	Stipulated Penalty (Per day per violation, unless otherwise specified)
i. Failure to install or operate CEMS as required in Paragraphs 79 and 108	\$1,000
j. Failure to conduct annual performance tests of PM emissions, as required in Paragraph 112	\$1,000
k. Failure to apply for any permit required by Section XVII	\$1,000
1. Failure to timely submit, modify, or implement, as approved, the reports, plans, studies, analyses, protocols, or other submittals required by this Consent Decree	\$750 during the first ten days, \$1,000 thereafter.
m. Using, selling, or transferring SO ₂ Allowances, except as permitted in Section V.C.	the surrender, pursuant to the procedures set forth in Paragraphs 103 and 104 of this Consent Decree, of SO ₂ Allowances in an amount equal to three times the number of SO ₂ Allowances used, sold, or transferred in violation of this Consent Decree.
n. Selling, trading, or transferring NO_X Allowances, except as permitted in Section IV.C.	the surrender of NO_X Allowances in an amount equal to three times the number of NO_X Allowances sold or transferred in violation of this Consent Decree.
o. Failure to surrender an SO ₂ Allowance as required by Paragraph 102	(a) \$27,500 plus (b) 100 additional SO ₂ Allowances per day per violation.
p. Failure to fund and/or implement any of the Environmentally Beneficial Projects in compliance with Section IX (Environmentally Beneficial Projects) of this Consent Decree	\$1,000 during the first 30 days, \$5,000 thereafter.
q. Any other violation of this Consent Decree	\$1,000

- 148. Violation of a 30-Day Rolling Average Emission Rate is a violation on every day on which the average is based. Violation of the Plant-Wide Annual Cap or Sammis Units 1 through 5 Monthly Cap is a single violation.
- 149. Where a violation of a 30-Day Rolling Average Emission Rate (for the same pollutant and from the same source) recurs within periods of less than thirty (30) days, Ohio Edison shall not pay a daily stipulated penalty for any day of the recurrence for which a stipulated penalty has already been paid.
- 150. Ohio Edison shall not be assessed or required to pay any stipulated penalties for any day on which a unit is not operated for failure to comply with a unit-specific requirement under this Consent Decree.
- 151. All stipulated penalties shall begin to accrue on the day after the performance is due or on the day a violation occurs, whichever is applicable, and shall continue to accrue until performance is satisfactorily completed or until the violation ceases. Nothing in this Consent Decree shall prevent the simultaneous accrual of separate stipulated penalties for separate violations of this Consent Decree.
- 152. Ohio Edison shall pay all stipulated penalties to the United States within thirty (30) days of receipt of written demand to Ohio Edison from the United States, and shall continue to make such payments every thirty (30) days thereafter until the violation(s) no longer continues, unless Ohio Edison elects within 20 days of receipt of written demand to Ohio Edison from the United States to dispute the accrual of stipulated penalties in accordance with the provisions in Section XVI (Dispute Resolution) of this Consent Decree.
- 153. Stipulated penalties shall continue to accrue as provided in accordance with Paragraph 151 during any dispute, with interest on accrued stipulated penalties payable and calculated at the rate established by the Secretary of the Treasury, pursuant to 28 U.S.C. § 1961, but need not be paid until the following:
 - a. If the dispute is resolved by agreement, or by a decision of Plaintiffs pursuant to Section XVI (Dispute Resolution) of this Consent Decree that is not appealed to the Court, accrued stipulated penalties agreed or determined to be owing, together with accrued interest, shall be paid within thirty (30) days of the effective date of the agreement or of the receipt of Plaintiffs' decision;

- b. If the dispute is appealed to the Court and Plaintiffs prevail in whole or in part, Ohio Edison shall, within sixty (60) days of receipt of the Court's decision or order, pay all accrued stipulated penalties determined by the Court to be owing, together with accrued interest, except as provided in Subparagraph 153.c.;
- c. If the Court's decision is appealed by any Party, Ohio Edison shall, within fifteen (15) days of receipt of the final appellate court decision, pay all accrued stipulated penalties determined to be owing, together with accrued interest.
- or purposes of this paragraph, the accrued stipulated penalties agreed by the Parties, or determined by the Plaintiffs through Dispute Resolution, to be owing may be less than the stipulated penalty amounts set forth in Paragraph 147.
- 154. All stipulated penalties shall be paid in the manner set forth in Section X (Civil Penalty) of this Consent Decree.
- 155. Should Ohio Edison fail to pay stipulated penalties in compliance with the terms of this Consent Decree, the United States shall be entitled to collect interest on such penalties, as provided for in 28 U.S.C. § 1961.
- 156. The stipulated penalties provided for in this Consent Decree shall be in addition to any other rights, remedies, or sanctions available to any Plaintiff by reason of Ohio Edison's failure to comply with any requirement of this Consent Decree or applicable law, except that for any violation of the Act for which this Consent Decree provides for payment of a stipulated penalty, Ohio Edison shall be allowed a credit for stipulated penalties paid against any statutory penalties also imposed for such violation.

XV. FORCE MAJEURE

157. For purposes of this Consent Decree, including but not limited to Paragraphs 69, 93, and 94 (Plant-Wide Annual Cap and Monthly Cap), a "Force Majeure Event" shall mean an event that has been or will be caused by circumstances beyond the control of Ohio Edison, its contractors, or any entity controlled by Ohio Edison that delays compliance with any provision of this Consent Decree or otherwise causes a violation of any provision of this Consent Decree despite Ohio Edison's best efforts to fulfill the obligation. "Best efforts to fulfill the obligation" include using best efforts to anticipate any potential Force Majeure Event and to address the effects of any such event (a) as it is

- occurring and (b) after it has occurred, such that the delay or violation is minimized to the greatest extent possible.
- 158. Notice of Force Majeure Events. If any event occurs or has occurred that may delay compliance with or otherwise cause a violation of any obligation under this Consent Decree, as to which Ohio Edison intends to assert a claim of Force Majeure, Ohio Edison shall notify the United States and the States in writing as soon as practicable, but in no event later than fourteen (14) business days following the date Ohio Edison first knew, or by the exercise of due diligence should have known, that the event caused or may cause such delay or violation. In this notice, Ohio Edison shall reference this paragraph of this Consent Decree and describe the anticipated length of time that the delay or violation may persist, the cause or causes of the delay or violation, all measures taken or to be taken by Ohio Edison to prevent or minimize the delay or violation, the schedule by which Ohio Edison proposes to implement those measures, and Ohio Edison's rationale for attributing a delay or violation to a Force Majeure Event. Ohio Edison shall adopt all reasonable measures to avoid or minimize such delays or violations. Ohio Edison shall be deemed to know of any circumstance which Ohio Edison, its contractors, or any entity controlled by Ohio Edison knew or should have known.
- 159. <u>Failure to Give Notice</u>. If Ohio Edison fails to comply with the notice requirements in Paragraph 158, the Plaintiffs may void Ohio Edison's claim for Force Majeure as to the specific event for which Ohio Edison has failed to comply with such notice requirement.
- 160. Plaintiffs' Response. The Plaintiffs shall notify Ohio Edison in writing regarding Ohio Edison's claim of Force Majeure within twenty (20) business days of receipt of the notice provided under Paragraph 158. If the Plaintiffs agree that a delay in performance has been or will be caused by a Force Majeure Event, the Parties shall stipulate to an extension of deadline(s) for performance of the affected compliance requirement(s) by a period equal to the delay actually caused by the event. In such circumstances, an appropriate modification shall be made pursuant to Section XXIII (Modification) of this Consent Decree.
- 161. <u>Disagreement</u>. If the Plaintiffs do not accept Ohio Edison's claim of Force Majeure, or if the Parties cannot agree on the length of the delay actually caused by the Force Majeure

- Event, the matter shall be resolved in accordance with Section XVI (Dispute Resolution) of this Consent Decree.
- Burden of Proof. In any dispute regarding Force Majeure, Ohio Edison shall bear the burden of proving that any delay in performance or any other violation of any requirement of this Consent Decree was caused by or will be caused by a Force Majeure Event. Ohio Edison shall also bear the burden of proving that Ohio Edison gave the notice required by Paragraph 158 and the burden of proving the anticipated duration and extent of any delay(s) attributable to a Force Majeure Event. An extension of one compliance date based on a particular event may, but will not necessarily, result in an extension of a subsequent compliance date.
- 163. <u>Events Excluded</u>. Unanticipated or increased costs or expenses associated with the performance of Ohio Edison's obligations under this Consent Decree shall not constitute a Force Majeure Event.
- 164. Potential Force Majeure Events. The Parties agree that, depending upon the circumstances related to an event and Ohio Edison's response to such circumstances, the kinds of events listed below are among those that could qualify as Force Majeure Events within the meaning of this Section: construction, labor, or equipment delays; Malfunction of a unit or emission control device; coal supply interruption; acts of God; acts of war or terrorism; and orders by a government official, government agency, or other regulatory body acting under and authorized by applicable law that directs Ohio Edison to supply electricity in response to a system-wide (state-wide or regional) emergency. Depending upon the circumstances and Ohio Edison's response to such circumstances, failure of a permitting authority to issue a necessary permit in a timely fashion may constitute a Force Majeure Event where the failure of the permitting authority to act is beyond the control of Ohio Edison and Ohio Edison has taken all steps available to it to obtain the necessary permit, including, but not limited to: submitting a complete permit application; responding to requests for additional information by the permitting authority in a timely fashion; and accepting lawful permit terms and conditions after expeditiously exhausting any legal rights to appeal terms and conditions imposed by the permitting authority.

165. As part of the resolution of any matter submitted to this Court under Section XVI (Dispute Resolution) of this Consent Decree regarding a claim of Force Majeure, the Parties by agreement, or this Court by order, may in appropriate circumstances extend or modify the schedule for completion of work under this Consent Decree to account for the delay in the work that occurred as a result of any delay agreed to by the United States and the States or approved by the Court. Ohio Edison shall be liable for stipulated penalties for its failure thereafter to complete the work in accordance with the extended or modified schedule.

XVI. <u>DISPUTE RESOLUTION</u>

- 166. The dispute resolution procedure provided by this Section shall be available to resolve all disputes arising under this Consent Decree, provided that the Party invoking such procedure has first made a good faith attempt to resolve the matter with the other Parties.
- 167. The dispute resolution procedure required herein shall be invoked by one Party giving written notice to the other Parties advising of a dispute pursuant to this Section. The notice shall describe the nature of the dispute and shall state the noticing Party's position with regard to such dispute. The Parties receiving such a notice shall acknowledge receipt of the notice, and the Parties in dispute shall expeditiously schedule a meeting to discuss the dispute informally not later than fourteen (14) days following receipt of such notice.
- 168. Disputes submitted to dispute resolution under this Section shall, in the first instance, be the subject of informal negotiations among the disputing Parties. Such period of informal negotiations shall not extend beyond thirty (30) calendar days from the date of the first meeting among the disputing Parties' representatives unless they agree in writing to shorten or extend this period. During the informal negotiations period, the disputing Parties may also submit their dispute to a mutually-agreed-upon alternative dispute resolution ("ADR") forum if the Parties agree that the ADR activities can be completed within the 30-day informal negotiations period (or such longer period as the Parties may agree to in writing).
- 169. If the disputing Parties are unable to reach agreement during the informal negotiation period, the Plaintiffs shall provide Ohio Edison with a written summary of their position

- regarding the dispute. The written position provided by the Plaintiffs shall be considered binding unless, within forty-five (45) calendar days thereafter, Ohio Edison seeks judicial resolution of the dispute by filing a petition with this Court. The Plaintiffs may respond to the petition within forty-five (45) calendar days of filing.
- 170. Where the nature of the dispute is such that a more timely resolution of the issue is required, the time periods set out in this Section may be shortened upon motion of one of the Parties to the dispute.
- 171. This Court shall not draw any inferences nor establish any presumptions adverse to any disputing Party as a result of invocation of this Section or the disputing Parties' inability to reach agreement.
- 172. As part of the resolution of any dispute under this Section, in appropriate circumstances the disputing Parties may agree, or this Court may order, an extension or modification of the schedule for the completion of the activities required under this Consent Decree to account for the delay that occurred as a result of dispute resolution. Ohio Edison shall be liable for stipulated penalties for its failure thereafter to complete the work in accordance with the extended or modified schedule, provided that Ohio Edison shall not be precluded from asserting that a Force Majeure Event has caused or may cause a delay in complying with the extended or modified schedule.
- 173. The Court shall decide all disputes pursuant to applicable principles of law for resolving such disputes. In their initial filings with the Court under Paragraph 169, the disputing Parties shall state their respective positions as to the applicable standard of law for resolving the particular dispute.

XVII. PERMITS

174. Unless expressly stated otherwise in this Consent Decree, in any instance where otherwise applicable law or this Consent Decree requires Ohio Edison to secure a permit to authorize construction or operation of any device, including all preconstruction, construction, and operating permits required under state law, Ohio Edison shall make such application in a timely manner. The United States will use its best efforts to expeditiously review all permit applications submitted by Ohio Edison in order to meet the requirements of this Consent Decree.

- 175. When permits are required as described in Paragraph 174, Ohio Edison shall complete and submit applications for such permits to the appropriate authorities to allow sufficient time for all legally required processing and review of the permit request, including requests for additional information by the permitting authorities. Any failure by Ohio Edison to submit a timely permit application for any unit in the Ohio Edison System shall bar any use by Ohio Edison of Section XV (Force Majeure) of this Consent Decree, where a Force Majeure claim is based on permitting delays.
- 176. <u>Title V Permits</u>. Whenever Ohio Edison applies for Title V Permit(s) or for amendment(s) to existing Title V Permit(s) to include any of the requirements of this Consent Decree in such permit, Ohio Edison shall send, at the same time, a copy of such application to each Plaintiff. Also, upon receiving a copy of any permit proposed for public comment as a result of such application, Ohio Edison shall promptly send a copy of such proposal to each Plaintiff, thereby allowing for timely participation in any public comment opportunity.
- 177. <u>Title V Permits Enforceable on Their Own Terms</u>. Notwithstanding the reference to Title V permits in this Consent Decree, the enforcement of such permits shall be in accordance with their own terms and the Act. The Title V permits shall not be directly enforceable under this Consent Decree, though any term or limit established by or under this Consent Decree shall be enforceable under this Consent Decree regardless of whether such term has or will become part of a Title V Permit subject to the limits of Section XXVII ("Conditional Termination of Enforcement Under Consent Decree").
- Consent Decree Requirements To Be Proposed for Inclusion in Title V Permits.

 Whenever Ohio Edison applies for Title V Permit(s), or for amendment(s) to existing Title V Permit(s) to include any of the requirements of this Consent Decree in such permit, Ohio Edison shall include in such application all "applicable requirements" (as defined in the Title V program regulations) including but not limited to (1) unit specific emission rates, (2) Plant-Wide Annual and Monthly Sammis Caps, (3) Additional and Interim Reductions and (4) SO₂ Allowance surrender requirements and NO_X Allowance restrictions. The NO_X Allowance restrictions that are based upon the FirstEnergy System-Wide Emission Rate required in Paragraph 74 shall be incorporated into the Sammis facility Title V permit.

- 179. New Source Review Permits. This Consent Decree shall not be construed to require Ohio Edison to apply for or obtain a permit pursuant to the New Source Review requirements of Parts C and D of Title I of the Act.
- 180. If Ohio Edison sells or transfers to an entity unrelated to Ohio Edison ("Third Party Purchaser") part or all of its ownership interest in a unit in the Ohio Edison System ("Ownership Interest") covered under this Consent Decree, Ohio Edison shall comply with the requirements of Paragraph 178 with regard to that unit prior to any such sale or transfer unless, following any such sale or transfer, Ohio Edison remains the holder of the Title V permit for such facility.

XVIII. INFORMATION COLLECTION AND RETENTION

- 181. Any authorized representative of the Plaintiffs, including their attorneys, contractors, and consultants, upon presentation of credentials, shall have a right of entry upon the premises of Sammis, Mansfield, Burger, Eastlake, and any facility that Ohio Edison must provide or cause to provide right of entry as required by Paragraphs 78 and 98, at any reasonable time for the purpose of:
 - a. monitoring the progress of activities required under this Consent Decree;
 - b. verifying any data or information submitted to the Plaintiffs in accordance with the terms of this Consent Decree;
 - c. obtaining samples and, upon request, splits of any samples taken by Ohio Edison or its representatives, contractors, or consultants; and
 - d. assessing Ohio Edison's compliance with this Consent Decree.
- 182. Ohio Edison shall retain, and instruct its contractors and agents to preserve, all non-identical copies of all records and documents (including records and documents in electronic form) now in its or its contractors' or agents' possession or control, and that directly relate to Ohio Edison's performance of its obligations under this Consent Decree, until December 31, 2020. This record retention requirement shall apply regardless of any corporate document retention policy to the contrary.
- 183. All information and documents submitted by Ohio Edison pursuant to this Consent Decree shall be subject to any requests under applicable law providing public disclosure of documents unless (a) the information and documents are subject to legal privileges or

- protection or (b) Ohio Edison claims and substantiates in accordance with 40 C.F.R. Part 2 that the information and documents contain confidential business information.
- 184. Nothing in this Consent Decree shall limit the authority of the Plaintiffs to conduct tests and inspections at facilities covered under this Consent Decree under Section 114 of the Act, 42 U.S.C. § 7414, or any other applicable federal or state laws, regulations or permits.

XIX. NOTICES

185. Unless otherwise provided herein, whenever notifications, submissions, or communications are required by this Consent Decree, they shall be made in writing and addressed as follows:

As to the United States of America:

Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice P.O. Box 7611, Ben Franklin Station Washington, D.C. 20044-7611 DJ# 90-5-2-1-06894

and

Director, Air Enforcement Division
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
Ariel Rios Building [2242A]
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

and

Air Enforcement & Compliance Assurance Branch U.S. EPA Region V 77 West Jackson Blvd.
Mail Code AE17J
Chicago, IL 60604-3590

As to the State of New York:

Chief, Environmental Protection Bureau New York State Attorney General's Office 120 Broadway New York, NY 10271

As to the State of New Jersey:

Administrator, Air and Environmental Quality Compliance and Enforcement P.O. Box 422 401 East State Street, Floor 4 Trenton, NJ 08625

and

Section Chief, Environmental Enforcement Section Division of Law Richard J. Hughes Justice Complex 25 Market Street P.O. Box 093 Trenton, NJ 08625-0093

As to the State of Connecticut:

Department Head Environment Department State of Connecticut Office of the Attorney General 55 Elm Street Hartford, CT 06106

and

Bureau Chief Air Bureau State of Connecticut Department of Environmental Protection 79 Elm Street Hartford, CT 06106

As to Ohio Edison:

Leila Vespoli Senior Vice President and General Counsel Ohio Edison Company 76 South Main Street Akron, OH 44308

and

Daniel V. Steen Vice President of Environmental Ohio Edison Company 76 South Main Street Akron, OH 44308

and

Douglas J. Weber Environmental Counsel Ohio Edison Company 76 South Main Street Akron, OH 44308

and

E. Donald Elliott Willkie Farr & Gallagher LLP 1875 K Street, NW Washington, DC 20006

and

Robert L. Brubaker Porter, Wright, Morris & Arthur LLP 41 S. High Street Columbus, Ohio 43215

186. All notifications, communications or submissions made pursuant to this Section shall be sent either by: (a) overnight mail or delivery service; (b) certified or registered mail, return receipt requested; or (c) electronic transmission, unless the recipient is not able to review the transmission in electronic form. All notifications, communications and transmissions (a) sent by overnight, certified or registered mail shall be deemed

- submitted on the date they are postmarked, or (b) sent by overnight delivery service shall be deemed submitted on the date they are delivered to the delivery service. All notifications, communications, and submissions made by electronic means shall be electronically signed and certified, and shall be deemed submitted on the date that Ohio Edison receives written acknowledgment of receipt of such transmission.
- 187. Any Party may change either the notice recipient or the address for providing notices to it by serving the other Parties with a notice setting forth such new notice recipient or address.

XX. SALES OR TRANSFERS OF OWNERSHIP INTERESTS

- 188. If Ohio Edison proposes to sell or transfer part or all of its ownership interest in any of its real property or operations subject to this Consent Decree ("Ownership Interest") to an entity unrelated to FirstEnergy ("Third Party Purchaser"), it shall advise the Third Party Purchaser in writing of the existence of this Consent Decree prior to such sale or transfer, and shall send a copy of such written notification to the Plaintiffs pursuant to Section XIX (Notices) no later than thirty (30) days before closing.
- 189. At the time of sale or transfer of an Ownership Interest (but in no case later than ten (10) days after closing) Ohio Edison shall move the Court for a modification of this Consent Decree to make the purchaser or transferee a party to this Consent Decree and jointly and severally liable with Ohio Edison for all requirements of this Consent Decree that are applicable to the transferred or purchased Ownership Interests. Until the Court approves the modification of the Consent Decree, Ohio Edison shall remain fully liable for compliance with the Consent Decree notwithstanding the sale or transfer.
- 190. This Consent Decree shall not be construed to impede the transfer of any Ownership Interests between Ohio Edison and/or FirstEnergy and any Third Party Purchaser as long the requirements of this Consent Decree are met. This Consent Decree shall not be construed to prohibit a contractual allocation as between Ohio Edison and/or First Energy and any Third Party Purchaser of Ownership Interests of the burdens of compliance with this Consent Decree, provided that both Ohio Edison and such Third Party Purchaser shall remain jointly and severally liable for the obligations of the

- Consent Decree applicable to the transferred or purchased Ownership Interests, except as provided in Paragraph 191.
- 191. If the Plaintiffs agree that the conditions of Paragraph 189 are satisfied and determine in their sole and unreviewable discretion that a transfer of liability and obligations is justified upon consideration of the Third Party Purchaser's technical capability, financial capability, and recent history of environmental compliance, Plaintiffs, Ohio Edison, and/or the Third Party Purchaser that has become a party to this Consent Decree pursuant to Paragraph 189 may move the Court for a modification that relieves Ohio Edison of its liability under this Consent Decree for the obligations of the Consent Decree applicable to the transferred or purchased Ownership Interests and makes the Third Party Purchaser solely liable for all requirements under the Consent Decree that are applicable to the transferred Ownership Interests.
- 192. Unless and until such modification relieving Ohio Edison of liability for the obligations and liabilities associated with the transferred Ownership Interest is entered by the Court, Ohio Edison shall remain liable for all the requirements of this Consent Decree, including those that may be applicable to the purchased or transferred Ownership Interests.
- 193. Notwithstanding the foregoing, however, Ohio Edison shall not assign, and shall not be released from, any obligation under this Consent Decree that is not specifically applicable to the purchased or transferred Ownership Interests, including the obligations set forth in Sections IX (Environmentally Beneficial Projects) and X (Civil Penalty).

XXI. <u>EFFECTIVE DATE</u>

194. The effective date of this Consent Decree shall be the date upon which this Consent Decree is entered by the Court.

XXII. RETENTION OF JURISDICTION

195. <u>Continuing Jurisdiction</u>. The Court shall retain jurisdiction of this case after entry of this Consent Decree to enforce compliance with the terms and conditions of this Consent Decree and to take any action necessary or appropriate for its interpretation, construction, execution, modification, or adjudication of disputes. During the term of this Consent Decree, any Party to this Consent Decree may apply to the Court for any relief necessary to construe or effectuate this Consent Decree.

XXIII. MODIFICATION

196. The terms of this Consent Decree may be modified only by a subsequent written agreement signed by all Parties. Where the modification constitutes a material change to any term of this Consent Decree, it shall be effective only upon approval by the Court.

XXIV. GENERAL PROVISIONS

- 197. This Consent Decree is not a permit. Compliance with the terms of this Consent Decree does not guarantee compliance with all applicable federal, state, or local laws or regulations. The emission rates set forth herein do not relieve Ohio Edison from any obligation to comply with other state and federal requirements under the Clean Air Act, including Ohio Edison's obligation to satisfy any state modeling requirements set forth in the Ohio State Implementation Plan.
- 198. This Consent Decree does not apply to any claim(s) of alleged criminal liability.
- 199. In any subsequent administrative or judicial action initiated by the United States for injunctive relief or civil penalties relating to the facilities covered by the Complaint in this action, Ohio Edison shall not assert any defense or claim based upon principles of waiver, res judicata, collateral estoppel, issue preclusion, claim preclusion, or claim splitting, or any other defense based upon the contention that the claims raised by the Plaintiffs in the subsequent proceeding were brought, or should have been brought, in the instant case; provided, however, that nothing in this paragraph is intended to, or shall, affect the validity of Section XI (Resolution of Claims) of this Consent Decree.
- 200. Ohio Edison shall be bound by the law and/or regulations under Parts C & D of Subchapter I of the Clean Air Act in effect at the time of any physical change in, or change in the method of operation of, a stationary source.
- 201. Except as specifically provided by this Consent Decree, nothing in this Consent Decree shall relieve Ohio Edison of its obligation to comply with all applicable federal, state, and local laws and regulations, nor shall be construed to prevent or limit the rights of the Plaintiffs to obtain penalties or injunctive relief under the Act or other federal, state, or local statutes, regulations, or permits.
- 202. Every term expressly defined by this Consent Decree shall have the meaning given to that term by this Consent Decree and, except as otherwise provided in this Consent Decree,

- every other term used in this Consent Decree that is also a term under the Act or the regulations implementing the Act shall mean in this Consent Decree what such term means under the Act or those implementing regulations.
- 203. Nothing in this Consent Decree is intended to, or shall, alter or waive any applicable law (including but not limited to any defenses, entitlements, challenges, or clarifications related to the Credible Evidence Rule, 62 Fed. Reg. 8315 (Feb. 27, 1997)) concerning the use of data for any purpose under the Act, generated either by the reference methods specified herein or otherwise.
- 204. Each limit and/or other requirement established by or under this Consent Decree is a separate, independent requirement.
- 205. Performance standards, emissions limits, and other quantitative standards set by or under this Consent Decree must be met to the number of significant digits in which the standard or limit is expressed. For example, an Emission Rate of 0.100 is not met if the actual Emission Rate is 0.101. Ohio Edison shall round the fourth significant digit to the nearest third significant digit, or the third significant digit to the nearest second significant digit, depending upon whether the limit is expressed to three or two significant digits. For example, if an actual Emission Rate is 0.1004, that shall be reported as 0.100, and shall be in compliance with an Emission Rate of 0.100, and if an actual Emission Rate of 0.1005, that shall be reported as 0.101, and shall not be in compliance with an Emission Rate of 0.100. Ohio Edison shall report data to the number of significant digits in which the standard or limit is expressed.
- 206. This Consent Decree does not limit, enlarge or affect the rights of any Party to this Consent Decree as against or on behalf of any third parties. Entry of this Consent Decree shall be solely for purposes of resolving this case and does not affect any other claims, including any claims by third parties. Entry of this Consent Decree as a final judgment shall not be considered binding on Ohio Edison in litigation with third parties. Except as provided in Paragraph 178, no portion of this Consent Decree or any prior rulings or orders in this case shall be enforceable by any person or entity other than the Parties. Ohio Edison's settlement of this case without exercising its right of appeal shall not be construed in any litigation between Ohio Edison and third parties as a final judgment or final determination on the issues addressed by the prior rulings or orders in this case.

- 207. This Consent Decree constitutes the final, complete and exclusive agreement and understanding among the Parties with respect to the settlement embodied in this Consent Decree, and supercedes all prior agreements and understandings among the Parties related to the subject matter herein. No document, representation, inducement, agreement, understanding, or promise constitutes any part of this Consent Decree or the settlement it represents, nor shall they be used in construing the terms of this Consent Decree.
- 208. Each Party to this action shall bear its own costs and attorneys' fees.

XXV. <u>SIGNATORIES AND SERVICE</u>

- 209. Each undersigned representative of the Parties certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind to this document the Party he or she represents.
- 210. This Consent Decree may be signed in counterparts, and such counterpart signature pages shall be given full force and effect.
- 211. Each Party hereby agrees to accept service of process by mail with respect to all matters arising under or relating to this Consent Decree and to waive the formal service requirements set forth in Rule 4 of the Federal Rules of Civil Procedure and any applicable Local Rules of this Court including, but not limited to, service of a summons.

XXVI. PUBLIC COMMENT

212. The Parties agree and acknowledge that final approval by the United States and entry of this Consent Decree is subject to the procedures of 28 C.F.R. § 50.7, which provides for notice of the lodging of this Consent Decree in the Federal Register, an opportunity for public comment, and the right of the United States to withdraw or withhold consent if the comments disclose facts or considerations which indicate that the Consent Decree is inappropriate, improper or inadequate. Ohio Edison shall not oppose entry of this Consent Decree by this Court or challenge any provision of this Consent Decree unless the United States has notified Ohio Edison, in writing, that the United States no longer supports entry of the Consent Decree.

XXVII. CONDITIONAL TERMINATION OF ENFORCEMENT UNDER CONSENT DECREE

- 213. Termination as to Completed Tasks. As soon as Ohio Edison completes a construction project or any other requirement of this Consent Decree that is not ongoing or recurring, Ohio Edison may, by motion to this Court, seek termination of the provision or provisions of this Consent Decree that imposed the requirement.
- 214. <u>Conditional Termination of Enforcement Through the Consent Decree.</u> After Ohio Edison:
 - has successfully completed construction, and has maintained operation, of all
 pollution controls as required by this Consent Decree;
 - b. has obtained final Title V permits (i) as required by the terms of this Consent Decree; (ii) that cover all units in this Consent Decree; and (iii) that include as enforceable permit terms all of the unit performance and other requirements specified in Section XVII (Permits) of this Consent Decree; and
 - c. certifies that the date is later than December 31, 2015;
 - Ohio Edison may so certify these facts to the Plaintiffs and this Court. If the Plaintiffs do not object in writing with specific reasons within forty-five (45) days of receipt of Ohio Edison's certification, then, for any Consent Decree violations that occur after the filing of notice, the Plaintiffs shall pursue enforcement of the requirements contained in the Title V permit through the applicable Title V permit and not through this Consent Decree.
- 215. Resort to Enforcement under this Consent Decree. Notwithstanding Paragraph 214, if enforcement of a provision in this Consent Decree cannot be pursued by a Party under the applicable Title V permit, or if a Consent Decree requirement was intended to be part of a Title V Permit and did not become or remain part of such permit, such requirement may be enforced under the terms of this Consent Decree at any time.

XXVIII. FINAL JUDGMENT

216.	. Upon approval and entry of this Consent Decree by the Court, this Consent D		
	constitute a final judgment in the above-captioned	matter between the Plaintiffs and Ohio	
	Edison.		
SO Ol	O ORDERED, THIS DAY OF	_, 2005.	
UNITED STATES DISTRICT COURT JUDGE		DISTRICT COURT JUDGE	

FOR THE UNITED STATES OF AMERICA:

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Assistant Attorney General State of Connecticut

FOR DEFENDANTS OHIO EDISON COMPANY AND PENNSYLVANIA POWER COMPANY:

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Senior Vice President and Chief Financial Officer Ohio Edison Company and Pennsylvania Power Company

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APPENDIX A - ALLEGHENY COUNTY ENVIRONMENTALLY BENEFICIAL PROJECTS

In accordance with Paragraph 132, the following describes the Environmentally Beneficial Projects for the residents of Allegheny County, Pennsylvania.

A. A 52 kW-DC rated Grid Connected Solar Power System, described below. This project shall be installed on the roof of the Monument Hill Building, 808 Ridge Avenue, Pittsburgh, PA 15212-6097. This environmentally beneficial project is estimated to prevent the emission of 68.5 tons of CO₂, 0.38 tons of SO₂, and 0.10 tons of NO_X per year of operation.

B. Project Parameters:

The Grid Connected Solar Power System is a 52 kW-DC rated grid tied design. This system is configured as twenty-four parallel-connected arrays, each dedicated to an inverter. Within each array are twenty-two 100 watt modules. The system will include a PV performance monitoring system to provide a system display. The system will also include appropriate DC and AC disconnects, ground fault protection, and lightning surge protection. Additional hardware requirements may be imposed by Duquesne Light (the local electric utility). The estimated roof area for this installation is 5,800 square feet. The GCSPS will be mounted to the roof via a standard industrial roof mounting system. The GCSPS design and installation must be completed in accordance with the National Electric Code Section 690 provisions pertaining to photovoltaic systems.

C. Specific components include:

528 Solar Power Industries M100 100 watt modules (SPI-M100)
designed to meet "World Class" quality, reliability and performance
requirements, and UL 1703 and IEC 612215 certification requirements.
The SPI-M100 modules include 150mm square multi-crystalline solar
cells, PECVD antireflective coating, heavy duty anodized aluminum
frames, tempered low iron front cover glass, EVA encapsulation and

- multi-layer back sheet protection, high capacity junction box with diodes, and quick connect polarized DC connectors.
- 2. Twenty-four (24) 2500 watt SunnyBoy inverters, model 2500U, housed in NEMA 4X stainless steel outdoor enclosures, with an efficiency of at least 90% at maximum output. The Sunny Boy inverters must include DC and AC disconnects to isolate the inverters from the photovoltaic array and grid, respectively.
- 3. Twenty-four (24) SunnyBoy PC options to monitor each inverter's performance, to be connected to the central PC.
- 4. One (1) Sunny Control Lite Unit
- 5. Twenty-four (24) 250V safety switches
- 6. One 250 Amp AC Load Center
- 7. One (1) RS-485 Cable
- 8. Twenty-four (24) Cutler Hammer Heavy Duty Disconnect Switches (30A dc)
- 9. Twenty-four (24) Lightning Surge Arrestors
- 10. One (1) UniRac Roof Mount System, including mounting hardware
- 11. Thirty thousand (30,000) feet of Use 2 wire
- 12. One (1) personal computer and display monitor
- 13. Two (2) Installation and Operations manuals
- D. Payments to fund this project shall be made to the order of the Allegheny County Clean Air Fund, and submitted to the following address:

Allegheny County Health Department Air Quality Program 301 Thirty-ninth Street Pittsburgh, Pennsylvania 15201-1891

APPENDIX B – REPORTING REQUIREMENTS

I. Semi-annual Reporting Requirements

Ohio Edison shall submit semi-annual reports, electronically and in hard copy, as required by Paragraph 141 and certified as required by Paragraph 144 of this Consent Decree. Ohio Edison shall provide the following information in each of the semi-annual reports.

A. Installation of NO_X and SO₂ Removal Equipment

Report the progress of construction of NO_X and SO₂ removal equipment, including:

- 1. If construction is not underway, the construction schedule, dates of contract execution, and major component delivery;
- 2. If construction is underway, the estimated percent of installation and estimated construction completion date; and
- 3. Once construction is complete, the date of final installation and of acceptance testing.

B. 30-Day Rolling Average Emission Rates for NO_X and SO₂

- 1. Report a NO_X and SO₂ 30-Day Rolling Average Emission Rate (lb/mmBtu), as defined in Paragraph 4, for each operating day of a Sammis unit commencing on the thirtieth day after 30-Day Rolling Average Emission Rates become applicable.
- 2. Within the first report that identifies a 30-Day Rolling Average Emission Rate (lb/mmBtu) at least five (5) example calculations (including hourly CEMS data in electronic format for the calculation) used to determine the 30-Day Rolling Average Emission Rate. If at any time Ohio Edison changes the methodology used in determining the 30-Day Rolling Average Emission Rate, Ohio Edison shall explain the change and the reason for using the new methodology.

- 3. Report all deviations from any 30-Day Rolling Average Emission Rate in lb/mmBtu. Ohio Edison shall identify any corrective actions taken in response to such deviation.
- 4. Commencing when a unit becomes subject to a 30-Day Rolling Average Emission Rate, Ohio Edison shall also report:
 - a. The date and time that the unit initially combusts any fuel;
 - b. The date and time that the unit is synchronized with a utility electric distribution system;
 - c. The date and time that the fire is extinguished in the unit; and
 - d. For the fifth and subsequent Cold Start Up Period that occurs within any 30-Day period, the earlier of the date and time that (1) is eight hours after the unit is synchronized with a utility electric distribution system, or (2) the flue gas has reached the SCR operational temperature range specified by the catalyst manufacturer.

C. PM Emission Rates

- Commencing when a PM Emission Rate becomes applicable, report the PM Emission Rate (lb/mmBtu) as defined in Paragraph 38, for Sammis Units 6 and 7.
- 2. For Sammis Units 6 and 7, attach a copy of the executive summary and results of any stack test to the next semi-annual report submitted.
- 3. Report all deviations from the PM Emission Rate in lb/mmBtu. Ohio Edison shall identify any corrective actions taken in response to such deviations.

D. Plant-Wide Annual Cap and Monthly Cap

1. Commencing when the Plant-Wide Annual Caps becomes applicable, report the applicable NO_X and SO₂ Plant-Wide Annual Caps (tons) as defined in Paragraph 36, for the Sammis Plant.

- 2. Commencing when the Monthly Cap becomes applicable, report the applicable SO₂ Monthly Cap (tons) as defined in Paragraph 30, for Sammis Units 1-5.
- 3. Deviations shall be reported once per year in the semi-annual report following the end of each calendar year. Ohio Edison shall identify the cause and any corrective actions, if necessary, taken for each deviation from the Plant-Wide Annual Caps and Monthly Cap reported above.
- E. Additional Reductions shall be reported once per year in the semi-annual report following the end of each calendar year.
 - Commencing in calendar year 2008, report the amount of Additional Eastlake Plant NO_X Reductions (tons) achieved for the applicable year for the Eastlake Plant and, if applicable, for each plant in addition to the Eastlake Plant where any remaining Additional Eastlake Plant NO_X Reductions are achieved.
 - 2. Commencing in calendar year 2010, report the amount of Additional Burger Plant NO_X Reductions (tons) achieved for the applicable year at the Burger Plant and, if applicable, for each plant in addition to the Burger Plant where any remaining Additional Burger Plant NO_X Reductions are achieved.
 - 3. Commencing in calendar year 2011, unless Ohio Edison elects to satisfy the options for the Burger Plant in accordance with Paragraph 83.a. and b., report the amount of Additional Burger Plant SO₂ Reductions achieved for the applicable year at the Burger Plant and, if applicable, for each plant in addition to the Burger Plant where any remaining Additional Burger Plant SO₂ Reductions are achieved.
 - a. If Ohio Edison elects to permanently shut down Burger Units 4 and 5 pursuant to Paragraph 83.a., Ohio Edison shall provide proof that the units are in fact shut down.
 - b. If Ohio Edison elects to repower Burger Units 4 and 5 pursuant to Paragraph 83.b., the 30-Day Rolling Average Emission Rates for NO_X and SO₂ and the PM Emission Rate as defined in Paragraphs 4 and 38.

4. Commencing in calendar year 2006, report the amount of Additional Mansfield Plant SO₂ Reductions (tons) achieved for the applicable year at the Mansfield Plant and, if applicable, for each plant in addition to the Mansfield Plant where any remaining Additional Mansfield Plant SO₂ Reductions are achieved and performance test data or CEMS data (or combination of CEMS data and coal sampling) equivalent to the sampling period of a performance test demonstrating that each FGD at Mansfield Units 1, 2, and 3 achieved a 95% Removal Efficiency in accordance with Paragraph 91.

F. Interim Reductions for NO_X and SO₂

Commencing in calendar year 2006, report the amount of Interim Emission Reductions (tons) achieved pursuant to Paragraphs 72, 97, and 98, including identifying the location from which such emissions are reduced and the methods by which such emission reductions are achieved.

G. Surrender of Restricted SO₂ Allowances

- 1. Beginning in 2018, report the Restricted SO₂ Allowances surrendered to EPA pursuant to Paragraph 102 and documentation verifying such surrender.
- 2. If Ohio Edison surrenders any Restricted SO₂ Allowances to a third party:
 - a. Include a description of the transfer in accordance with the provisions of Paragraph 104;
 - b. No later than the next semi-annual report due 12 months after the report containing in the information in a. above, include a statement that the third party permanently surrendered the SO₂ Allowances to EPA within one year after Ohio Edison transferred the SO₂ Allowances to the third party; and
 - c. Report the amount of Restricted SO₂ Allowances transferred and the units to which Ohio Edison transfers Restricted SO₂ Allowances pursuant to Paragraph 100.

H. Generation of Super-Compliant Allowances

Report the generation of Super-compliant NO_X and SO_2 Allowances as defined in Paragraphs 49 and 50 and the calculations or data justifying the generation of the used or traded Super-compliant Allowances, annually as part of the Semi-annual report following the completion of a calendar year.

I. NO_x System-Wide Annual Emission Rate

Commencing in calendar year 2016, report the NO_X System-Wide Annual Emission Rate (lb/mmBtu) for the preceding year if Ohio Edison elects to use Restricted NO_X Allowances pursuant to the second sentence of Paragraph 74.

J. Environmentally Beneficial Projects

- 1. Cash Contributions for Environmentally Beneficial Projects. Report the payment of proceeds and amounts of proceeds for these projects made pursuant to Paragraphs 129, 132, and 133.
- 2. Renewable Energy Development Projects. Report the execution of each purchase power contract pursuant to Paragraph 130, including the amount of megawatts to be purchased over a 20-year period; the location and description of the renewable energy development project; and the date of commencement of operation of any renewable energy development project.

II. Deviation Reports

In addition to the reporting requirements under Paragraph 143, a summary of all deviations from the requirements of the Consent Decree that occurred during the reporting period identifying the date and time that the deviation occurred, the date and time the deviation was corrected, the cause and any corrective actions, if necessary, taken for each deviation, and the date that the deviation was initially reported under Paragraph 143.

III. Ohio Edison Submissions

A list of all plans or submissions and the date submitted to the Plaintiffs for the reporting period, identifying if any are pending the review and approval of the Plaintiffs.

IN THE UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF OHIO EASTERN DIVISION

UNITED STATES OF AMERICA, et al., :

v.

Plaintiffs, :

: Civil Action No. 2:99-cv-1181

: Judge Sargus

OHIO EDISON COMPANY, et al., : Magistrate Judge Kemp

:

Defendants. :

JOINT MOTION TO MODIFY CONSENT DECREE WITH ORDER MODIFYING CONSENT DECREE

WHEREAS on July 11, 2005, this Court entered a Consent Decree in the abovecaptioned matter.

WHEREAS pursuant to Paragraph 83, by no later than December 31, 2008, Ohio Edison shall elect either to: satisfy the emission control requirements of Paragraph 82 for Burger Units 4 and 5; shut down Burger Units 4 and 5 no later than December 31, 2010; or repower Burger Units 4 and 5 no later than December 31, 2012, including through the construction of circulating fluidized bed boilers or other clean coal technologies of equivalent environmental performance.

WHEREAS pursuant to Paragraph 83.b, if Ohio Edison elects to repower Burger Units 4 and 5 including through the construction of circulating fluidized bed boilers or other clean coal technologies of equivalent environmental performance, such units are required to achieve and maintain a 30-day Rolling Average Emission Rate not greater than 0.100 lb/mmBtu for SO2 or a Removal Efficiency of at least ninety-five percent

(95%) for SO2; a 30-Day Rolling Average Emission Rate not greater than 0.100 lb/mmBtu for NOx; and a PM Emission Rate not greater than 0.015 lb/mmBtu.

WHEREAS by Order dated January 30, 2009, this Court extended Ohio Edison's election requirement from December 31, 2008 to March 31, 2009.

WHEREAS prior to March 31, 2009, Ohio Edison informed the United States, and the states of Connecticut, New Jersey, and New York ("the Plaintiffs") that the company was interested in repowering Burger Units 4 and 5 to combust biomass fuel.

WHEREAS Ohio Edison has represented to the Plaintiffs that it intends to combust 100% biomass fuel but that it may be necessary to co-fire Burger Units 4 and 5 with a fossil fuel.

WHEREAS on March 31, 2009, Ohio Edison elected to repower Burger Units 4 and 5 to combust principally biomass fuel.

WHEREAS concurrent with Ohio Edison's election, the parties reached preliminary agreement, subject to formal approval by Plaintiffs' respective senior management, regarding a proposed modification to the Consent Decree.

WHEREAS all parties have obtained the necessary approvals for the proposed modification to the Consent Decree for the repowering project at Burger Units 4 and 5.

For good cause shown, the parties hereby seek to modify the Consent Decree in this matter, and move that the Court sign and enter the following Order:

- 1. Modify Paragraph 83 as follows:
- 83. No later than March 31, 2009, Ohio Edison shall elect either to satisfy the emission control requirements of Paragraph 82 for Burger Units 4 and 5, or:
 - a. Shut down Burger Units 4 and 5 no later than December 31, 2010;
- b. Repower Burger Units 4 and 5 no later than December 31, 2012, including through construction of circulating fluidized bed boilers or other clean coal technologies

of equivalent environmental performance that at a minimum achieve and maintain a 30-Day Rolling Average Emission Rate not greater than 0.100 lb/mmBtu for SO_2 or a Removal Efficiency of at least ninety-five percent (95%) for SO_2 ; a 30-Day Rolling Average Emission Rate not greater than 0.100lb/mmBtu for NO_X ; and a PM Emission Rate not greater than 0.015 lb/mmBtu;

or

- c. Repower Burger Units 4 and 5 no later than December 31, 2012 to combust principally biomass fuels and commence operation. Ohio Edison has elected this option, which shall be undertaken in accordance with the following requirements:
 - i. For purposes of Paragraph 83.c, the term "biomass fuels" shall mean a blend of renewable feedstock consisting solely of: wood (including residues from harvesting or processing such as bark, leaves, wood chips, sawdust, and byproducts from paper manufacturing, but solely if the manufacturing process does not use any chlorinated compounds for bleaching), agricultural crops, grasses, dedicated energy crops (including, but not limited to, trees crops, grasses, and shrubs), other vegetation waste or products (including, but not limited to, landscape or right-of-way trimmings, algae, food waste and by-products), including up to five percent (5%) binding materials or additives that have demonstrated emission reduction properties and/or other biomass fuels proposed by OE and approved by the Plaintiffs prior to use, but in no event shall biomass fuels include animal wastes, construction debris, or non-natural wood such as plywood, pressure-treated wood and the like;
 - ii.. Once Burger Units 4 and 5 commence operation following completion of the projects necessary to permit combustion principally of biomass fuels, Ohio Edison shall continuously operate all combustion control and pollution control equipment at Burger Units 4 and 5, including such equipment as ESP, SNCR, low-NOx burners, and over-fired air consistent with good engineering practices to minimize emissions to the extent practicable;
- iii. During the first 180 days after Burger Units 4 and 5 commence operation following completion of the projects necessary to permit combustion principally of biomass fuels (the "Shakedown Period"), Ohio Edison shall operate the Burger Units 4 and 5 using its reasonable best efforts to achieve and maintain a 30-Day Rolling Average Emission Rate for SO2 of 0.100 lb/mmBtu, a 30-Day Rolling Average Emission Rate for NOx of 0.100 lb/mmBtu, and a PM Emission Rate of 0.015 lb/mmBtu;

- If, by the end of the Shakedown Period, Ohio Edison is able to achieve and maintain the emission rates specified in subparagraph 83.c.iii at representative operations, then Burger Units 4 and 5 shall be subject to the emission rates specified in subparagraph 83.c.iii immediately following the end of the Shakedown Period. Ohio Edison shall thereafter comply with those rates. If, by the end of the Shakedown Period, Ohio Edison is unable to achieve and maintain the emission rates specified in subparagraph 83.c.iii at representative operations, then a second 180-day operating period (the "Cure Period"), shall apply. During the Cure Period, Ohio Edison shall optimize Burger Units 4 and 5 in order to achieve the emission rates specified in subparagraph 83.c.iii, if feasible, using its reasonable best efforts. At a minimum, Ohio Edison shall optimize Burger Units 4 and 5 to reduce emissions by undertaking upgrades or modifications to the boilers, combustion controls, and/or pollution controls, and/or by reducing the percentage of low sulfur western coal as part of the cofiring operation of Burger Units 4 and 5. For purposes of this subparagraph, Ohio Edison shall not be required to install Flue Gas Desulfurization (as defined by Paragraph 22 of the Consent Decree), Selective Catalytic Reduction System (as defined by Paragraph 45 of the Consent Decree), or baghouse systems as part of its reasonable best efforts to achieve the emission rates specified in subparagraph 83.c.iii;
- v. <u>At all times during the Shakedown Period and Cure Period, emissions at Burger Units 4 and 5 shall not exceed the following: for SO2, a 30-Day Rolling Average Emission Rate not greater than 0.150 lb/mmBtu, for NOx, a 30-day Rolling Average Emission Rate not greater than 0.200 lb/mmBtu, and for PM, a PM Emission Rate not greater than 0.020 lb/mmBtu;</u>
- At the expiration of the Cure Period, Ohio Edison shall submit a vi. compliance plan to Plaintiffs for review and approval pursuant to Section XIII (Review and Approval of Submittals) in which Ohio Edison shall propose a 30-Day Rolling Average Emission Rate for NOx and SO2 and a PM Emission Rate for Burger Units 4 and 5 consistent with Ohio Edison's reasonable best efforts during the Shakedown and Cure Periods to achieve and maintain the emission rates specified in subparagraph 83c.iii, based upon the emission data generated by Ohio Edison during the Shakedown Period and Cure Period. In no event shall Ohio Edison propose a 30-Day Rolling Average Emission Rate greater than 0.150 lb/mmBtu for SO₂, a 30-Day Rolling Average Emission Rate greater than 0.200 lb/mmBtu for NO_x or a PM Emission Rate greater than 0.020 lb/mmBtu or a 30-Day Rolling Average Emission Rate lower than 0.100 lb/mmBtu for SO₂, a 30-Day Rolling Average Emission Rate lower than 0.100 lb/mmBtu for NO_x or a PM Emission Rate lower than 0.015 lb/mmBtu. Upon approval of the compliance plan by Plaintiffs, Ohio Edison shall comply with the 30-Day Rolling Average Emission Rate for NOx and SO2 and PM Emission Rate for Burger Units 4 and 5 approved under the plan;

- vii. At all times during the Shakedown and Cure Periods, co-firing of coal, if any, in Burger Units 4 and 5 shall be limited to low-sulfur western coal. Following the Shakedown Period (or Cure Period, if applicable), Ohio Edison shall seek approval from the Plaintiffs prior to co-firing more than twenty percent (20%) low sulfur western coal in Burger Units 4 and 5. Following approval by the Plaintiffs, the emissions rates listed in subparagraph 83. c.iii above shall apply during any period in which more than twenty percent (20%) low sulfur western coal is co-fired in Burger Units 4 and 5; and
 - viii. Reporting and Testing Requirements. No later than 30 days after the end of each quarterly period commencing at the start of the Shakedown Period until the end of the Cure Period, Ohio Edison shall report to Plaintiffs pursuant to Paragraphs 144 and 185 SO2 and NOx emissions data as determined by CEMS in accordance with 40 C.F.R. Part 75 on both a daily basis and 30-day rolling average basis, and emissions data for PM from any PM stack test performed at Burger Units 4 and 5 regardless of the number of test runs or length of such runs. Using the reference methods described below for measuring the PM Emission Rate, Ohio Edison shall conduct two stack tests during the Shakedown Period – the first one within the first 90 days of the Shakedown Period and the second one within the second 90 days of the Shakedown Period -and two stack tests during the Cure Period (if a Cure Period is required for PM) – the first one within the first 90 days of the Cure Period and the second one within the second 90 days of the Cure Period.

In measuring the PM Emission Rate, Ohio Edison shall conduct periodic stack tests in accordance with 40 C.F.R. Part 60, Appendix A, Method 5, or Method 5B, or alternative methods requested by Ohio Edison and approved by EPA. For units that are required to be equipped with SO₂ control equipment and that are subject to the percent removal efficiency requirements of this Consent Decree, the outlet SO₂ Emission Rate and the inlet SO₂ Emission Rate shall be determined based on the data generated in accordance with 40 C.F.R. Part 75 (using SO₂ CEMS data from both the inlet and outlet of the control device), except that, if it is not feasible to install SO₂ CEMS at the inlet of the control device, Ohio Edison may use fuel sampling consistent with ASTM protocols and standards to compute the inlet SO₂ Emission Rate.

2. Modify Section XIV (Stipulated Penalties), by adding items r., s., t., u. and v. to the table of "Stipulated Penalties" as follows:

	Stipulated Penalty
Consent Decree Violation	(Per day per violation, unless
	otherwise specified)

r. Use of biomass fuels other than as stated in or not in accordance with Paragraph 83ci. or approved by Plaintiffs prior to use	\$15,000 per day, except the Stipulated Penalty shall be reduced to \$1,500 per day for the first thirty (30) days of violation only, provided OE establishes that (1) use of such fuel during the initial 30-day period of violation was due to the fact that the vendor supplying the biomass fuel for Burger Units 4 and 5 delivered biomass fuel that was not in accordance with the requirements of Paragraph 83c.i (or as otherwise approved by Plaintiffs), and (2) Burger Units 4 and 5 achieved and maintained the applicable 30-Day Rolling Average Emission Rate for NOx and SO2 and the Emission Rate for PM for that initial 30-day period of violation
s. Once Burger Units 4 and 5 commence operation following completion of the projects necessary to permit combustion principally of biomass fuels, failure to continuously operate all combustion control and pollution control equipment at Burger Units 4 and 5, including such equipment as ESP, low-Nox burners and over-fired air, consistent with good engineering practices to minimize emissions to the extent practicable, in accordance with Paragraph 83c.ii	\$3,500 per day
t. If a Cure Period applies to the repowering of Burger Units 4 and 5 with biomass fuels, failure to optimize Burger Units 4 and 5, as required by Paragraph 83c.iv., in order to achieve the emission rates specified in Paragraph 83c.iii, if feasible, using its reasonable best efforts	\$40,000 for entire Cure period; following the Cure Period, \$4,000 per day of operation of Burger Units 4 and 5 commencing on the day that Plaintiffs provide written notice to OE specifying such failure to optimize Burger Units 4 and 5 until OE completes such optimization of Burger Units 4 and 5
u. Failure to co-fire, if at all, with only low sulfur western coal in Burger Units 4 and 5 during Shakedown and Cure Periods. Following Shakedown Period (or Cure Period, if applicable), failure to seek approval from Plaintiffs prior to co-firing more than twenty percent (20%) low sulfur western coal in Burger Units 4 and 5, in accordance with Paragraph 83c.vii v. Failure to conduct stack tests on Burger Units 4	\$50,000 per day \$1,000 per test per day

and 5 during the Shakedown and Cure Periods in	
accordance with Paragraph 83c.viii	

- 3. Modify Paragraph 164 as follows:
- 164. Potential Force Majeure Events. The Parties agree that, depending upon the circumstances related to an event and Ohio Edison's response to such circumstances, the kinds of events listed below are among those that could qualify as Force Majeure Events within the meaning of this Section: construction, labor, or equipment delays; malfunction of a unit or emission control device; biomass fuel or coal supply interruption; acts of God; acts of war or terrorism; and orders by a government official, government agency, or other regulatory body acting under and authorized by applicable law that directs Ohio Edison to supply electricity in response to a system-wide (state-wide or regional) emergency. Depending upon the circumstances and Ohio Edison's response to such circumstances, failure of a permitting authority to issue a necessary permit in a timely fashion may constitute a Force Majeure Event where the failure of the permitting authority to act is beyond the control of Ohio Edison and Ohio Edison has taken all steps available to it to obtain the necessary permit, including, but not limited to: submitting a complete permit application; responding to requests for additional information by the permitting authority in a timely fashion, and accepting lawful permit terms and conditions after expeditiously exhausting any legal rights to appeal terms and conditions imposed by the permitting authority.
 - 4. Except as specifically provided in this Order, all other terms and conditions of the Consent Decree remain unchanged and in full effect.

SO ORDERED THIS	DAY OF	2009	
	UNITED STATE	TES DISTRICT JUDGE	
	Respectfully su	ibmitted,	
	FOR THE UN	ITED STATES OF AMERIC	CA:
	IOHN C. CDII	DEN .	
	JOHN C. CRU		
	Q	nt Attorney General	
	Environment ai	nd Natural Resources Division	

United States Department of Justice

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JEROME W. MACLAUGHLIN ARNOLD S. ROSENTHAL

Environmental Enforcement Section Environment and Natural Resources Division United States Department of Justice P.O. Box 7611 Washington, D.C. 20530 (202) 514-0056

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FOR THE STATE OF NEW YORK:

ANDREW M. CUOMO ATTORNEY GENERAL STATE OF NEW YORK

FOR OHIO EDISON COMPANY:

GARY D. BENZ Associate General Counsel Ohio Edison Company

DOUGLAS J. WEBER Senior Attorney Ohio Edison Company

CERTIFICATE OF SERVICE

I hereby certify that on this day of August, 2009, I electronically filed the foregoing Joint Motion to Modify Consent Decree with Order Modifying Consent Decree with the Clerk of Court using the CM/ECF systems, which will send notification of such filing to the following counsel for Defendants:

> James A. King Trial Attorney Porter, Wright, Morris & Arthur LLP 41 South High Street Columbus, Ohio 43215-6194

Jerome W. MacLaughlin

UNITED STATES DISTRICT COURT FOR THE DISTRICT OF NEW JERSEY NEWARK DIVISION

UNITED STATES OF AMERICA, STATE OF NEW JERSEY,))
Plaintiffs,)) CIVIL ACTION NO.
V.) CIVIL ACTION NO.
PSEG FOSSIL LLC,)
Defendant.)))

CONSENT DECREE

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WHEREAS, Plaintiffs, the United States of America ("the United States,") on behalf of the United States Environmental Protection Agency ("EPA"), and the State of New Jersey ("New Jersey") acting by and through the New Jersey Department of Environmental Protection ("NJDEP"), filed a Complaint for injunctive relief and civil penalties pursuant to Sections 113(b) and 167 of the Clean Air Act, 42 U.S.C. §§ 7413(b) and 7467, alleging that Defendant, PSEG Fossil LLC ("PSEG Fossil") constructed major modifications at major emitting facilities in violation of the Prevention of Significant Deterioration ("PSD") and Nonattainment New Source Review ("Nonattainment NSR") requirements in Parts C and D of Title I the Clean Air Act ("Act"), 42 U.S.C. §§ 7470-7515, and in violation of the Federally-enforceable State Implementation Plan developed by the State of New Jersey;

WHEREAS, Defendant PSEG Fossil is the owner and operator of certain electric generating assets it acquired from Public Service Electric and Gas Company effective August 21, 2000, pursuant to the restructuring of the electric utilities in New Jersey through the New Jersey Electric Discount and Energy Competition Act, N.J.S.A. 48:3-49, et seq., and implementing restructuring orders of the New Jersey Board of Public Utilities;

WHEREAS, the Complaint alleges claims upon which relief can be granted against PSEG Fossil under Sections 113 and 167 of the Act, 42 U.S.C. §§ 7413 and 7477, and 28 U.S.C. § 1355;

WHEREAS, PSEG Fossil has not answered or otherwise responded to the Complaint in light of the settlement memorialized in this Consent Decree;

WHEREAS, PSEG Fossil has denied and continues to deny the violations alleged in the Complaint, maintains that it has been and remains in compliance with the Act and is not liable for civil penalties or injunctive relief, and states that it is agreeing to the obligations imposed by this Consent Decree solely to avoid the costs and uncertainties of litigation and to improve the environment;

WHEREAS, on or before February of 2001, EPA provided PSEG Fossil and the State of New Jersey with actual notice of the violations pertaining to PSEG Fossil's alleged violations, in accordance with Section 113(a)(1) of the Clean Air Act, 42 U.S.C. § 7413(a)(1);

WHEREAS, PSEG Fossil, consistent with its environment, health, and safety policy, approached and met with New Jersey in October of 2000, and with the United States in January of 2001, prior to PSEG Fossil receiving from EPA and NJDEP notification of the alleged violations, to reconcile the Parties' respective goals for achieving emission reductions of certain air pollutants at the electric generating stations covered under this Consent Decree;

WHEREAS, the Parties recognize, and the Court by entering this Consent Decree finds, that this Consent Decree has been negotiated in good faith and at arm's length, that the parties have voluntarily agreed to this Consent Decree, that implementation of this Consent Decree will avoid prolonged and complicated litigation between the parties, and that this Consent Decree is fair, reasonable, consistent with the goals of the Act, and in the public interest;

WHEREAS, the Parties anticipate that the installation and operation of pollution control equipment pursuant to this Consent Decree will achieve significant reductions in SO₂, NO_x, and PM emissions, and thereby improve air quality, and that certain actions that PSEG Fossil has

agreed to undertake are expected to advance technologies and methodologies for reducing certain air pollutants, including greenhouse gases;

WHEREAS, nothing in this Consent Decree is intended to preclude PSEG Fossil from selling or transferring ownership or operation of any Unit covered by this Consent Decree, or from allocating between PSEG Fossil and any prospective transferee the obligations set forth in this Consent Decree;

WHEREAS, the United States, New Jersey, and PSEG Fossil have consented to entry of this Consent Decree without trial of any issue;

NOW, THEREFORE, without any admission of fact or law, and without any admission of the violations alleged in the Complaint, it is hereby ORDERED, ADJUDGED, AND DECREED as follows:

I. JURISDICTION AND VENUE

- 1. This Court has jurisdiction over the subject matter herein and over this action pursuant to 28 U.S.C. §§ 1331, 1345, 1355, and 1367, and pursuant to Sections 113 and 167 of the Act, 42 U.S.C. §§ 7413 and 7477. This Court also has personal jurisdiction over the Defendant.
- Venue is proper under Section 113(b) of the Act, 42 U.S.C. § 7413(b), and under 28 U.S.C. § 1391(b) and (c). Solely for the purposes of this Consent Decree and the underlying Complaint, PSEG Fossil waives all objections and defenses that it may have to the claims set forth in the Complaint, the jurisdiction of the Court, or to venue in this District. PSEG Fossil shall not challenge the terms of this Consent Decree or this Court's jurisdiction to enter and enforce this Consent Decree. For purposes of the Complaint filed

by the Plaintiffs in this matter and resolved by the Consent Decree, and for purposes of entry and enforcement of this Decree, PSEG Fossil waives any defense or objection based on standing. Except as expressly provided for herein, this Consent Decree shall not create any rights in any Party other than the United States, New Jersey and PSEG Fossil. PSEG Fossil consents to entry of this Consent Decree without further notice.

II. APPLICABILITY

- 3. The provisions of this Consent Decree shall apply to and be binding upon the United States, New Jersey, and upon PSEG Fossil, its successors and assigns, and PSEG Fossil's officers, employees, and agents solely in their capacities as such. If PSEG Fossil proposes to sell or transfer any of its assets or operations subject to the requirements of this Consent Decree prior to the fulfillment of PSEG Fossil's obligations under this Consent Decree, it shall advise the purchaser or transferee in writing of the existence of this Consent Decree, and shall send a copy of such written notification by certified mail, return receipt requested, to Plaintiffs sixty (60) days before such sale or transfer.
- 4. Upon any partial or complete sale or transfer of PSEG Fossil's interest in Hudson Unit 2, Mercer Unit 1, or Mercer Unit 2, including any interest in the ownership or operation in any of these Units (but exclusive of any non-controlling non-operational shareholder interest in such Unit), the Parties shall agree to a modification to this Consent Decree that:

 (a) makes the purchaser or transferee jointly and severally liable as a party defendant to this civil action and Consent Decree for all requirements under this Consent Decree that may be applicable to the purchased or transferred Unit; or (b) makes the purchaser or transferee solely liable as a party defendant to this Consent Decree for all requirements

- under this Consent Decree that are applicable to the purchased or transferred Unit, in accordance with Paragraph 5, herein.
- 5. If the Plaintiffs agree that: (a) the purchaser or transferee has the financial capability, technical capability, and recent history of compliance to justify a transfer of liability from PSEG Fossil to the purchaser or transferee; (b) the purchaser or transferee has appropriately contracted with PSEG Fossil to assume the obligations and liabilities applicable to the Unit; and (c) PSEG Fossil and the purchaser or transferee have properly allocated any emission allowance or credit requirements under this Consent Decree that may be associated with the Unit, then the Plaintiffs shall agree to such a modification of this Consent Decree. These modifications shall make the purchaser or transferee solely liable as a party defendant to this civil action and Consent Decree for all requirements under this Consent Decree that are applicable to the purchased or transferred Unit.
- 6. In the case of a transfer of responsibility for operating Hudson Unit 2, Mercer Unit 1, or Mercer Unit 2, the Plaintiffs may also agree to a modification of this Consent Decree to exclude the operational entity from liability for the nonoperational obligations under this Consent Decree, as long as PSEG Fossil remains liable for all requirements under this Consent Decree.
- 7. Notwithstanding the foregoing, PSEG Fossil may not assign, and may not be released from any obligation under this Consent Decree that is not specific to the Unit that is the subject of the sale or transfer, including the obligations set forth in Sections VIII (Environmental Mitigation Projects) and X (Civil Penalty).

8. PSEG Fossil shall provide a copy of this Consent Decree to all vendors, suppliers, consultants, contractors, agents, and any other company or other organization performing any of the work described in Sections IV (Emissions Reductions and Controls) or VIII (Environmental Mitigation Projects) of this Consent Decree. Notwithstanding any retention of contractors, subcontractors, or agents to perform any work required under this Consent Decree, PSEG Fossil shall be responsible for ensuring that all work is performed in accordance with the requirements of this Consent Decree. In any action to enforce this Consent Decree, PSEG Fossil shall not assert as a defense the failure of its officers, directors, employees, servants, agents, or contractors to take actions necessary to comply with this Consent Decree, unless PSEG Fossil establishes that such failure resulted from a Force Majeure event as defined in this Consent Decree.

III. <u>DEFINITIONS</u>

- 9. A "30-Day Rolling Average Emission Rate" shall be determined by calculating the Emission Rate for an Operating Day, and then arithmetically averaging that Emission Rate with the Emission Rates for the previous twenty-nine (29) Operating Days. A new 30-Day Rolling Average shall be calculated for each new Operating Day.
- 10. A "24-Hour Emission Rate" shall be determined by dividing the total pounds of pollutant by the total million BTU of heat input ("lb/mmBTU") for a 24-hour Operating Day. A new 24-Hour Emission Rate shall be calculated for each new Operating Day.
- 11. "Act" or the "Clean Air Act" shall mean the Federal Clean Air Act, 42 U.S.C. §§ 7401 through 7671q, and its implementing regulations.

- 12. "Air Pollution Control Act " shall mean the New Jersey Air Pollution Control Act,N.J.S.A. 26:2C-1 et seq., and its implementing regulations.
- 13. "Bergen" shall mean the electric generating plant, owned and operated by PSEG Fossil and located in Bergen County, New Jersey, which includes one 620 MW combined-cycle Unit ("Bergen Unit 1") and a second 545 MW combined-cycle Unit that is currently under construction ("Bergen Unit 2"), together with associated ancillary equipment and systems.
- 14. "CEMS" or "Continuous Emission Monitoring System," for obligations involving NO_x and SO₂ under this Decree, shall mean "CEMS" as defined in 40 C.F.R. Section 72.2 and installed and maintained as required by 40 C.F.R. Part 75; and for mercury, the devices described in Section VIII of this Consent Decree (Environmental Mitigation Projects).
- 15. "Consent Decree" shall mean this Consent Decree.
- 16. "Emission Rate" shall mean the number of pounds of pollutant emitted per million BTU of heat input ("lb/mmBTU"), measured as required by this Consent Decree.
- 17. "EPA" shall mean the United States Environmental Protection Agency.
- 18. "Flue gas desulfurization system," or "FGD," means an add-on emission control device used to remove sulfur dioxide from flue gas.
- 19. "Fossil fuel" shall mean any hydrocarbon fuel, including coal, petroleum oil, or natural gas.
- 20. "Hudson Unit 2" shall mean the coal-fired steam electric generating Unit, and associated ancillary systems and equipment, owned and operated by PSEG Fossil and located in Hudson County, New Jersey.
- 21. "lb/mmBTU" shall mean pounds per million British Thermal Units of heat input, based upon higher heating value ("hhv").

- 22. "MEG Alert," or "Maximum Electricity Generation Alert" shall mean a period in which one or more electric generating units are operated at emergency capacity, at the direction of the load dispatcher, in order to prevent or mitigate voltage reductions or interruptions in electricity service, or both. A MEG Alert begins when one or more electric generating units are operated at emergency capacity, after receiving notice from the load dispatcher directing the electric generating unit to do so, and ends when the electric generating unit ceases operating at emergency capacity.
- 23. "Mercer" shall mean the two coal-fired, steam electric generating Units and associated and ancillary systems and equipment, known as Mercer Unit 1 and Mercer Unit 2, owned and operated by PSEG Fossil and located in Mercer County, New Jersey.
- 24. "Mercury CEMS" or "mercury continuous emission monitoring system" shall mean equipment that samples, analyzes, measures, and provides, by readings taken at frequent intervals, a permanent record of mercury emissions.
- 25. "MW" means a megawatt, or one million Watts.
- 26. "NJDEP" shall mean the New Jersey Department of Environmental Protection.
- 27. "NO_x" shall mean oxides of nitrogen, as measured in accordance with the provisions of this Consent Decree.
- 28. "NO_x Allowances" shall be defined as that term is defined in New Jersey's NO_x Budget

 Program in N.J.A.C. 7:27-31 et seq.
- 29. "NSR" shall mean the nonattainment area new source review program within the meaning of Part D of Subchapter I of the Act, 42 U.S.C. §§ 7510-7515, 40 C.F.R. Part 51, and N.J.A.C. 7:27-18.1 et seq.

- 30. "Operating Day" for a Unit shall mean any calendar day on which the Unit fires fossil fuel.
- 31. "Ozone Control Period" shall mean the five-month period from May 1 through September 30 of any calendar year.
- 32. "Parties" shall mean the United States, the State of New Jersey, and PSEG Fossil.
- 33. "PM" shall mean total particulate matter, as measured in accordance with the provisions of this Consent Decree.
- 34. "PM CEMS" or "PM continuous emission monitoring system" shall mean equipment that samples, analyzes, measures, and provides, by readings taken at frequent intervals, a permanent record of PM emissions.
- 35. "PM Emission Rate" shall mean the average number of pounds of PM emitted per million BTU of heat input ("lb/mmBTU"), as measured in annual stack tests, in accordance with the reference methods set forth in 40 C.F.R. Part 60, Appendix A, Method 5.
- 36. "PM-10 emissions" shall mean finely divided solid or liquid material, with an aerodynamic diameter less than or equal to a nominal 10 micrometers emitted to the ambient air, as defined in 40 C.F.R. §51.100(rr), and as measured in accordance with the terms of this Consent Decree.
- 37. "Project Dollars" shall mean PSEG Fossil's expenditures and payments incurred or made in carrying out the projects identified in Section VIII of this Consent Decree (Environmental Mitigation Projects) to the extent that such expenditures or payments both: (a) comply with the Project Dollar and other requirements set by Section VIII of this Consent Decree (Environmental Mitigation Projects) for such expenditures and payments; and (b) constitute PSEG Fossil's documented external costs for contractors, vendors, as

- well as equipment, and its internal costs consisting of employee time, travel, and other out-of-pocket expenses specifically attributable to these particular projects.
- 38. "PSD" shall mean Prevention of Significant Deterioration within the meaning of Subchapter I of the Clean Air Act, 42 U.S.C. §§ 7470-7492 and 40 C.F.R. Part 52.
- 39. "Removal Efficiency" shall mean the percent reduction in the emitted mass of a pollutant achieved by a Unit's pollution control device that PSEG Fossil operates at a Unit. This percentage shall be calculated by subtracting the outlet Emission Rate from the inlet Emission Rate, dividing the difference by the inlet Emission Rate, and then multiplying the result by 100.
- 40. "Repower" shall mean the modification of a Unit, or removal and replacement of Unit components, such that the modified or replaced Unit generates electricity through the use of new Combined Cycle Combustion Turbine technology fueled either by natural gas, by other gaseous fuels with a sulfur content no greater than that found in natural gas, or by distillate oil that is burned in accordance with the sulfur and use restrictions contained in the permit issued by NJDEP to PSEG Fossil for that Unit.
- 41. "SCR" shall mean Selective Catalytic Reduction technology.
- 42. "SO₂" shall mean sulfur dioxide, as measured in accordance with this Consent Decree.
- 43. "SO₂ Allowance" shall mean "allowance," as defined at 42 U.S.C. § 7651a(3): an authorization, allocated to an affected Unit, by the Administrator of EPA under Subchapter IV-A of the Act, to emit, during or after a specified calendar year, one ton of sulfur dioxide.

- 44. "Title V Permit" shall mean the permit required of PSEG Fossil's major sources under Subchapter V of the Clean Air Act, 42 U.S.C. §§7661-7661e and N.J.A.C. 7:27-22.
- 45. "Unit" shall mean, collectively, the coal pulverizer, the stationary equipment that feeds coal to the boiler, the boiler that produces steam for the steam turbine, the steam turbine, the generator, the equipment necessary to operate the generator, steam turbine and boiler, and all ancillary equipment, including pollution control equipment, or systems necessary for the production of electricity. An electric generating station may be comprised of one or more Units.
- 46. "Watt" shall mean a unit of power equal to one ampere per volt.

IV. EMISSIONS REDUCTIONS AND CONTROLS

SO₂ Emission Controls and Practices

- 47. PSEG Fossil shall install and commence operation of three dry flue gas desulfurization ("FGD") systems, one each on Hudson Unit 2, Mercer Unit 1 and Mercer Unit 2, by the dates set forth in Paragraphs 53, 55, and 57, below. Each FGD shall be operated at all times that the Unit it serves operates, except that PSEG Fossil need not operate an FGD when the Unit that it is servicing is not fired with coal.
- 48. In determining SO₂ Emission Rates, PSEG Fossil shall use the methods specified in 40 C.F.R. Part 75, Appendix F and 40 C.F.R. Part 60, Appendix A.
- 49. In calculating the 30-Day Rolling Average SO₂ Emission Rate at a Unit that has ceased firing fossil fuel, PSEG Fossil may exclude the period, not to exceed two hours, from the restart of that Unit to the time that the Unit is fired with any coal.

- 50. In calculating the 24-Hour SO₂ Emission Rate at a Unit, PSEG Fossil shall exclude the pounds of pollutant emissions and million BTU of heat input ("lb/mmBTU") pertaining to the period of time in which the Unit is not fired with coal.
- At least 9 months prior to the commencement of operation of any FGD required by this Consent Decree, and in accordance with N.J.A.C. 7:27-22.18, PSEG Fossil shall submit to EPA and NJDEP for review and approval a proposed protocol for determining the SO₂ Emission Rate. NJDEP and EPA shall approve, disapprove, or modify PSEG Fossil's proposal in accordance with Paragraphs 94 through 98 of this Consent Decree. The proposed protocol shall set forth the methods by which PSEG Fossil proposes to convert data from its CEMS to a 30-Day Emission Rate and a 24-Hour Emission Rate after the installation of the FGDs. PSEG Fossil shall also submit a revised protocol proposal to EPA and NJDEP for review and approval prior to any change, concurrent with or subsequent to the installation of the control technology required pursuant to this Consent Decree, in the location, type, or operation of a CEMS employed by PSEG Fossil for measuring SO₂ emissions at Hudson Unit 2, Mercer Unit 1, or Mercer Unit 2.

SO₂ Controls at Hudson Unit 2

52. By December 31, 2004, PSEG Fossil shall submit to EPA and NJDEP for review and approval the proposed design parameters for an FGD at Hudson Unit 2 to achieve a 30-Day Rolling Average Emission Rate for SO₂ of no greater than 0.150 lbs/mmBTU. NJDEP and EPA shall approve, disapprove, or modify PSEG Fossil's initial design proposal in accordance with Paragraphs 94 through 98 of this Consent Decree.

By no later than December 31, 2006, PSEG Fossil shall install and commence operation of an FGD at Hudson Unit 2 in accordance with the design parameters approved by EPA and NJDEP. Beginning on this same date, PSEG Fossil shall operate the FGD at Hudson Unit 2 to achieve and maintain SO₂ Emission Rates of no greater than 0.150 lb/mmBTU, based on a 30-Day Rolling Average Emission Rate, and 0.250 lb/mmBTU, based on a 24-Hour Emission Rate.

SO₂ Controls at Mercer Unit 1

- 54. By December 31, 2008, PSEG Fossil shall submit to EPA and NJDEP for approval the proposed design parameters for an FGD at Mercer Unit 1 to achieve a 30-Day Rolling Average Emission rate for SO₂ of no greater than 0.150 lbs/mmBTU. NJDEP and EPA shall approve, disapprove, or modify PSEG Fossil's initial design proposal in accordance with Paragraphs 94 through 98 of this Consent Decree.
- 55. By no later than December 31, 2010, PSEG Fossil shall install and commence operation of an FGD at Mercer Unit 1 in accordance with the design parameters approved by EPA and NJDEP. Beginning on this same date, PSEG Fossil shall operate the FGD at Mercer Unit 1 to achieve and maintain SO₂ Emission Rates of no greater than 0.150 lb/mmBTU, based on a 30-Day Rolling Average Emission Rate, and 0.250 lb/mmBTU, based on a 24-Hour Emission Rate.

SO₂ Controls at Mercer Unit 2

- 56. By December 31, 2010, PSEG Fossil shall submit to EPA and NJDEP for approval proposed design parameters for an FGD at Mercer Unit 2 to achieve a 30-Day Rolling Average Emission Rate for SO₂ of no greater than 0.150 lbs/mmBTU. NJDEP and EPA shall approve, disapprove, or modify PSEG Fossil's initial design proposal in accordance with Paragraphs 94 through 98 of this Consent Decree.
- 57. By no later than December 31, 2012, PSEG Fossil shall install and commence operation of an FGD at Mercer Unit 2 in accordance with the design parameters approved by EPA and NJDEP. Beginning on this same date, PSEG Fossil shall operate the FGD at Mercer Unit 2 to achieve and maintain SO₂ Emission Rates of no greater than 0.150 lb/mmBTU, based on a 30-Day Rolling Average Emission Rate, and 0.250 lb/mmBTU, based on a 24-Hour Emission Rate.

Alternative SO₂ Control Technologies

58. PSEG Fossil may install technology other than the FGD systems described above in satisfaction of the obligations of this Consent Decree if the alternative technology achieves the same or better SO₂ Emission Rates as required of the FGD systems and is approved in writing by EPA and NJDEP in advance of the installation of the alternative technology.

Fuel Limitations

59. Prior to the installation of an FGD at any Unit pursuant to this Consent Decree, PSEG

Fossil shall continue to burn coal at Hudson Unit 2, Mercer Unit 1, and Mercer Unit 2 in

compliance with the respective NJDEP permit requirements for those Units, including

sulfur content limitations, in effect as of the date of lodging of this Consent Decree. Upon

- the commencement of operation of an FGD at any Unit pursuant to this Consent Decree, PSEG Fossil shall burn only coal that has a monthly average sulfur content of no greater than 2.00 % at that Unit. The monthly average sulfur content shall be determined in accordance with the New Jersey permits for these particular Units.
- 60. PSEG Fossil shall not burn fuel oil having a sulfur content greater than any amount authorized by regulation and permit at any Unit covered by this Consent Decree.
- 61. PSEG Fossil shall not burn fuel or fuel mixes not authorized by NJDEP at any Unit covered by this Consent Decree.

NO_x Emission Controls and Practices

- 62. PSEG Fossil shall install and commence operation of three selective catalytic reduction ("SCR") systems--one each on Hudson Unit 2, Mercer Unit 1 and Mercer Unit 2--by the dates set forth in Paragraphs 68, 71, and 72, below.
- PSEG Fossil shall operate each SCR (or approved alternative technology approved pursuant to Paragraph 73, below) at all times that the Unit it serves operates, except that PSEG Fossil need not operate an SCR: (a) for a Unit that has ceased firing fossil fuel, during the period of time, not to exceed eight hours, from the restart of that Unit to the time that the Unit is fired with coal; and (b) for a Unit that is to be shut down, during the period of time that the Unit is no longer synchronized with any utility electric distribution system and is no longer fired with coal.
- 64. In determining NO_x Emission Rates, PSEG Fossil shall use the methods specified in 40 C.F.R. Part 75, Appendix F and 40 C.F.R. Part 60, Appendix A.

- 65. In calculating the 24-Hour NO_x Emission Rate at a Unit, PSEG Fossil shall exclude: (i) for a Unit that has ceased firing fossil fuel, the period of time, not to exceed eight hours, from the restart of that Unit to the time that the Unit is either fired with coal or synchronized with a utility electric distribution system; and (ii) for a Unit that is to be shut down, the period of time in which the Unit is no longer synchronized with any utility electric distribution system, and is no longer fired with coal.
- 66. At least 9 months prior to the commencement of operation of any SCR required by this Consent Decree, and in accordance with N.J.A.C. 7:27-22.18, PSEG Fossil shall submit to EPA and NJDEP for review and approval a proposed protocol for determining NO_x Emission Rates. NJDEP and EPA shall approve, disapprove, or modify PSEG Fossil's initial proposal in accordance with Paragraphs 94 through 98 of this Consent Decree. The proposed protocol shall set forth the methods by which PSEG Fossil proposes to convert data from its CEMS to a 30-Day Emission Rate and a 24-Hour Emission Rate after the installation of the SCRs. PSEG Fossil shall also submit a revised protocol to EPA and NJDEP for review and approval prior to any change, concurrent with or subsequent to the installation of the control technology required pursuant to this Consent Decree, in the location, type, or operation of a CEMS employed by PSEG Fossil for measuring NO_x emissions.

NO_x Controls at Hudson Unit 2

67. By May 1, 2005, PSEG Fossil shall submit to EPA and NJDEP for approval proposed design parameters for an SCR at Hudson Unit 2 to achieve a 30-Day Rolling Average Emission Rate for NO_x of no greater than 0.100 lbs/mmBTU. NJDEP and EPA shall

- approve, disapprove, or modify PSEG Fossil's initial design proposal in accordance with Paragraphs 94 through 98 of this Consent Decree.
- 68. By May 1, 2007, PSEG Fossil shall commence year-round operation of an SCR at Hudson Unit 2 to achieve and maintain NO_x Emission Rates of no greater than 0.100 lb/mmBTU, based on a 30-Day Rolling Average Emission Rate, and 0.150 lb/mmBTU, based on a 24-Hour Emission Rate.

NO_x Controls at Mercer Units 1 and 2

- 69. By no later than May 1, 2002, PSEG Fossil shall submit to EPA and NJDEP for approval proposed design parameters for SCRs at Mercer Units 1 and 2:
 - a. that achieve and maintain a NO_x Removal Efficiency of no less than 90% of each Unit's peak hourly firing rate;
 - b. that utilize supplemental duct burners and a gas reheat system to maintain (at all times that an SCR is required under this Consent Decree to be operated) the catalyst within the optimum temperature range to remove NO_x ;
 - c. that are controlled by a process control system which maximizes NO_x Removal Efficiency; and
 - that utilize an ammonia injection system and air flow in a manner which minimizes
 NO_x emissions at all electrical loads.

By no later than 90 days prior to the commencement of operation of an SCR at Mercer Units 1 or 2, PSEG Fossil shall also submit to NJDEP and EPA, for review and approval, control room operating instructions for the SCRs at Mercer Unit 1 and Mercer Unit 2 that provide for manual operation of the SCRs to maximize

- NO_{x} Removal Efficiency and to minimize ammonia emissions ("ammonia slip") from the SCRs.
- 70. NJDEP and EPA shall approve, disapprove, or modify PSEG Fossil's initial design and operating proposals in accordance with Paragraphs 94 through 98 of this Consent Decree.
- By no later than May 1, 2004, PSEG Fossil shall install and commence operation of an SCR at Mercer Unit 2 in accordance with the design parameters approved by EPA and NJDEP. PSEG Fossil shall operate the Mercer Unit 2 SCR during the Ozone Control Period in 2004 and 2005, and shall commence year-round operation of the SCR beginning on May 1, 2006. During all required periods of operation for the Mercer Unit 2 SCR, PSEG Fossil shall achieve and maintain NO_x Emission Rates of no greater than 0.130 lb/mmBTU, based on a 30-Day Rolling Average Emission Rate, and 0.150 lb/mmBTU, based on a 24-Hour Emission Rate.
- By no later than May 1, 2005, PSEG Fossil shall install and commence operation of an SCR at Mercer Unit 1 in accordance with the design parameters approved by EPA and NJDEP. PSEG Fossil shall operate the Mercer Unit 1 SCR during the Ozone Control Period in 2005, and shall commence year-round operation of the SCR beginning on May 1, 2006. During all required periods of operation for the Mercer Unit 1 SCR, PSEG Fossil shall achieve and maintain NO_x Emission Rates of no greater than 0.130 lb/mmBTU, based on a 30-Day Rolling Average Emission Rate, and 0.150 lb/mmBTU, based on a 24-Hour Emission Rate.

Alternative NO_x Control Technologies

73. PSEG Fossil may install technology other than SCRs in satisfaction of the NO_x control obligations of this Section if the alternative technology is designed to achieve the same or better Removal Efficiency and achieves the same or better NO_x Emission Rates as required of the SCR systems, and is approved in writing by EPA and NJDEP prior to the installation of the alternative NO_x control technology.

Particulate Emissions ("PM") Controls and Practices

- 74. The reference methods for determining PM Emission Rates shall be those specified in 40 C.F.R. Part 60, Appendix A, Method 5, using annual stack tests. The reference methods for determining PM-10 Emission Rates shall be those specified in 40 C.F.R. Part 51, Appendix M, Method 202 and either Method 201 or 201A, or other appropriate method approved by EPA and NJDEP.
- 75. Within three months of the date of entry of this Consent Decree, PSEG Fossil shall submit to EPA and NJDEP for review and approval a protocol for measuring PM and PM-10 emissions, in accordance with the reference methods set forth in Paragraph 74, above.

 NJDEP and EPA shall approve, disapprove, or modify PSEG Fossil's initial proposal in accordance with Paragraphs 94 through 98 of this Consent Decree.
- 76. PSEG Fossil shall calculate the PM and PM-10 Emission Rates from the annual stack tests in accordance with 40 C.F.R. § 60.8(f) and the emission test protocol approved by NJDEP and EPA.
- 77. By July 31, 2002, and every calendar year thereafter in accordance with the requirements set forth in PSEG Fossil's permits issued by the State of New Jersey and in New Jersey's

regulations, PSEG Fossil shall conduct stack testing for PM and PM-10 emissions at Hudson Unit 2, Mercer Unit 1, and Mercer Unit 2 in accordance with the protocol approved by EPA and NJDEP. PSEG Fossil shall report to EPA and NJDEP the results of its stack tests within 60 days of conducting such tests, unless NJDEP provides PSEG Fossil with additional time in which to submit such test results. PSEG Fossil's stack tests conducted as required by its permits from the State of New Jersey may be used to satisfy the annual stack test requirement imposed by this Paragraph.

PM Controls at Hudson Unit 2

- Within six months from the entry of this Consent Decree, PSEG Fossil shall submit to EPA and NJDEP for review and approval the results of an optimization study that recommends the best operational practices to minimize PM emissions from the ESP at Hudson Unit 2, and to achieve a PM Emission Rate of no greater than 0.100 lbs/mmBTU. NJDEP and EPA shall approve, disapprove, or modify PSEG Fossil's study and recommendations in accordance with Paragraphs 94 through 98 of this Consent Decree. PSEG Fossil shall implement the recommendations ultimately approved by EPA and NJDEP within three months of receiving such approval, and shall thereafter operate the ESP to achieve an emission rate of no greater than 0.100 lbs/mmBTU.
- 79. By December 31, 2004, PSEG Fossil shall submit to EPA and NJDEP for approval proposed design parameters for a polishing baghouse at Hudson Unit 2 to achieve a PM Emission Rate of at least 0.0150 lbs/mmBTU. NJDEP and EPA shall approve, disapprove, or modify PSEG Fossil's initial design proposal in accordance with Paragraphs 94 through 98 of this Consent Decree.

- 80. By no later than December 31, 2006, PSEG Fossil shall install and commence operation of a polishing baghouse at Hudson Unit 2 in accordance with the design parameters approved by EPA and NJDEP. Beginning on this same date, PSEG Fossil shall install and commence operation of a polishing baghouse at Hudson Unit 2 to achieve and maintain a PM Emission Rate of no more than 0.0150 lb/mmBTU. PSEG Fossil shall operate the Hudson Unit 2 polishing baghouse at all times that the Unit it serves is combusting coal. PSEG Fossil shall also operate the Hudson Unit 2 ESP at all times that the Unit it serves is burning coal or oil.
- 81. PSEG Fossil may install an alternative technology to the polishing baghouse described above in satisfaction of the obligations of this Paragraph if the technology achieves the same or better Emission Rate as the polishing baghouse and is approved in writing by EPA and NJDEP in advance of the installation of the alternative technology.

PM Controls at Mercer Units 1 and 2

- 82. Within six months from the entry of this Consent Decree, PSEG Fossil shall submit to EPA and NJDEP for review and approval the results of an optimization study that recommends the best operational practices to minimize PM emissions from the ESPs at Mercer Units 1 and 2. NJDEP and EPA shall approve, disapprove, or modify PSEG Fossil's study and recommendations in accordance with Paragraphs 94 through 98 of this Consent Decree.
- 83. Within three months of its receipt of approval from NJDEP and EPA of PSEG Fossil's recommended operational practices for reducing PM emissions from Mercer Units 1 and 2 pursuant to Paragraph 82, above, PSEG Fossil shall submit to EPA and NJDEP for review

- and approval an operation and maintenance plan for the ESPs at these Units that incorporates the approved operational practices. NJDEP and EPA shall approve, disapprove, or modify PSEG Fossil's operation and maintenance plan in accordance with Paragraphs 94 through 98 of this Consent Decree.
- 84. Beginning three months from PSEG Fossil's receipt of approval by EPA and NJDEP of the proposed operation and maintenance plan for the ESPs at Mercer Units 1 and 2, PSEG Fossil shall operate the ESPs in conformance with the practices and procedures set forth in the approved operation and maintenance plan.
- 85. Beginning three months from PSEG Fossil's implementation of the practices and procedures set forth in the EPA- and NJDEP-approved operation and maintenance plan for the ESPs at Mercer Units 1 and 2, PSEG Fossil shall operate these ESPs to achieve and maintain a PM Emission Rate of 0.030 lb/mmBTU.
- 86. PSEG Fossil shall include in its Title V Permit application and all other relevant permit applications for operation or construction, the operational practices approved by EPA and NJDEP in the optimization study.
- 87. PSEG Fossil shall operate the Mercer Unit 1 and Mercer Unit 2 ESPs at all times that the Unit each one serves is in operation.

Repowering of Bergen Unit 2

88. By no later than December 31, 2002, PSEG Fossil shall complete the Repowering of Bergen Unit 2 utilizing combined cycle combustion turbine technology to generate electricity, firing either natural gas, other gaseous fuels with a sulfur content no greater than that found in natural gas, or distillate oil that is burned in accordance with the sulfur

- and use restrictions contained in the permit issued by NJDEP to PSEG Fossil for that Unit.
- 89. By no later than December 31, 2002, PSEG Fossil shall install and commence operation of an SCR at the Repowered Bergen Unit 2 to achieve and maintain compliance with the NO_x Emission Rates in the permit issued by NJDEP to PSEG Fossil for that Unit.
- 90. Bergen Unit 2 may be fired with distillate fuel oil only if: (a) PSEG Fossil complies with the sulfur and time limitations contained in the permit issued by NJDEP to PSEG Fossil for that Unit; and (b) PSEG Fossil uses all NO_x emission control equipment for that Unit when it is fired with such oil, consistent with Paragraph 89 of this Consent Decree.
- 91. PSEG Fossil shall obtain all necessary state and/or local permits for the Bergen Repowering; a PSD permit and a major NSR permit pursuant to N.J.A.C. 7:27-18 shall not be required for the Bergen Repowering project, however, as long as the project is completed in accordance with the permit issued by NJDEP to PSEG Fossil and the requirements of N.J.A.C. 7:27-8.
- 92. PSEG Fossil shall not operate the Repowered Bergen Unit 2 until NJDEP issues a permit for this Unit. In the event that the project is not constructed or operated in accordance with the permit issued by NJDEP to PSEG Fossil, PSEG Fossil must obtain prior approval from both EPA and NJDEP.

Use of Data

93. Nothing in this Consent Decree, including Paragraphs 48 (measuring SO₂ emissions), 64 (NO_x emissions), and 76 (PM and PM-10 emissions), is intended to, or shall, alter applicable law (including the Credible Evidence Rule (62 Fed. Reg. 8,314 (1997))

concerning the use of data, for any purpose under the Clean Air Act or the Air Pollution Control Act, generated by the reference methods specified herein or otherwise.

EPA and NJDEP Review and Approval of PSEG Fossil Submittals

- 94. Within sixty days from the date that EPA and NJDEP receive from PSEG Fossil any submittal required under this Consent Decree, including initial design proposals for emission control equipment, proposed protocols for calculating emission rates, and optimization studies and proposed recommendations, NJDEP or EPA shall approve, disapprove, or modify PSEG Fossil's proposal.
- 95. If EPA or NJDEP either disapprove or modify PSEG Fossil's initial proposal, then PSEG Fossil shall, within sixty days from such determination, respond to EPA's or NJDEP's determination to disapprove or modify PSEG Fossil's initial proposal.
- 96. Within sixty days of receiving PSEG Fossil's response to EPA's or NJDEP's disapproval or request for modification, NJDEP or EPA shall issue a final determination as to the parameters to be used by PSEG Fossil.
- 97. Within sixty days of receiving EPA's or NJDEP's final determination, PSEG Fossil shall, if required by EPA or NJDEP in its final determination, modify and resubmit its initial proposal to NJDEP and EPA.
- 98. If EPA or NJDEP fail to provide a response within sixty days to any of PSEG Fossil's proposals for the design and installation of emission control equipment, as required by Paragraphs 94 and 96, above, then the installation date for that piece of control equipment, as well as the effective date of any associated Emission Rate, shall be extended by the period of time beyond sixty days that EPA and NJDEP delay their responses, or any

additional amount of time as EPA and NJDEP may agree to, in consideration of PSEG Fossil's outage schedule. Any such failure by EPA and NJDEP, however, shall not alter or extend any other obligation imposed on PSEG Fossil under this Consent Decree.

Moreover, any failure by EPA or NJDEP to respond within sixty days to any PSEG Fossil submittal other than the design of emission control equipment to be installed pursuant to this Consent Decree shall not alter or extend any obligation under this Consent Decree.

V. <u>ALLOWANCES, CRED</u>ITS

Use of SO₂ and NO_x Allowances

- Upon the dates specified in Paragraphs 53, 55, and 57, above, for the commencement of operation of each SO₂ emission control device required by this Consent Decree, PSEG Fossil may use any SO₂ Allowances allocated by EPA to Hudson Unit 2, Mercer Unit 1, and Mercer Unit 2 only to satisfy the operational needs of these Units, and shall neither:

 (a) use such Allowances at any other Unit, including any other PSEG Fossil Unit not covered by this Decree; nor (b) sell or transfer any SO₂ Allowances allocated to these Units to a third party, other than for purposes of retiring such SO₂ Allowances in accordance with Paragraphs 100 and 109, below.
- 100. Within one year from the date of commencement of operation of each SO₂ emission control device required by Paragraphs 53, 55, and 57, PSEG Fossil shall retire to EPA, or transfer to a non-profit third party selected by PSEG Fossil for retirement, any SO₂

 Allowances that exceed the operational SO₂ Allowance needs of Hudson Unit 2, Mercer Unit 1, and Mercer Unit 2, collectively. PSEG Fossil shall retire SO₂ Allowances by the

- use of the applicable United States Environmental Protection Agency Acid Rain Program Allowance Transfer Form.
- 101. Upon the dates specified in Paragraphs 68, 71, and 72, above, for the commencement of operation of each NO_x emission control device required by this Consent Decree, PSEG Fossil may use any NO_x allowances allocated by EPA to Hudson Unit 2, Mercer Unit 1 and Mercer Unit 2 only to satisfy the operational needs of these Units, and shall neither:

 (a) use such NO_x allowances at any other Unit, including any other PSEG Fossil Unit not covered by this Decree; nor (b) sell or transfer any NO_x allowance allocated to these Units to a third party, other than for purposes of retiring such NO_x allowances in accordance with Paragraphs 102 and 109, below.
- 102. Within one year from the date of commencement of operation of each NO_x emission control device required by Paragraphs 68, 71, and 72, PSEG Fossil shall retire to EPA, or transfer to a non-profit third party selected by PSEG Fossil for retirement, any NO_x allowances that exceed the operational NO_x allowance needs of Hudson Unit 2, Mercer Unit 1, and Mercer Unit 2, collectively.

Use and Retirement of NO_x Credits under the New Jersey OMET Program

- 103. Within sixty days of entry of this Consent Decree, PSEG Fossil shall retire 372,380 discrete emission reduction credits ("DER Credits") of the DER Credits that PSEG Fossil has accumulated under New Jersey's Open Market Emissions Trading program ("OMET Program").
- 104. PSEG Fossil shall retain in New Jersey's OMET Program 20,240 DER Credits for Maximum Electricity Generation ("MEG") Alerts and 55,200 DER Credits for high emitting units that have to be unexpectedly dispatched on a higher capacity utilization schedule than PSEG Fossil's daily dispatch plan in order to meet system demand

- ("Unexpected Dispatch RACT Compliance"). PSEG Fossil shall not sell or transfer any of the DER Credits retained for MEG Alerts and Unexpected Dispatch RACT Compliance, and shall use these retained DER Credits only for MEG Alerts and Unexpected Dispatch RACT Compliance.
- 105. PSEG Fossil may not generate or claim DER Credits under New Jersey's OMET program at Hudson Unit 2, Mercer Unit 1, or Mercer Unit 2 between January 1, 2001, and the dates for the installation and operation of the SCRs at these Units set forth in this Consent Decree.
- 106. Upon installation of the SCRs required by this Consent Decree, PSEG Fossil may generate or claim 50% of the DER Credits which result from PSEG Fossil achieving NO_x Emission Rates below those required by this Consent Decree. PSEG Fossil may also generate and claim 100% of the of the DER Credits which result from PSEG Fossil commencing operation of the SCRs earlier than the dates required by this Consent Decree.
- By January 15, 2006, PSEG Fossil shall retire to New Jersey any remaining DER Credits from the 20,240 DER Credits previously retained for MEG Alerts. By December 31,
 2015, PSEG Fossil shall retire to New Jersey any remaining DER Credits from the 55,200 DER Credits previously retained for Unexpected Dispatch RACT Compliance.

Retirement of Allowances

108. For purposes of this Section, "retirement of allowances" means permanently surrendering allowances from the boiler Unit accounts administered by EPA so that such allowances can never be used to meet any compliance requirement under the Clean Air Act, the New Jersey State Implementation Plan, or this Consent Decree.

- If any allowances are transferred directly to a non-profit third party, PSEG Fossil shall submit a report of such transfer to Plaintiffs within seven (7) business days of such transfer, in accordance with Paragraph 197 of this Consent Decree. Such report shall: (i) provide the identity of the non-profit third-party recipient(s) of the allowances and a listing of the serial numbers of the transferred allowances; (ii) demonstrate that the third-party recipient(s) will not sell, trade, or otherwise exchange any of the allowances; (iii) demonstrate that the third party recipient(s) will not use any of the allowances to meet any obligation imposed by any environmental law; and (iv) demonstrate that the third-party recipient(s) will surrender the allowances for permanent retirement to EPA or NJDEP within one year after PSEG Fossil transfers the allowances to the third-party recipient(s). PSEG Fossil shall not have complied with the allowance surrender requirements of Paragraphs 100 and 102 until all third-party recipient(s) shall have actually surrendered the transferred allowances to EPA or NJDEP for retirement.
- 110. For all SO₂ Allowances surrendered to EPA, PSEG Fossil shall first submit the applicable United States Environmental Protection Agency Acid Rain Program Allowance Transfer Form to EPA's Office of Air and Radiation's Clean Air Markets Division directing the transfer of the Allowances held or controlled by PSEG Fossil to the EPA Enforcement Surrender Account or to any other EPA account that the Agency may direct. As part of submitting these transfer requests, PSEG Fossil shall irrevocably authorize the transfer of these SO₂ Allowances and identify, by name of account and any applicable serial or other identification numbers or station names, the source and location of the SO₂ Allowances being retired.

111. For all NO_x allowances surrendered to NJDEP, PSEG Fossil shall submit a retirement request pursuant to the procedures set forth at N.J.A.C. 7:27-31.10(l). As part of submitting these transfer requests, PSEG Fossil shall irrevocably authorize the transfer of these allowances and identify, by name of account and any applicable serial or other identification numbers or station names, the source and location of the allowances being retired.

Exclusion of Certain Emission Allowances

- 112. For any and all actions taken by PSEG Fossil pursuant to the terms of this Consent Decree, PSEG Fossil shall not use or sell any resulting NO_x or SO₂ emission allowances in any emission trading or marketing program of any kind.
- 113. Except as provided for in Paragraphs 100 and 102, nothing in this Consent Decree shall preclude PSEG Fossil from using, selling, or transferring emission allowances allocated to Hudson Unit 2, Mercer Unit 1, and Mercer Unit 2 arising from either: (a) PSEG Fossil's activities at these Units that occur prior to the date of entry of this Consent Decree; or (b) PSEG Fossil's activities at these Units that are not required under this Consent Decree and that occur after the date of entry of this Consent Decree.
- 114. Notwithstanding the preceding Paragraph, PSEG Fossil shall not use, sell, or transfer under New Jersey law more than 50% of the NO_x and SO₂ allowances that result from PSEG Fossil achieving Emission Rates below those required by this Consent Decree.

 PSEG Fossil may, however, use, sell, or transfer, in accordance with New Jersey law, 100% of the of the NO_x and SO₂ allowances that result from PSEG Fossil commencing operation of emission controls earlier than the dates required by this Consent Decree.

115. Nothing in this Consent Decree shall preclude PSEG Fossil from purchasing emission allowances to satisfy operational requirements that may exist outside of this Consent Decree.

VI. PERMITS AND RESOLUTION OF PAST CIVIL CLAIMS

Timely Application for Permits

116. Except as otherwise stated in this Consent Decree, in any instance where otherwise applicable law or this Consent Decree requires PSEG Fossil to secure a permit to authorize the construction, modification, or operation of any Unit or Unit component under this Consent Decree, PSEG Fossil shall make such application in a timely and complete manner. Such applications shall be completed and submitted to the appropriate authorities to allow sufficient time for all legally required processing and review of the permit request. Any failure by PSEG Fossil to submit a timely permit application for Hudson Unit 2, Mercer Unit 1, or Mercer Unit 2 shall bar any use by PSEG Fossil of the Force Majeure provisions of this Consent Decree to allege that it failed to install or operate a Unit as required by this Consent Decree because a permitting authority failed to issue a necessary permit in a timely manner. Nothing in this Decree shall be construed to relieve PSEG Fossil of any obligation to comply with New Jersey's permitting requirements pursuant to Subchapters 8 and 22 of the New Jersey Code, N.J.A.C. 7:27-8 and 7:27-22; provided, however, that no such permit issued by New Jersey under Subchapters 8 or 22 may impose conditions on NO_x, SO₂ and PM emissions that are more stringent than those imposed under Paragraphs 53, 55, 57, 59 through 61, 68, 71, 72, 80, and 85, absent either a final agency order or a change in the regulations promulgated under the Air Pollution Control Act that allows for a more stringent condition.

Title V Permits.

- 117. Within sixty (60) days of entry of this Decree, PSEG Fossil shall amend its existing Title V

 Permit application(s) or apply for an amendment of its Title V Permit(s), to include a

 schedule for all performance, operational, maintenance, and control technology

 requirements established by this Consent Decree, including but not limited to Emission

 Rates, limits on fuel use, and operation and maintenance optimization requirements.

 Within one year after commencement of operation of each pollution control device in

 Section IV (Emission Reductions and Controls) of this Decree, PSEG Fossil shall submit a

 proposed modification to its Title V permit(s) and applications to reflect the new Emission

 Rates pursuant to Section IV (Emission Reduction and Controls) and, to the extent

 applicable, the surrender of allowances under Section V (Allowances, Credits) of this

 Decree.
- 118. Except as this Consent Decree expressly requires otherwise, this Consent Decree shall not be construed to require PSEG Fossil to apply for or obtain a permit pursuant to Parts C and D in Title I of the Clean Air Act for any work performed by PSEG Fossil within the scope of the Resolution of Claims provisions of Paragraphs 121 and 122, below, or within the scope of Section IV (Emission Reductions and Controls) of this Consent Decree.

 Nothing in this Decree shall be construed to relieve PSEG Fossil of any obligation to comply with Title V of the Clean Air Act and NJDEP's implementing regulations.
- 119. Resolution of Past Federal Civil Claims This Consent Decree resolves PSEG Fossil's civil liability for violations at Hudson Unit 2, Mercer Unit 1, Mercer Unit 2, and Bergen Unit 2 that have arisen from PSEG Fossil's actions at these Units prior to the date on which this Consent Decree is lodged with the Court of: (a) the Prevention of Significant

Deterioration ("PSD") or Non-Attainment New Source Review ("NSR") provisions of Parts C and D in Title I of the Clean Air Act; (b) the Federally-enforceable NSR provisions incorporated into N.J.A.C. 7:27-18; and (c) the Federally-enforceable New Jersey permitting requirements set forth in N.J.A.C. 7:27-8.3(a), (b), and (c). This Consent Decree further resolves PSEG Fossil's civil liability for violations of the Federally-enforceable provisions of N.J.A.C. 7:27-19.6 and 7:27-19.24 at the designated set of electricity generating units identified in New Jersey Title V permit no. 05-95-0009.

120. Resolution of Past State Civil Claims -This Consent Decree resolves PSEG Fossil's civil liability for violations at Hudson Unit 2, Mercer Unit 1, Mercer Unit 2, and Bergen Unit 2 that have arisen from PSEG Fossil's actions at these Units prior to the date on which this Consent Decree is lodged with the Court of: (a) the Prevention of Significant Deterioration ("PSD") or Nonattainment New Source Review ("Nonattainment NSR") provisions of Parts C and D in Title I of the Clean Air Act; (b) the NSR provisions incorporated into N.J.A.C. 7:27-18; and (c) the New Jersey permitting requirements set forth in N.J.A.C. 7:27-8.3(a), (b), and (c). This Consent Decree further resolves PSEG Fossil's civil liability for: (a) the OMET provisions incorporated into N.J.A.C. 7:27-30; and (b) compliance with N.J.A.C. 7:27-19.6 and 7:27-19.24 with respect to the use of DER Credits.

VII. RESOLUTION OF FUTURE CIVIL CLAIMS - COVENANTS NOT TO SUE

121. Resolution of Future Federal Claims – Subject to the limitations specified in Paragraphs
123 and 124, the United States covenants not to sue PSEG Fossil and its successors and
assigns for civil claims arising from the PSD or Nonattainment NSR provisions of Parts C
and D in Title I of the Clean Air Act, 42 U.S.C. § 7401 et seq., at Hudson Unit 2, Mercer

Unit 1, and Mercer Unit 2 based on failure to obtain PSD or Nonattainment NSR permits for:

- a. physical changes or changes in the method of operation at Hudson Unit 2, Mercer Unit 1, and Mercer Unit 2, after the date of lodging of this Consent Decree, that this Consent Decree expressly directs PSEG Fossil to undertake; or
- b. physical changes or changes in the method of operation at Hudson Unit 2, Mercer Unit 1, and Mercer Unit 2, after the date of lodging of this Consent Decree, that are not required by this Consent Decree, if and only if PSEG Fossil is otherwise in compliance with: Section IV (Emissions Reductions and Controls), other than the 30-Day, 24-Hour, and PM Emission Rates contained in Paragraphs 53, 55, 57, 68, 71, 72, 80, and 85; Section V (Allowances, Credits); and Paragraph 117 of this Consent Decree.
- and 124, below, New Jersey covenants not to sue PSEG Fossil and its successors and assigns for civil claims arising from the PSD or Nonattainment NSR provisions of Parts C and D in Title I of the Clean Air Act, 42 U.S.C. § 7401 et seq., and N.J.A.C. 7:27-18.1 et seq. at Hudson Unit 2, Mercer Unit 1, and Mercer Unit 2 based on failure to obtain PSD or Nonattainment NSR permits for:
 - a. physical changes or changes in the method of operation at Hudson Unit 2, Mercer Unit 1, and Mercer Unit 2, after the date of lodging of this Consent Decree, that this Consent Decree expressly directs PSEG Fossil to undertake; or
 - b. physical changes or changes in the method of operation at Hudson Unit 2, MercerUnit 1, and Mercer Unit 2, after the date of lodging of this Consent Decree, that

are not required by this Consent Decree, if and only if PSEG Fossil is otherwise in compliance with: Sections IV (Emissions Reduction and Controls), other than the 30-Day, 24-Hour, and PM Emission Rates contained in Paragraphs 53, 55, 57, 68, 71, 72, 80, and 85; Section V (Allowances, Credits); and Paragraph 117 of this Consent Decree.

General Limitations on the Future Covenants Not To Sue

- 123. If emissions from Hudson Unit 2, Mercer Unit 1, and Mercer Unit 2, collectively exceed more than 16,444 tons of NO_x in any calendar year after December 31, 2005, or more than 29,948 tons of SO₂ in any calendar year after December 31, 2006, then the covenants not to sue in Paragraphs 121 and 122 shall not apply to any physical change or change in the method of operation at these Units within the five-year period preceding the excedance.
- 124. The Covenants Not to Sue in Paragraphs 121 and 122 do not apply to physical changes or changes in the method of operation, either individually or collectively for a Unit, at Hudson Unit 2, Mercer Unit 1 or Mercer Unit 2 that would increase the maximum hourly emission rates, as determined by 40 C.F.R. § 60.14, for NO_x, SO₂, or any other pollutant regulated under the applicable New Source Performance Standard by more than 10 percent. To determine the allowable maximum hourly emission rate increase, PSEG shall use the following formulae:

PostCI = $(ER_{current} \times (1 - CE)) \times 0.10$

PreCI = $ER_{current} \times 0.10$

where

PostCI = Allowable post control maximum hourly emission rate increase (lbs/hr)

ER_{current} = Maximum hourly emission rate, as determined by 40 C.F.R. § 60.14 at the time of lodging consent decree (lbs/hr)

CE = Control efficiency, expressed as a decimal fraction, expected from a

given control as determined by comparing the average 30-Day Rolling Average Emission Rate achieved at the Unit during the year

prior to entry of the Consent Decree to the 30-Day Rolling Average Emission Rate Required by the Consent Decree

PreCI = Allowable pre-control maximum hourly emission rate increase

(lbs/hr).

- 125. Any claim not resolved through this Section of the Consent Decree is reserved, as is any affirmative defense or claim of exemption to any such claim. As to any claim resolved but later re-opened under this Section of the Decree, no such Party shall assert issue preclusion, claim preclusion, or any claim splitting theory to defeat such a claim or defense.
- 126. The State of New Jersey specifically reserves all rights under the Air Pollution Control Act, N.J.S.A. 26:2C-1 et seq., and common law, to require PSEG Fossil to take additional actions that NJDEP determines are necessary to protect public health, safety, welfare, and the environment. Moreover, nothing in this Consent Decree shall constitute a waiver of any statutory or common law right of NJDEP to require such additional actions should NJDEP determine that such actions are necessary.
- 127. Notwithstanding any other provisions of this Decree, the provisions of Paragraphs 121 and 122 (Resolution of Future Federal and State Civil Claims) shall terminate on December 31, 2015, and are without any force or effect as to any physical change or change in the method of operation of a Unit commenced or completed after that date.

Effect of this Section on PSEG Fossil.

128. This Section of the Decree does not: (a) impose any affirmative obligation on PSEG Fossil; (b) preclude PSEG Fossil from obtaining a PSD or Nonattainment NSR permit for a modification of a Unit that would be subject to the limitations and reopeners contained in Paragraphs 123 and 124; or (c) relieve PSEG Fossil of any obligation imposed on it by other Sections of this Decree.

VIII. ENVIRONMENTAL MITIGATION PROJECTS

- 129. PSEG Fossil shall submit for review and approval, pursuant to Paragraphs 94 through 98 of this Consent Decree, plans for the Mitigation Projects described in this Section (Environmental Mitigation Projects), and shall implement those projects in compliance with the schedules and terms of this Consent Decree and the plans for such projects approved under this Decree. In performing these Projects, PSEG Fossil shall spend no less than \$6.0 million (present value in 2001 dollars) in Project Dollars. PSEG Fossil shall maintain all documents required by Generally Accepted Accounting Principles to substantiate the Project Dollars spent by PSEG Fossil, and shall provide these documents to EPA and NJDEP within 30 days of a request by either EPA or NJDEP for the documents.
- 130. All plans and reports submitted by PSEG Fossil pursuant to the requirements of this Section of the Consent Decree shall be publicly available from PSEG Fossil, without charge by PSEG Fossil.
- PSEG Fossil shall certify, as part of each plan submitted to the Plaintiffs for any Mitigation Project, that as of the date of entry of this Consent Decree it was unaware of any person

- required by law, other than this Consent Decree, to perform the Project described in the plan.
- 132. PSEG Fossil shall use good faith efforts to secure as much benefit as possible for the Project Dollars expended, consistent with the applicable requirements and limits of this Consent Decree.
- 133. If PSEG Fossil elects to undertake a Project by contributing funds to another person or instrumentality that will carry out the Project, that person or instrumentality must, in writing: (a) identify its legal authority for accepting such funding; and (b) identify its legal authority to conduct the Project for which PSEG Fossil contributes the funds. Regardless of whether PSEG Fossil elects to undertake a Project by itself or to do so by contributing funds to another person or instrumentality that will carry out the Project, PSEG Fossil acknowledges that it will receive credit for the expenditure of such funds as Project Dollars only if PSEG Fossil demonstrates that the funds have been actually spent either by PSEG Fossil or by the person or instrumentality receiving them, and that such expenditures met all requirements of this Consent Decree.
- 134. Within sixty (60) days following the completion of each approved Mitigation Project to be undertaken by PSEG Fossil, PSEG Fossil shall submit to EPA and NJDEP a report that documents the date that the Mitigation Projects were completed, the results of implementing the project, including the emission reductions or other environmental benefits achieved, and the Project Dollars expended by PSEG Fossil in implementing the project. PSEG Fossil shall include in its reports pursuant to Section IX (Reporting and Recordkeeping) of this Consent Decree all recorded mercury and PM CEMS data, in electronic format.

135. PSEG Fossil shall submit the required plans and certifications for, and complete, the following Projects:

PSEG Fossil - New Jersey Carbon Dioxide Reduction Program

- average carbon dioxide ("CO₂") emission rate, expressed in pounds per Megawatt-hour ("lbs/MWhr"), from fossil fuel-fired electric generating units in New Jersey ("NJEGUs") owned or operated by PSEG Fossil, a wholly-owned subsidiary of PSEG Fossil or a wholly-owned affiliate of PSEG Fossil, to a goal of 1,450 lbs/MWhr, which is 15% below PSEG Fossil's 1990 CO₂ emission rate of 1,706 lbs/MWhr.
- PSEG Fossil shall receive a \$0.10 credit in Project Dollars for each \$1.00 expended by PSEG Fossil up until December 31, 2005, for what EPA and NJDEP deem to be reasonable and prudent capital expenditures made to reach this 15% CO₂ reduction goal, up to a maximum of \$3.5 million in Project Dollars (for up to \$35 million in reasonable and prudent capital expenditures). PSEG Fossil's costs associated with its repowering of Bergen Unit 2 are not eligible for credit as Project Dollars.
- 138. Notwithstanding any other provision of this Consent Decree, if PSEG Fossil does not for any reason attain the goal of a 15% reduction from the 1990 CO₂ emission rate at these plants by December 31, 2005, then by April 30, 2006, PSEG Fossil shall pay to NJDEP \$1.00 per ton of CO₂ emissions for the shortfall. The shortfall, if any, shall be determined by calculating the difference between the 2005 Overall Calendar Year CO₂ Emission Rate from PSEG Fossil's NJEGUs and PSEG Fossil's 15% CO₂ emission rate reduction goal of 1,450 lb/MWh. The difference in emission rates shall be multiplied by the total megawatt hours generated in 2005 by PSEG Fossil's NJEGUs resulting in pounds of CO₂. The

pounds of CO₂ is then divided by 2,000 lbs/ton to calculate the tons of CO₂. The tons of CO₂ shall be multiplied by the CO₂ fund rate of \$1.00 per ton. The shortfall payment, if any, shall not exceed \$1.5 million. Each such dollar paid by PSEG Fossil to NJDEP shall be counted as a Project Dollar, for purposes of this Consent Decree.

Methane Gas Recovery

- 139. By December 31, 2002, PSEG Fossil shall pay not less than \$1.5 million to NJDEP, which shall utilize the money for the recovery and beneficial reuse of methane gas from landfills in New Jersey. Each dollar paid by PSEG Fossil shall be counted as a Project Dollar, for purposes of this Consent Decree.
- 140. PSEG Fossil may not recover the cost of the methane gas recovery Project Dollar expenditures.

Mercury Reduction and Monitoring

- 141. Through the installation and optimization of the FGD systems to be installed pursuant to Paragraphs 53, 55, and 57 of this Consent Decree, or through the installation and operation of any alternate SO₂ emissions reduction system approved by EPA and NJDEP under Paragraph 58, PSEG Fossil shall use best efforts to achieve a 90% reduction of PSEG Fossil's mercury emissions from year 2000 levels at Hudson Unit 2, Mercer Unit 1, and Mercer Unit 2, within one year after the installation of each FGD system at these Units.
- 142. By December 31, 2008, PSEG Fossil shall also expend not less than \$1.0 million in the development of technology for monitoring mercury emissions from coal-fired Units. Each dollar spent by PSEG Fossil pursuant to Paragraphs 143 through 147 shall be counted as a Project Dollar, for purposes of this Consent Decree.

- 143. By December 31, 2002, PSEG Fossil, in consultation with EPA and NJDEP, shall evaluate technologies for continuous mercury emissions monitoring ("Mercury CEMS") at Hudson Unit 2, Mercer Unit 1, and Mercer Unit 2, and shall provide a report to EPA and NJDEP proposing Mercury CEMS technology at these Units.
- 144. By December 31, 2003, EPA and NJDEP, in consultation with PSEG Fossil, shall select and approve a Mercury CEMS demonstration technology for Hudson Unit 2, Mercer Unit 1, or Mercer Unit 2.
- 145. By December 31, 2004, PSEG Fossil shall install and commence operation of a Mercury CEMS demonstration technology selected by EPA and NJDEP, in consultation with PSEG Fossil. For purposes of this Paragraph, it shall be presumed that PSEG Fossil will install the Mercury CEMS demonstration technology at Hudson Unit 2, unless PSEG Fossil demonstrates to the satisfaction of EPA and NJDEP that installation at an alternative Unit is more appropriate.
- 146. Beginning on December 31, 2004, PSEG Fossil shall consult with EPA, NJDEP, and the Mercury CEMS supplier(s) to optimize and evaluate the performance of the Mercury CEMS demonstration technology. On or before December 31st of 2005, 2006, and 2007, PSEG Fossil shall submit to EPA and NJDEP a report summarizing the performance and accuracy of the Mercury CEMS demonstration technology.
- 147. By December 31, 2008, PSEG Fossil shall also install and commence operation of Mercury CEMS at the two remaining Units at which the Mercury CEMS demonstration technology was not installed, unless by March 31, 2008, EPA and NJDEP determine, based on the results of the Mercury CEMS demonstration technology and the results from any other available Mercury CEMS, that it is infeasible to operate Mercury CEMS at these

- two remaining Units. If by March 31, 2008, EPA and NJDEP determine that it is infeasible to operate Mercury CEMS at these two remaining Units, PSEG Fossil shall be entitled to discontinue operation of and remove the Mercury CEMS demonstration technology.
- 148. For purposes of Paragraph 147, above, "infeasible" shall mean: (a) that the CEMS cannot be kept in proper condition for sufficient periods of time without chronic and serious interference with the operation of the Unit; (b) the CEMS demonstrate persistent and unusual equipment adjustment and servicing needs that cannot be resolved without an unreasonable expenditure of resources; or (c) the data generated cannot be used to assess mercury emissions from the Unit and the Unit's pollution control devices.
- 149. Any determination by EPA and NJDEP as to the feasibility of operating Mercury or PM CEMS shall be subject to the dispute resolution provisions of this Consent Decree, but shall be upheld upon judicial review unless the Court concludes that the Agencies' determination was arbitrary and capricious.
- 150. If on or before March 31, 2008, EPA and NJDEP determine that it is infeasible to operate Mercury CEMS at the two remaining Units, using either the Mercury CEMS demonstration technology or any other Mercury CEMS technology, and if PM CEMS are commercially-available in the United States, then within two years from the date of such determination of infeasibility, PSEG Fossil shall install and commence continuous operation of PM CEMS on Hudson Unit 2, Mercer Unit 1, and Mercer Unit 2 in accordance with 40 C.F.R. Part 60, Appendix B and Appendix F, unless the available technical literature indicates that PM CEMS are technically infeasible given the flue gas stack conditions of these Units.

- 151. Until the Mercury CEMS referenced above is installed on Hudson Unit 2, Mercer Unit 1, and Mercer Unit 2 and EPA and NJDEP determine that such technology produces reliable results, PSEG Fossil shall conduct stack tests in accordance with NJDEP regulations and permits as well as 40 C.F.R. Part 60, Appendix A, EPA Method 29 or Method 101A. By July 1st of each year following the entry of this Consent Decree, and annually thereafter, PSEG Fossil shall conduct these stack tests to determine emissions and concentrations of mercury. PSEG Fossil shall report to EPA and NJDEP the results of its stack tests within 60 days of conducting such tests, unless NJDEP provides PSEG Fossil with additional time in which to submit such test results.
- 152. By April 30, 2002, and by the end of each calendar month thereafter until EPA and NJDEP conclude that the installed continuous emission monitoring technology has produced reliable results, PSEG Fossil shall conduct a monthly analysis of the mercury in the coal used as fuel at Hudson Unit 2, Mercer Unit 1, and Mercer Unit 2. If after 24 months of monthly mercury coal analysis, EPA and NJDEP may approve quarterly testing if EPA and NJDEP determine that the annual average does not change significantly from twelve samples per year to four samples per year. PSEG Fossil shall revert to monthly sampling and analysis, however, if EPA and NJDEP determine that monthly sampling is warranted by the quarterly results.
- 153. PSEG Fossil shall also determine the mercury content of representative samples of the coal being burned during mercury stack testing each year, and shall correlate the amount of mercury in the coal to the amount being emitted to the air for that year. The coal sampling and analysis conducted during these annual stack tests may also serve as the

- monthly (or quarterly) mercury sampling and analysis for that month in which the annual test was conducted.
- 154. PSEG Fossil shall report the results of its mercury coal analyses to EPA and NJDEP, in the periodic reports to be submitted in accordance with Section IX (Reporting and Recordkeeping) of this Consent Decree.

IX. REPORTING AND RECORDKEEPING

- 155. Within 180 days after completing construction on each control technology specified in Paragraphs 53, 55, 57, 68, 71, 72, 80, and 85, PSEG Fossil must conduct performance tests and submit performance test reports that demonstrate compliance with all the Emission Rates in this Consent Decree. Performance test reports shall be submitted to both EPA and NJDEP at the addresses specified in Paragraph 197.
- 156. Beginning at the end of the first calendar quarter following entry of this Decree and continuing until December 31, 2003, and annually on January 31, 2004, and every year thereafter for the duration of this Decree, and in addition to any other express reporting requirement in this Consent Decree, PSEG Fossil shall submit to EPA and NJDEP a progress report.
- 157. Such progress report shall provide: (a) all information necessary to determine compliance with this Consent Decree, including compliance with Paragraphs 47, 53, 55, 57, 59-61, 63, 68, 71-72, 78, 80, 85, 87-90, 100, 102-104, 107, 109, 129, 136-139, 141-142, 145, 147, 150, and 160; (b) all information necessary to determine whether PSEG Fossil has complied with the restrictions in Paragraphs 123 and 124 on the future federal and state covenants; (c) information relating to emission allowances and credits that PSEG Fossil claims to have generated in accordance with Paragraphs 106 and 113 by compliance

beyond the requirements of this Consent Decree; and (d) information indicating that the installation and commencement of operation date for a pollution control device may be delayed, including the nature and cause of the potential delay, and any steps taken by PSEG Fossil to mitigate such delay.

- 158. Each PSEG Fossil progress report shall be signed by PSEG Fossil's Vice President, Fossil Operations, or, in his or her absence, another company Vice President, or higher ranking official, and contain the following certification:
 - "I certify under penalty of law that I believe the information provided in this document is true, accurate and complete. I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attached documents and, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil and criminal penalties, including the possibility of fine or imprisonment or both, for submitting false, inaccurate or incomplete information."
- 159. PSEG Fossil shall report to EPA and NJDEP any violation of the requirements of this

 Consent Decree, including Emission Rate excedances, within 10 days of any such
 violation. PSEG Fossil shall also summarize any such violations, and any other anticipated
 violations, in the periodic progress reports submitted pursuant to this Section.

X. CIVIL PENALTY

160. Within thirty (30) calendar days of entry of this Consent Decree, PSEG Fossil shall pay to the United States a civil penalty in the amount of \$1,400,000. The civil penalty shall be paid by Electronic Funds Transfer ("EFT") to the United States Department of Justice, in accordance with current EFT procedures, referencing the USAO File Number and DOJ Case Number 90-5-2-1-1866/1 and the civil action case name and case number of this

action. The costs of EFT shall be PSEG Fossil's responsibility. Payment shall be made in accordance with instructions provided by the Financial Litigation Unit of the U.S. Attorney's Office for the District of New Jersey. Any funds received after 4:00 p.m. (EST) shall be credited on the next business day. PSEG Fossil shall provide notice of payment, referencing the USAO File Number, DOJ Case Number 90-5-2-1-1866/1, and the civil action case name and case number, to the Department of Justice and to EPA, as provided in Paragraph 197. Failure to timely pay the civil penalty shall subject PSEG Fossil to interest accruing from the date payment is due until the date payment is made at the rate prescribed by 28 U.S.C. § 1961, and shall render PSEG Fossil liable for all charges, costs, fees, and penalties established by law for the benefit of a creditor or of the United States in securing payment.

161. Payments made pursuant to this Section are penalties within the meaning of Section 162(f) of the Internal Revenue Code, 26 U.S.C. §162(f), and are not tax deductible expenditures for purposes of federal law.

XI. <u>STIPULATED PENALTIES</u>

- 162. Within thirty days after written demand from the United States or New Jersey, and subject to the provisions of Sections XIII (Force Majeure) and XIV (Dispute Resolution), PSEG Fossil shall pay the following stipulated penalties to the Plaintiffs, in accordance with their direction on the amounts to be paid to each of the Plaintiffs, for each failure by PSEG Fossil to comply with the terms of this Consent Decree:
 - a. For failure to pay timely the civil penalty as specified in Section X (Civil Penalty) of this Consent Decree: \$10,000 per day;

- b. For all violations of a 24-Hour Emission Rate: (1) less than 5% in excess of limit-\$2,500 per day, per violation; (2) more than 5% but less than 10% in excess of limit--\$5,000 per day per violation; (3) equal to or greater than 10% in excess of limit--\$10,000 per day, per violation;
- c. For all violations of a 30-Day Rolling Average Emission Rate: (1) Less than 5% in excess of limit -- \$2,500 per day per violation; (2) more than 5% but less than 10% in excess of limit -- \$5,000 per day per violation; (3) equal to or greater than 10% in excess of limit -- \$10,000 per day per violation;
 - Violation of an Emission Rate that is based on a 30-Day Rolling Average
 Emission Rate is a violation on every day of the 30-day period on which the average is based;
 - ii. Where a violation of a 30-Day Rolling Average Emission Rate (for the same pollutant and from the same source) recurs within periods less than 30 days, PSEG Fossil shall not pay a daily stipulated penalty for any day of the recurrence for which a stipulated penalty has already been paid;
- d. For failure to operate an FGD, SCR, ESP, or polishing baghouse when the Unit associated with the FGD, SCR, ESP, or polishing baghouse is in operation, except as permitted by Paragraphs 47, 63, 80 and 87: \$10,000 per day, per violation, for the first 30 days, and \$27,500 per day, per violation, thereafter;
- e. For failure to construct and operate the Bergen Repowering project in a manner consistent with the permit issued by NJDEP to PSEG Fossil, unless prior approval is given by EPA and NJDEP: \$15,000 per day, per violation;

- f. For failure to burn coal or oil except as permitted by PSEG Fossil's permit from NJDEP and by this Consent Decree: \$10,000 per day, per violation;
- g. Failure to submit a protocol, report, study, or analysis to EPA and NJDEP or to comply with EPA and NJDEP revisions to the submitted protocol, report, study, or analysis: \$1,000 per day, per violation;
- h. For failure to apply for a permit, as required by Paragraph 116: \$1,000 per day, per violation;
- i. Violation of any Consent Decree prohibition on the use of SO₂ or NO_x allowances as set forth in Section V (Allowances, Credits) of this Consent Decree: three times the market value of the improperly used allowance, as measured at the time of the improper use, per violation;
- j. For failure to permanently retire allowances in accordance with Paragraphs 100 and 102: \$27,500 per day, per violation, plus \$1,000 per SO₂ Allowance;
- k. For failure to demonstrate the third party surrender of allowances to EPA within one year after PSEG Fossil's transfer of such allowances to the third party in accordance with Paragraphs 109: \$2,500 per day, per violation;
- 1. For failure to install or operate CEMS, as required by this Consent Decree: \$1,000 per day, per violation;
- m. For failure to conduct a stack test, as required by Paragraph 77: \$1,000 per day, per violation;
- n. For failure to undertake and complete an action required as Part of the Mitigation
 Projects described in Section VIII (Environmental Mitigation Projects): \$1,000 per

day per violation for the first 30 days, and \$5,000 per day per violation thereafter; and

- o. For any other violation of this Consent Decree, \$1,000 per day, per violation.
- 163. Should PSEG Fossil dispute its obligation to pay part or all of a demanded stipulated penalty, it may avoid the imposition of a separate stipulated penalty for the failure to pay the disputed penalty by depositing the disputed amount in a commercial escrow account pending resolution of the matter and by invoking the Dispute Resolution provisions of this Consent Decree within the time provided in Section XIV (Dispute Resolution) of the Consent Decree for payment of the disputed penalty. If the dispute is thereafter resolved in PSEG Fossil's favor, the escrowed amount plus accrued interest shall be returned to PSEG Fossil. If the dispute is resolved in favor of the plaintiffs, then the Plaintiffs shall be entitled to the escrowed amount determined to be due by the Court, plus accrued interest. The balance in the escrow account, if any, shall be returned to PSEG Fossil.
- 164. The Plaintiffs reserve the right to pursue any other remedies to which they are entitled, including, but not limited to, a new civil enforcement action and additional injunctive relief for PSEG Fossil's violations of this Consent Decree.
- 165. If the Plaintiffs elect to seek civil or contempt penalties after having collected stipulated penalties for the same violation, any further penalty awarded shall be reduced by the amount of the stipulated penalty timely paid or escrowed by PSEG Fossil. PSEG Fossil shall not be required to remit any stipulated penalty that is disputed in compliance with Section XIV (Dispute Resolution) of this Consent Decree until the dispute is resolved in favor of the Plaintiffs. However, nothing in this Paragraph shall be construed to cease the accrual of the stipulated penalties until the dispute is resolved.

XII. RIGHT OF ENTRY

166. Any authorized representative of EPA or NJDEP, upon presentation of credentials, shall have a right of entry upon the premises of Bergen, Hudson, or Mercer at any reasonable time for the purpose of monitoring compliance with the provisions of this Consent Decree, including inspecting plant equipment and inspecting and copying any records maintained by PSEG Fossil required by this Consent Decree. PSEG Fossil shall retain such records for a period of fifteen (15) years from the date of entry of this Consent Decree. Nothing in this Consent Decree shall limit the authority of EPA to conduct tests and inspections at PSEG Fossil's facilities under Section 114 of the Act, 42 U.S.C. § 7414.

XIII. FORCE MAJEURE

- 167. For purposes of this Consent Decree, a "Force Majeure Event" shall mean (a) an event which causes a delay in performing any requirement of this Consent Decree, or (b) a Unit malfunction which causes PSEG Fossil to exceed a 30-Day or 24-Hour Emission Rate required under this Consent Decree, which has been or will be caused by circumstances beyond the control of PSEG Fossil, including any entity controlled by PSEG Fossil, and which PSEG Fossil could not have prevented by the exercise of due diligence.
- 168. If a Force Majeure Event occurs, PSEG Fossil shall notify the Plaintiffs in writing as soon as practicable, but in no event later than seven (7) business days following the date PSEG Fossil first knew, or within ten (10) business days following the date PSEG Fossil should have known by the exercise of due diligence, that the Force Majeure Event caused or may cause such delay or excedance. In this notice PSEG Fossil shall reference this Paragraph of this Consent Decree and describe the anticipated length of time that the delay or excedance may persist, the cause or causes of the delay or excedance, the measures taken

- or to be taken by PSEG Fossil to prevent or minimize the delay or excedance, and the schedule by which those measures will be implemented. PSEG Fossil shall adopt all reasonable measures to avoid or minimize such delays or excedances.
- 169. Failure by PSEG Fossil to comply with the notice requirements of the above Paragraphs in this Section shall render this Section voidable by the Plaintiffs, as to the specific event for which PSEG Fossil has failed to comply with such notice requirement. If voided, the provisions of this Section shall have no effect as to the particular event involved.
- 170. The Plaintiffs shall notify PSEG Fossil in writing regarding PSEG Fossil's claim of Force Majeure within (15) fifteen business days of receipt of the Force Majeure notice provided under Paragraph 168.
- 171. If the Plaintiffs agree that a delay has been or will be caused by a Force Majeure Event, the parties shall stipulate to an extension of the required deadline(s) for all requirement(s) affected by the delay for a period of time equivalent to the delay actually caused by such circumstances. Such stipulation shall be filed as a modification to this Consent Decree in order to be effective.
- 172. PSEG Fossil shall not be liable for stipulated penalties for the period of any delay, or for any excedance of a 30-Day or 24-Hour Emission Rate, that the Plaintiffs agree to characterize as a Force Majeure Event.
- 173. If the Plaintiffs do not accept PSEG Fossil's claim of a Force Majeure Event, to avoid the imposition of stipulated penalties PSEG Fossil must submit the matter to this Court for resolution by filing a petition for determination. Once PSEG Fossil has submitted the matter, the Plaintiffs shall have fifteen business days to file their response. If PSEG Fossil submits the matter to this Court for resolution, and the Court determines that the delay or

excedance has been or will be caused by a Force Majeure Event, as defined in this Consent Decree, PSEG Fossil shall be excused as to that event(s) and excedance (including stipulated penalties otherwise applicable), but only for the period of time equivalent to the delay caused by the Force Majeure Event, and only for the excedances caused by the Force Majeure Event.

- 174. PSEG Fossil shall bear the burden of proving that any delay in performing any requirement of this Consent Decree or any excedance of a 30-Day or 24-Hour Emission Rate was caused by or will be caused by a Force Majeure Event. PSEG Fossil shall also bear the burden of proving the duration and extent of any delay or excedance attributable to a Force Majeure Event. An extension of one compliance date based on a particular event may, but will not necessarily, result in an extension of a subsequent compliance date.
- Fossil's obligations under this Consent Decree shall not constitute a Force Majeure Event. However, failure of a permitting authority to issue a necessary permit in a timely fashion may constitute a Force Majeure Event where the failure of the permitting authority to act is beyond the control of PSEG Fossil and PSEG Fossil has taken all steps available to it to obtain the necessary permit, including, but not limited to, submitting a complete permit application, responding to requests for additional information by the permitting authority in a timely fashion, accepting lawful permit terms and conditions, and prosecuting appeals of any allegedly unlawful terms and conditions imposed by the permitting authority in an expeditious fashion.
- 176. The Parties agree that, depending upon the circumstances related to an event and PSEG Fossil's response to such circumstances, the kinds of events listed below could also qualify

- as Force Majeure Events within the meaning of this Section: construction, labor, or equipment delay or failures; natural gas and gas transportation availability delay or failures; acts of God; acts of War; acts of terrorism; and orders by governmental officials acting under and authorized by applicable law, that direct PSEG Fossil to supply electricity in response to a legally declared, system-wide (or state-wide) emergency.
- 177. Notwithstanding any other provision of this Consent Decree, this Court shall not draw any inferences nor establish any presumptions adverse to any Party as a result of PSEG Fossil delivering a notice pursuant to this Section or the Parties' inability to reach agreement on a dispute under this Section.
- 178. As part of the resolution of any matter submitted to this Court under this Section, the

 Parties by agreement, or this Court by order, may in appropriate circumstances extend or

 modify the schedule for completion of work under this Consent Decree to account for the

 delay in the work that occurred as a result of any delay agreed to by the Plaintiffs or

 approved by this Court. PSEG Fossil shall be liable for stipulated penalties for its failure

 thereafter to complete the work in accordance with the extended or modified schedule.

XIV. <u>DISPUTE RESOLUTION</u>

- 179. The dispute resolution procedure provided by this Section shall be available to resolve all disputes arising under this Consent Decree, except as provided in Section VIII (Environmental Mitigation Projects) regarding Force Majeure, or in this Section, provided that the Party making such application has made a good faith attempt to resolve the matter with the other Party.
- 180. The dispute resolution procedure required herein shall be invoked by one Party to this

 Consent Decree giving written notice to the other parties to this Consent Decree advising

- of a dispute pursuant to this Section. The notice shall describe the nature of the dispute and shall state the noticing Party's position with regard to such dispute. The Parties receiving such a notice shall acknowledge receipt of the notice, and the Parties shall expeditiously schedule a meeting, to occur not later than fourteen (14) business days following receipt of such notice, to discuss the dispute informally.
- 181. Disputes submitted to dispute resolution under this Section shall, in the first instance, be the subject of informal negotiations between the Parties to this Consent Decree. Such period of informal negotiations shall not extend beyond thirty (30) calendar days from the date of the first meeting between representatives of the Plaintiffs and PSEG Fossil unless the Parties' representatives agree to shorten or extend this period.
- 182. If the Parties are unable to reach agreement during the informal negotiation period, the Plaintiffs shall provide PSEG Fossil with a written summary of their position regarding the dispute. The written position provided by the Plaintiffs shall be considered binding unless, within forty-five (45) calendar days thereafter, PSEG Fossil files with this Court a petition, which describes the nature of the dispute and seeks resolution. The Plaintiffs may respond to the petition within forty-five (45) calendar days of filing.
- 183. Where the nature of the dispute is such that a more timely resolution of the issue is required, the time periods set out in this Section may be shortened upon motion of one of the Parties to the dispute.
- 184. This Court shall not draw any inferences nor establish any presumptions adverse to either Party as a result of invocation of this Section or the Parties' inability to reach agreement.
- 185. As part of the resolution of any dispute under this Section, in appropriate circumstances the Parties may agree, or this Court may order, an extension or modification of the

schedule for the completion of the activities required under this Consent Decree to account for the delay that occurred as a result of dispute resolution. PSEG Fossil shall be liable for stipulated penalties for its failure thereafter to complete the work in accordance with the extended or modified schedule, subject to this Section and Section XI (Stipulated Penalties).

186. The Court shall decide all disputes pursuant to applicable principles of law for resolving such disputes; provided, however, that the Parties reserve their rights to argue for what the applicable standard of law should be for resolving any particular dispute.

XV. GENERAL PROVISIONS

- 187. <u>Effect of Settlement</u>. Compliance with the terms of this Consent Decree does not guarantee compliance with all applicable Federal, State, or Local laws or regulations.
- 188. This Consent Decree does not apply to any claim(s) of criminal liability that could be alleged.
- In any subsequent administrative or judicial action initiated by the Plaintiffs for injunctive relief or civil penalties relating to the matters covered by this Consent Decree at the facilities subject to this Consent Decree, PSEG Fossil shall not assert any defense or claim based upon principles of waiver, res judicata, collateral estoppel, issue preclusion, or claim splitting, or any other defense based on the contention that the claims raised by the Plaintiffs in the subsequent proceeding were brought, or should have been brought, in the instant case; provided, however, that nothing in this Paragraph is intended to affect the enforceability of the Resolution of Claims provisions of Section VII (Resolution of Future Claims -- Covenant Not to Sue) of this Consent Decree.

- 190. <u>Effective Date</u>. The effective date of this Consent Decree shall be the date upon which this Consent Decree is entered by the Court.
- 191. <u>Citations to Law</u>. Except as expressly provided otherwise by this Decree, provisions of law expressly cited by this Decree shall be construed to mean the provision as it exists on the date of entry of this Consent Decree.
- 192. <u>Meaning of Terms</u>. Every term expressly defined by this Decree shall have the meaning given to that term by this Decree, and every other term used in this Decree that also is a term used under the Act or the regulations implementing the Act shall mean in this Decree what such terms mean under the Act or those regulations.
- Other Laws. Except as specifically provided by this Consent Decree, nothing in this

 Consent Decree shall relieve PSEG Fossil of its obligation to comply with all applicable
 federal, state and local laws and regulations. Subject to Section VII (Resolution of Future
 Civil Claims -- Covenants Not to Sue), nothing contained in this Consent Decree shall be
 construed to prevent or limit the Plaintiffs' rights to obtain penalties or injunctive relief
 under the Clean Air Act or other federal, state or local statutes or regulations.
- 194. <u>Third Parties</u>. This Consent Decree does not limit, enlarge or affect the rights of any Party to this Consent Decree as against any third parties.
- 195. <u>Costs</u>. Each Party to this action shall bear its own costs and attorneys' fees.
- 196. <u>Public Documents</u>. All information and documents submitted by PSEG Fossil to the United States pursuant to this Consent Decree shall be subject to public inspection, unless subject to legal privileges or protection or identified and supported as business confidential by PSEG Fossil in accordance with 40 C.F.R. Part 2 and N.J.A.C. 7:27-1.6 et seq.

197. Notice. Unless otherwise provided herein, notifications to or communications with the United States or PSEG Fossil shall be deemed submitted on the date they are postmarked and sent either by overnight mail or by certified or registered mail, return receipt requested. Except as otherwise provided herein, when written notification to or communication with the United States, EPA, New Jersey, NJDEP, or PSEG Fossil is required by the terms of this Consent Decree, it shall be addressed as follows:

As to the United States of America:

For U.S. DOJ:

Chief, Environmental Enforcement Section U.S. Department of Justice P.O. Box 7611 Washington, D.C. 20044-7611 DJ # 90-5-2-1-1866/1

For U.S. EPA:

Branch Chief Air Compliance Branch DECA EPA Region 2 290 Broadway New York, NY 10007

Branch Chief Air Branch Office of Regional Counsel EPA Region 2 290 Broadway New York, NY 10007

As to the State of New Jersey:

Administrator
Air and Environmental Quality Enforcement
401 East State Street
4th Floor, East Wing
P.O. Box 422
Trenton, New Jersey 08625

Deputy Attorney General
Section Chief, Environmental Permitting and Counseling
Division of Law - L&PS Dept.
State of New Jersey
R.J. Hughes Justice Complex
P.O. Box 093
Trenton, New Jersey 08625

As to PSEG Fossil:

Mr. Jeffrey W. Moore Vice President, Fossil Operations PSEG Fossil, LLC 80 Park Plaza Newark, New Jersey 07102

With a copy to:

Christopher J. McAuliffe, Esq. General Environmental Counsel PSEG Fossil Services Corporation 80 Park Plaza, T5C Newark, New Jersey 07102

Any Party may change either the notice recipient or the address for providing notices to it by serving all other Parties with a notice setting forth such new notice recipient or address.

198. Modification. Except as otherwise allowed by law or as provided in Section XIII (Force Majeure) and Section XIV (Dispute Resolution) of this Consent Decree, there shall be no modification of this Consent Decree without written approval by the United States, PSEG Fossil, and New Jersey, and approval of such modification by this Court.

- 199. Continuing Jurisdiction. The Court shall retain jurisdiction of this case after entry of this Consent Decree to enforce compliance with the terms and conditions of this Consent Decree and to take any action necessary or appropriate for its interpretation, construction, execution, modification, or adjudication of disputes. During the term of this Consent Decree, any Party to this Consent Decree may apply to this Court for any relief necessary to construe or effectuate this Consent Decree.
- 200. <u>Complete Agreement</u>. This Consent Decree constitutes the final, complete, and exclusive agreement and understanding among the Parties to this Consent Decree with respect to the settlement embodied in this Consent Decree. The Parties to this Consent Decree acknowledge that there are no representations, agreements, or understandings relating to the settlement other than those expressly contained in this Consent Decree.
- 201. Signatories. This Consent Decree may be signed in counterparts, and such counterpart signature pages shall be given full force and effect. The undersigned representative of PSEG Fossil certifies he is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind PSEG Fossil.
- 202. <u>Service</u>. PSEG Fossil hereby agrees to accept service of process by mail with respect to all matters arising under or relating to this Consent Decree, and to waive the formal service requirements set forth in Rule 4 of the Federal Rules of Civil Procedure and any applicable Local Rules of this Court, including, but not limited to, service of a summons.
- 203. Public Notice and Comment; Objection to Entry. The Parties to this Consent Decree agree and acknowledge that final approval by the United States and entry of this Consent Decree is subject to the procedures of 28 C.F.R. § 50.7, which provides for notice of the lodging of this Consent Decree in the Federal Register, an opportunity for public comment, and the right of the United States to withdraw or withhold consent if comments

disclose facts or considerations which indicate that the Consent Decree is inappropriate, improper, or inadequate. PSEG Fossil shall not oppose entry of this Consent Decree by this Court or challenge any provision of this Consent Decree unless the United States on New Jersey has notified PSEG Fossil in writing that the United States or New Jersey no longer supports entry of the Consent Decree.

204. <u>Final Judgment</u>. Upon approval and entry of this Consent Decree by the Court, this Consent Decree shall constitute a final judgment between the United States, the State of New Jersey, and PSEG Fossil.

XVI. TERMINATION

- 205. As soon as PSEG Fossil completes any element of construction required by this Consent Decree, or completes any requirement of this Consent Decree that is not ongoing, PSEG Fossil may seek termination of that provision of this Consent Decree containing such requirement. If PSEG Fossil believes it has complied with such requirement, then PSEG Fossil shall so certify to the Plaintiffs.
 - a. If the Plaintiffs do not object in writing with specific reasons within sixty (60) days of receipt of PSEG Fossil's certification, then, upon motion by PSEG Fossil, this Court may order the termination of the provision containing the requirement.
 - b. If the Plaintiffs object to PSEG Fossil's certification, however, then the matter shall be submitted to this Court for resolution under Section XIV (Dispute Resolution) of this Consent Decree. In such case, PSEG Fossil shall bear the burden of proving that the provision of the Consent Decree should be terminated.
- 206. Once PSEG Fossil has completed all construction requirements of this Consent Decree, and has obtained final Title V permits that were applied for in compliance with the terms of this Consent Decree, cover all Units in this Consent Decree, include as enforceable

permit terms all of the Unit performance and other requirements required by Section IV (Emission Reductions and Controls) of this Consent Decree, then PSEG Fossil shall so certify these facts to the Plaintiffs and this Court.

- a. If the Plaintiffs do not object in writing with specific reasons within sixty (60) days of receipt of PSEG Fossil's certification, then, for any violations that occur after the filing of certification, Plaintiffs shall pursue enforcement of the requirements contained in the Title V permit through only the applicable Title V permit, and not this Consent Decree.
- b. In the event that some aspect of the Title V permit does not allow for enforcement of a requirement found in this Consent Decree, however, or if a Consent Decree requirement was intended to be part of the Title V permit and did not become or remain part of such permit, then the Plaintiffs may enforce such requirement under this Consent Decree.
- c. If the Plaintiffs do object in writing to PSEG Fossil's certification, then the matter shall be submitted to this Court for resolution under Section XIV (Dispute Resolution) of this Consent Decree. In such case, PSEG Fossil shall bear the burden of proving that it has complied with the requirements referenced in this Paragraph.

SO ORDERED, THIS	DAY OF	, 2002.	
	UNITED S	TATES DISTRICT COU	RT JUDGE

FOR THE UNITED STATES OF AMERICA:

THOMAS J. SANSONETTI

Assistant Attorney General Environmental and Natural Resources Division United States Department of Justice

MATTHEW W. MODDIGON

MATTHEW W. MORRISON

Trial Attorney
Environmental Enforcement Section
Environmental and Natural Resources Division
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CHRISTOPHER J. CHRISTIE

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Regional Counsel Region 2 United States Environmental Protection Agency

FOR THE STATE OF NEW JERSEY:

ROBERT C. SHINN, JR. Commissioner New Jersey Department of Environmental Protection KEVIN P. AUERBACHER
Deputy Attorney General
Division of Law
Department of Law and Public Safety

FOR PSEG FOSSIL:

THOMAS R. SMITH President PSEG Fossil LLC

UNITED STATES DISTRICT COURT FOR THE DISTRICT OF NEW JERSEY NEWARK DIVISION

UNITED STATES OF AMERICA, STATE OF NEW JERSEY,)
Plaintiffs,)
v.) Civ. No. 02-CV-34(
PSEG FOSSIL LLC,	
Defendant.)))

AMENDMENT TO CONSENT DECREE

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WHEREAS, Plaintiffs, the United States of America ("the United States"), on behalf of the United States Environmental Protection Agency ("EPA"), and the State of New Jersey ("New Jersey") acting by and through the New Jersey Department of Environmental Protection ("NJDEP"), and Defendant, PSEG Fossil LLC ("PSEG Fossil"), lodged a consent decree on February 15, 2002, ("Consent Decree") resolving Plaintiffs' claims for injunctive relief and civil penalties arising out of alleged violations of the Prevention of Significant Deterioration ("PSD") and Nonattainment New Source Review ("Nonattainment NSR") requirements in Parts C and D of Title I the Clean Air Act ("Act"), 42 U.S.C. §§ 7470–7515, and the federally-enforceable State Implementation Plan developed by the State of New Jersey ("SIP");

WHEREAS, upon motion of the United States and New Jersey, this Court entered the Consent Decree on July 26, 2002;

WHEREAS, PSEG Fossil has requested a revised timeline in which to either Shut Down Hudson Unit 2 or install the pollution control technologies specified in the Consent Decree;

WHEREAS, in exchange for agreeing to a revised timeline, the Plaintiffs required that PSEG Fossil implement, through an amendment to the Consent Decree ("Amendment"), an alternative compliance program that achieves emission reductions through installation of pollution control technologies and operational changes, as well as allowance surrenders of SO₂ and NO_x, and other actions to compensate for any delay in complying with the Consent Decree;

NOW, THEREFORE, without any admission of fact or law, it is hereby ORDERED, ADJUDGED, and DECREED that PSEG Fossil shall comply with the original Consent Decree as modified by this Amendment.

I. APPLICABILITY

- 1. The provisions of the Consent Decree, as modified by this Amendment, shall continue to apply to and be binding upon the United States, New Jersey, and upon PSEG Fossil, its successors and assigns, and PSEG Fossil's officers, employees, and agents solely in their capacities as such.
- 2. All references to the phrase "Consent Decree" in the original Consent Decree shall be construed to mean "Consent Decree and the Amendment." All definitions in the Consent Decree, as well as those set forth below in Section II (Definitions) shall be applicable to this Amendment.

II. **DEFINITIONS**

- 3. The following definitions shall apply to this Amendment:
- a. "90-Day Rolling Average Emission Rate" shall be determined by calculating the Emission Rate for an Operating Day, and then arithmetically averaging that Emission Rate with the Emission Rates for the previous eighty-nine Operating Days. A new 90-Day Rolling Average shall be calculated for each new Operating Day.
- b. "Kearny Unit 7 and Unit 8" shall mean the oil-fired steam electric generating units situated at PSEG Fossil's Kearny Generating Station, which is located at 118 Hackensack Avenue in Kearny, New Jersey.
- c. "NO_x Allowance" means an authorization or credit to emit a specified amount of NO_x during the Ozone Control Period that is allocated or issued under an emission trading or marketable permit program of any kind established under the Act or the SIP.
- d. "PJM" shall mean the Pennsylvania-New Jersey-Maryland independent system operator.

- e. "Shakedown Period" shall mean a period of 180 days commencing the Operating

 Day after Hudson Unit 2 is combusting 100% Ultra-Low Sulfur Coal.
- f. "Shut Down" shall mean the permanent cessation of operation of a Unit and the dismantling of this Unit such that it can no longer be brought back into commercial operation without going through a new PSD/Nonattainment NSR permitting process, as a new source, with NJDEP and/or EPA.
- g. "SNCR" shall mean a selective non-catalytic reduction system for the reduction of emissions of NO_x .
- g. "Ultra-Low Sulfur Coal" shall mean sub-bituminous coal obtained by PSEG
 Fossil with a sulfur content of no greater than 0.25%, a nitrogen content of no greater than 1%
 and an ash content no greater than 2.5%, all as determined on a quarterly basis from fuel analysis
 data for each barge of coal delivered to the station during that quarter.

III. EMISSIONS REDUCTIONS AND CONTROLS

A. SO₂ Controls at Hudson Unit 2

4. Consent Decree Paragraph 53 is replaced with the following: "By no later than December 31, 2010, PSEG Fossil shall install and commence operation of an FGD at Hudson Unit 2 in accordance with the design parameters approved by EPA and NJDEP unless it has completed Shut Down pursuant to Paragraphs 18–19 of this Amendment. The installation of the FGD shall be completed in accordance with the following FGD milestones:

Award major equipment orders:

June 4, 2007

Delivery of OEM design package:

January 7, 2008

Commencement of construction:

April 7, 2008

Commencement of tie-in outage:

September 15, 2010

Commencement of FGD operation:

14 days after Unit is synchronized

with any utility electric distribution

system following the tie-in outage.

Beginning on December 31, 2010, PSEG Fossil shall operate the FGD at Hudson Unit 2 to achieve and maintain SO₂ Emission Rates of no greater than 0.150 lb/MMBtu, based on a 30-Day Rolling Average Emission Rate, and 0.250 lb/MMBtu, based on a 24-Hour Emission Rate."

B. SO₂ Controls at Mercer Units 1 and 2

5. Consent Decree Paragraphs 54 and 55 are replaced with the following: "By no later than December 31, 2008, PSEG Fossil shall submit to EPA and NJDEP for approval proposed design parameters for an FGD at Mercer Unit 1. NJDEP and EPA shall approve, disapprove, or modify PSEG Fossil's initial design proposal in accordance with Paragraphs 94 through 98 of the Consent Decree. The installation of the FGD shall be completed in accordance with the following FGD milestones:

Award major equipment orders:

February 5, 2007

Delivery of OEM design package:

June 9, 2008

Commencement of construction:

July 6, 2009

Commencement of tie-in outage:

September 15, 2010

Commencement of FGD operation:

14 days after Unit is synchronized

with any utility electric distribution

system following the tie-in outage.

Beginning on December 31, 2010, PSEG Fossil shall operate the FGD at Mercer Unit 1 to achieve a 30-Day Rolling Average Emission Rate for SO₂ of no greater than 0.150 lbs/MMBtu,

based on a 30-Day Rolling Average Emission Rate, and 0.250 lb/MMBtu, based on a 24-Hour Emission Rate."

6. Consent Decree Paragraphs 56 and 57 are replaced with the following: "By no later than December 31, 2008, PSEG Fossil shall submit to EPA and NJDEP for approval proposed design parameters for an FGD at Mercer Unit 2. NJDEP and EPA shall approve, disapprove, or modify PSEG Fossil's initial design proposal in accordance with Paragraphs 94 through 98 of the Consent Decree. The installation of the FGD shall be completed in accordance with the following FGD milestones:

Award major equipment orders:

February 5, 2007

Delivery of OEM design package:

June 9, 2008

Commencement of construction:

July 6, 2009

Commencement of tie-in outage:

September 15, 2010

Commencement of FGD operation:

14 days after Unit is synchronized

with any utility electric distribution

system following the tie-in outage.

Beginning on December 31, 2010, PSEG Fossil shall operate the FGD at Mercer Unit 2 to achieve a 30-Day Rolling Average Emission Rate for SO₂ of no greater than 0.150 lbs/MMBtu, based on a 30-Day Rolling Average Emission Rate, and 0.250 lb/MMBtu, based on a 24-Hour Emission Rate."

C. NO_x Controls at Hudson Unit 2

7. Consent Decree Paragraph 68 is replaced with the following: "By January 1, 2007 PSEG Fossil shall commence year-round operation of an SNCR on Hudson Unit 2 until it either installs and operates a SCR at Hudson Unit 2, or Shuts Down Hudson Unit 2 in accordance

with Paragraph 18 of this Amendment. By no later than December 31, 2010, PSEG Fossil shall install and commence year-round operation of an SCR at Hudson Unit 2 to achieve and maintain NO_x Emission Rates of no greater than 0.100 lb/MMBtu, based on a 30-Day Rolling Average Emission Rate, and 0.150 lb/MMBtu, based on a 24-Hour Emission Rate unless it has completed Shut Down pursuant to Paragraphs 18–19 of this Amendment. The installation of the SCR shall be completed in accordance with the following SCR milestones:

Award major equipment orders:

June 4, 2007

Delivery of OEM design package:

January 7, 2008

Commencement of construction:

April 7, 2008

Commencement of tie-in outage:

September 15, 2010

Commencement of SCR operation:

14 days after Unit is synchronized

with any utility electric distribution

system following the tie-in outage.

D. NO_x Controls at Mercer Units 1 and 2

- 8. A new Paragraph 71a is inserted in the Consent Decree as follows: "By no later than January 1, 2007, PSEG Fossil shall achieve and maintain NO_x Emission Rates at Mercer Unit 2 of no greater than 0.100 lb/MMBtu, based on a 90-Day Rolling Average Emission Rate. PSEG Fossil shall continue year-round operation of the Mercer Unit 2 SCR, and shall operate the SCR at all times Mercer Unit 2 operates, subject to the exceptions set forth in Paragraph 63 of the Consent Decree."
- 9. A new Paragraph 72a is inserted in the Consent Decree as follows: "By no later than January 1, 2007, PSEG Fossil shall achieve and maintain NO_x Emission Rates at Mercer Unit 1 of no greater than 0.100 lb/MMBtu, based on a 90-Day Rolling Average Emission Rate.

PSEG Fossil shall continue year-round operation of the Mercer Unit 1 SCR, and shall operate the SCR at all times Mercer Unit 1 operates, subject to the exceptions set forth in Paragraph 63 of the Consent Decree."

E. PM Controls at Hudson Unit 2

10. Consent Decree Paragraph 80 is replaced with the following: "By no later than December 31, 2010, PSEG Fossil shall install and commence operation of a baghouse at Hudson Unit 2, in accordance with the design parameters approved by EPA and NJDEP, to achieve and maintain a PM Emission Rate of no more than 0.0150 lb/MMBtu unless it has completed Shut Down pursuant to Paragraphs 18–19 of this Amendment. The installation of the baghouse shall be completed in accordance with the following baghouse milestones:

Award major equipment orders:

June 4, 2007

Delivery of OEM design package:

January 7, 2008

Commencement of construction:

April 7, 2008

Commencement of tie-in outage:

September 15, 2010

Commencement of baghouse operation:

14 days after Unit is synchronized

with any utility electric distribution

system following the tie-in outage.

PSEG Fossil shall operate the Hudson Unit 2 baghouse at all times that the Unit it serves is combusting coal. PSEG Fossil shall operate the existing Hudson Unit 2 ESP and fly ash conditioning system beginning January 1, 2007, and continuing until the Unit is either permanently Shut Down or retrofitted with a baghouse to control PM emissions."

F. PM Controls at Mercer Units 1 and 2

11. A new Consent Decree Paragraph 87a is inserted as follows: "By no later than December 31, 2007, PSEG Fossil shall submit to EPA and NJDEP for review and approval the design criteria for a new baghouse to control PM emissions at Mercer Unit 1. EPA and NJDEP shall approve, disapprove, or modify PSEG Fossil's proposed design criteria in accordance with Paragraphs 94–98 of the Consent Decree. By no later than December 31, 2008, PSEG Fossil shall install and commence operation of the baghouse at Mercer Unit 1 in accordance with the approved design criteria. The installation of the baghouse shall be completed in accordance with the following baghouse milestones:

Award major equipment orders:

February 5, 2007

Delivery of OEM design package:

June 11, 2007

Commencement of construction:

September 10, 2007

Commencement of tie-in outage:

September 15, 2008

Commencement of baghouse operation:

14 days after Unit is synchronized

with any utility electric distribution

system following the tie-in outage.

PSEG Fossil shall operate the Mercer Unit 1 baghouse to achieve and maintain a PM Emission Rate of no more than 0.0150 lb/mmBtu, and shall operate the baghouse whenever the Unit it serves is combusting coal."

12. A new Consent Decree Paragraph 87b is inserted as follows: "By no later than December 31, 2007, PSEG Fossil shall submit to EPA and NJDEP for review and approval the design criteria for a new baghouse to control PM emissions at Mercer Unit 2. EPA and NJDEP shall approve, disapprove, or modify PSEG Fossil's proposed design criteria in accordance with

Paragraphs 94–98 of the Consent Decree. By no later than December 31, 2008, PSEG Fossil shall install and commence operation of the baghouse at Mercer Unit 2 in accordance with the approved design criteria. The installation of the baghouse shall be completed in accordance with the following baghouse milestones:

Award major equipment orders:

February 5, 2007

Delivery of OEM design package:

June 11, 2007

Commencement of construction:

September 10, 2007

Commencement of tie-in outage:

September 15, 2008

Commencement of baghouse operation:

14 days after Unit is synchronized

with any utility electric distribution

system following the tie-in outage.

PSEG Fossil shall operate the Mercer Unit 2 baghouse to achieve and maintain a PM Emission Rate of no more than 0.0150 lb/mmBtu, and shall operate the baghouse whenever the Unit it serves is combusting coal."

G. Fuel Switch at Hudson Unit 2

- January 1, 2007, and April 30, 2007, PSEG Fossil shall burn at Hudson Unit 2 a blend of Ultra-Low Sulfur Coal and other coal, as long as such other coal complies with PSEG Fossil's permit and the SIP ("Compliance Coal"). During this time period, PSEG Fossil shall use best efforts to ensure that no less than 20% of the coal that it burns is comprised of Ultra-Low Sulfur Coal through implementation of the following work practices at Hudson Unit 2:
- a. PSEG Fossil shall segregate coal delivered to Hudson Station such that three to five of the sixteen coal hoppers that collect coal from the coal pile are restricted to Ultra-Low

Sulfur Coal and shall use best efforts to operate the coal plow or plows that remove coal from the hoppers for combustion in Hudson Unit 2 such that no less than 20% of the coal that is sent to the furnace for combustion is Ultra-Low Sulfur Coal.

b. PSEG Fossil shall achieve this fuel blend by using best efforts to: (i) restrict the coal hoppers from which a single coal plow may collect coal such that no less than 20% of the coal that is sent to the furnace for combustion is Ultra-Low Sulfur Coal; or, (ii) operate two coal plows, one for the hoppers loaded with Ultra-Low Sulfur Coal and one for the hoppers loaded with Compliance Coal, but remove coal collection arms from the plows such that no less than 20% of the coal that is sent to the furnace for combustion is Ultra-Low Sulfur Coal.

PSEG Fossil shall track the method it employs to blend coal and report that method in its Quarterly Progress Reports pursuant to Section VII of this Amendment.

From May 1, 2007, until PSEG Fossil Shuts Down Hudson Unit 2 or operates an FGD at the Unit in accordance with this Amendment, PSEG Fossil shall burn only Ultra-Low Sulfur Coal at Hudson Unit 2. PSEG Fossil shall use best efforts to minimize emissions of SO₂, NO_x, and PM from Hudson Unit 2 during and after the Shakedown Period."

- 14. A new Consent Decree Paragraph 59a is inserted as follows: "Commencing May 1, 2007, and continuing through the Shakedown Period, PSEG Fossil shall collect SO₂ and NO_x emissions data for the purpose of proposing interim SO₂ and NO_x rates for Hudson Unit 2. Within 30 days after the expiration of the Shakedown Period, PSEG Fossil shall submit to EPA and NJDEP for their review and approval an SO₂ emissions report and a NO_x emissions report. Both the SO₂ and NO_x emissions reports shall include:
 - a. SO₂ and NO_x emissions data collected during the Shakedown Period;

- b. an analysis of PSEG Fossil's ability to achieve and maintain 30-Day Rolling Average Emission Rates for SO_2 and NO_x at Hudson Unit 2 in light of the data collected during the Shakedown Period; and
- c. proposed 30-Day Rolling Average Emission Rates for SO_2 and NO_x which may include and identify a proposed compliance margin for achieving the proposed rates on a continuous basis.

Beginning 30 days after approval by EPA and NJDEP, PSEG shall begin to comply with the 30-Day Rolling Average Emission Rates for SO₂ and NO_x approved by EPA and NJDEP. PSEG shall continue to comply with such rates until superseded by emission rates in Paragraphs 4 and 7 of this Amendment following installation of an FGD and SCR at Hudson Unit 2."

- 15. A new Consent Decree Paragraph 59c is inserted as follows: "Prior to the installation of an FGD at Mercer Unit 1 and Mercer Unit 2, PSEG Fossil shall continue to burn coal at Mercer Unit 1 and Mercer Unit 2 in compliance with the respective NJDEP permit requirements for those Units, including sulfur content limitations, in effect as of the date of lodging of this Amendment."
- 16. A new Consent Decree Paragraph 59b is inserted as follows: "Upon the commencement of operation of an FGD at any Unit pursuant to this Amendment, PSEG Fossil shall burn only coal that has a monthly average sulfur content of no greater than 2.00% at that Unit. The monthly average sulfur content shall be determined in accordance with the New Jersey permits for these particular Units."

H. Emission Caps at Hudson Unit 2

17. A new Consent Decree Paragraph 98a is inserted as follows: "Emissions Cap at Hudson Unit 2. PSEG Fossil shall ensure that total emissions from Hudson Unit 2, including

the tons of pollutants emitted during all periods of operation (including during periods of startup, shutdown, and malfunction), do not exceed the following annual tonnage limitations:

Year	SO ₂ (tons per year)	NO _x (tons per year)
2007	5,547	3,486
2008	5,270	3,486
2009	5,270	3,486
2010	5,270	3,486

I. Shut Down of Hudson Unit 2

- 18. A new Consent Decree Paragraph 98b is inserted as follows: "In lieu of installing and operating the controls and achieving the emission rates at Hudson Unit 2 required by Consent Decree Paragraphs 53, 68, and 80, PSEG Fossil may elect to notify EPA, NJDEP, and PJM no later than December 31, 2007, of its intention to Shut Down permanently Hudson Unit 2 by December 31, 2008, and shall Shut Down Hudson Unit 2 by December 31, 2008."
- 19. A new Consent Decree Paragraph 98c is inserted as follows: "If after having made the notice provided in Paragraph 98b, PSEG Fossil receives a determination from PJM that deactivation of Hudson Unit 2 would adversely affect the reliability of the transmission system ("Reliability Determination") and obtains from the Federal Energy Regulatory Commission ("FERC"), as part of a cost-of-service Reliability Must Run filing, a Cost of Service Recovery Rate Tariff that includes a tracker for the monthly recovery of the costs for installation and operation of the FGD, SCR and baghouse required by this Amendment, then PSEG Fossil may continue to operate Hudson Unit 2 under the provisions of Paragraphs 13–15 of this Amendment until December 31, 2010, at which time PSEG Fossil shall commence operation of an FGD, SCR, and baghouse at Hudson Unit 2 in accordance with the emission rates and limitations set

forth herein. If after having made the notice provided in Paragraph 98b, PSEG Fossil receives the Reliability Determination from PJM but does not receive from the FERC the Cost of Service Recovery Rate Tariff with tracker for monthly recovery of the costs for the installation and operation of the FGD, SCR and baghouse required by this Amendment, then PSEG Fossil may continue to operate Hudson Unit 2 under the provisions of Paragraphs 13-15 of this Amendment until December 31, 2010 or the needs of the reliability determination are met, whichever occurs first. In no event shall PSEG Fossil operate Hudson Unit 2 after December 31, 2010—even in the event that the Department of Energy or the FERC issues an order directing PSEG Fossil to continue operation of Hudson Unit 2 to address reliability concerns—unless PSEG Fossil has installed and operates the FGD, SCR and baghouse pursuant to this Amendment. If PSEG Fossil operates Hudson Unit 2 after December 31, 2010, PSEG Fossil shall achieve and maintain the emission rates set forth herein applicable to that Unit. If after having made the notice provided in Paragraph 98b, PSEG Fossil does not receive a Reliability Determination from PJM, then PSEG Fossil shall shutdown Hudson Unit 2 by December 31, 2008. PSEG Fossil shall provide the Plaintiffs with copies of any documents sent to or received from PJM, the Department of Energy, or the FERC pursuant to this Paragraph within ten days of receipt or delivery by PSEG Fossil."

J. Shut Down of Kearny Units 7 and 8

20. A new Consent Decree Paragraph 98d is inserted as follows: "No later than January 1, 2007, PSEG Fossil shall Shut Down Kearny Units 7 and 8 and surrender all applicable air pollution control permits for those Units."

IV. EFFECT OF AMENDMENT

21. A new Paragraph 128a is inserted into the Consent Decree as follows: "As long as PSEG Fossil timely installs and operates the new emission control devices, timely operates the existing control devices, implements the emission reduction measures in Paragraphs 13, 16, and 20 of this Amendment, complies with the annual emission caps, and Shuts Down Hudson Unit 2 if it elects to do so, as required by this Amendment, then all civil claims of the United States and the State of New Jersey arising out of PSEG Fossil's actual or prospective non-compliance with Paragraphs 53, 68, and 80 of the Consent Decree shall be resolved."

V. ALLOWANCES AND CREDITS

- 22. Consent Decree Paragraph 99 is replaced with the following: "Beginning on January 1, 2007, and upon each subsequent date by which PSEG Fossil is required to commence operation of an SO₂ emission control device or implement an SO₂ emission reduction measure under either the Consent Decree or this Amendment, PSEG Fossil may use any SO₂ Allowances allocated by EPA to Hudson Unit 2, Mercer Unit 1, Mercer Unit 2, Kearny Unit 7, and Kearny Unit 8 only to satisfy the operational needs of these Units, collectively, and shall neither: (a) use such Allowances at any other Unit, including any other PSEG Fossil Unit not covered by this Decree; nor (b) sell or transfer any SO₂ Allowances allocated to these Units to a third party, other than for purposes of retiring such SO₂ Allowances in accordance with the Consent Decree and this Amendment."
- 23. Consent Decree Paragraph 100 is replaced with the following: "Beginning January 1, 2008, and within one year of each subsequent date by which PSEG Fossil is required to commence operation of an SO₂ emission control device or implement an SO₂ emission reduction measure under either the Consent Decree or this Amendment, PSEG Fossil shall

surrender to EPA, or transfer to a non-profit third party selected by PSEG Fossil for surrender, any SO₂ Allowances that exceed the operational SO₂ Allowance needs of Hudson Unit 2, Mercer Unit 1, Mercer Unit 2, Kearny Unit 7, and Kearny Unit 8, collectively. PSEG shall surrender SO₂ Allowances by the use of the applicable United States Environmental Protection Agency Acid Rain Program Allowance Transfer Form."

- 24. Consent Decree Paragraph 101 is replaced with the following: "Beginning May 1, 2004, and upon each subsequent date by which PSEG Fossil is required to commence operation of a NO_x emission control device or implement a NO_x emission reduction measure under either the Consent Decree or this Amendment, PSEG Fossil may use any NO_x Allowances allocated by EPA to Hudson Unit 2, Mercer Unit 1, Mercer Unit 2, and, as of January 1, 2007, Kearny Unit 7, and Kearny Unit 8 only to satisfy the operational needs of these Units, collectively, and shall neither: (a) use such NO_x Allowances at any other Unit, including any other PSEG Fossil Unit not covered by this Decree; nor (b) sell or transfer any NO_x Allowances allocated to these Units to a third party, other than for purposes of retiring such NO_x Allowances in accordance with the Consent Decree and this Amendment."
- 25. Consent Decree Paragraph 102 is replaced with the following: "Beginning May 1, 2005, and within one year of each subsequent date by which PSEG Fossil is required to commence operation of a NO_x emission control device or implement a NO_x emission reduction measure under either the Consent Decree or this Amendment, PSEG Fossil shall retire to EPA, or transfer to a non-profit third party selected by PSEG Fossil for retirement, any NO_x Allowances that exceed the operational NO_x Allowance needs of Hudson Unit 2, Mercer Unit 1, Mercer Unit 2, and, as of January 1, 2007, Kearny Unit 7, and Kearny Unit 8, collectively."

- 26. A new Consent Decree Paragraph 102a is inserted as follows: "Within ninety days of entry of this Amendment, PSEG Fossil shall surrender to EPA, or transfer to a non-profit third party selected by PSEG Fossil for surrender, 1,230 NO_x Allowances and 8,568 SO₂ Allowances not already allocated to or generated by Hudson Unit 2, Mercer Unit 1, Mercer Unit 2, Kearny Unit 7, and Kearny Unit 8."
- 27. A new Consent Decree Paragraph 102b is inserted as follows: "For any and all actions taken by PSEG Fossil to comply with this Consent Decree and Amendment, including the Shut Down of Hudson Unit 2, and the installation and optimization of FGDs, SCRs, and baghouses, and other emission reduction measures, any emission reductions generated shall not be considered as a creditable contemporaneous emission decrease for the purpose of obtaining a netting credit under the Clean Air Act's Nonattainment NSR and PSD Programs."

VI. PERMITS

28. Consent Decree Paragraph 117 is replaced with the following: "Within sixty days of entry of this Amendment, PSEG Fossil shall submit an application to NJDEP to modify its existing Title V Permit(s), to include a schedule for all performance, operational, maintenance, and control technology requirements established by this Amendment, including but not limited to Emission Rates and fuel limitations. Within three months after commencement of operation of each pollution control device and implementation of the measures in Section III of this Amendment, PSEG Fossil shall submit an application to modify its Title V Permit(s) to reflect the requirements of the Consent Decree, including but not limited to the new Emission Rates, limits on fuel use, and operation, maintenance, and optimization requirements of this Amendment."

VII. REPORTING AND RECORDKEEPING

- 29. A new Consent Decree Paragraph 156a is inserted as follows: "In addition to any progress reports required under the Consent Decree, beginning at the end of the first calendar quarter following entry of this Amendment and continuing every calendar quarter thereafter for the duration of this Decree, PSEG Fossil shall submit within thirty days after the end of each quarter a Quarterly Report."
- 30. A new Consent Decree Paragraph 157b is inserted as follows: "PSEG Fossil shall include in its Quarterly Report the following: (a) information describing PSEG Fossil's progress in achieving each of the FGD milestones, SCR milestones, and Baghouse milestones contained in this Amendment; (b) any other information describing PSEG Fossil's progress in achieving compliance with this Amendment; (c) information relating to emission allowances and credits that PSEG Fossil is required to surrender under the Amendment, including those referenced in Paragraphs 22–27 of this Amendment; and (d) any information indicating that the installation and commencement of operation date for a pollution control device may be delayed, including the nature and cause of the potential delay and any steps taken by PSEG Fossil to mitigate such delay."
- 31. A new Consent Decree Paragraph 157c is inserted as follows: "In addition to any progress reports required under the Consent Decree, PSEG shall submit to Plaintiffs a 30-day Report providing written notice to the Plaintiffs no more than thirty days after each FGD milestone, SCR milestone, or Baghouse milestone, stating whether PSEG Fossil has met the milestone, and if not, the reasons for any delay, including the nature and cause of the delay, and any steps taken by PSEG Fossil to mitigate such delay."

32. Consent Decree Paragraph 158 is replaced with the following: "Each PSEG Fossil progress report, Quarterly Report and 30-day Report shall be signed by PSEG Fossil's Vice President, Fossil Operations, or, in his or her absence, another company Vice President, or higher ranking official, and contain the following certification:

"I certify under penalty of law that I believe the information provided in this document is true, accurate, and complete. I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attached documents and, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil and criminal penalties, including the possibility of fine or imprisonment or both, for submitting false, inaccurate or incomplete information."

VIII. MERCURY EMISSIONS REDUCTION AND MONITORING

shall install carbon injection systems for control of mercury emissions at Mercer Unit 1 and Mercer Unit 2 by January 31, 2007, and shall operate each carbon injection system whenever the Unit it serves is combusting coal. PSEG Fossil shall install a carbon injection system for control of mercury emissions at Hudson Unit 2 by December 31, 2010, and shall operate the carbon injection system whenever the Unit it serves is combusting coal, unless it has Shut Down Hudson Unit 2 pursuant to Paragraphs 18–19 of this Amendment. PSEG Fossil shall operate the carbon injection systems on Mercer Unit 1, Mercer Unit 2, and Hudson Unit 2, together with the baghouses and FGDs for those Units, to use best efforts to achieve a 90% reduction of PSEG Fossil's mercury emissions from year 2000 levels at Hudson Unit 2, Mercer Unit 1, and Mercer Unit 2, within one year after installation of the carbon injection system, baghouse, and FGD at each Unit."

34. Consent Decree Paragraphs 147 through 150 are replaced with the following: "By December 31, 2008, PSEG Fossil shall also install and commence operation of Mercury CEMS at Mercer Units 1 and 2."

IX. PARTICULATE MATTER MONITORING

- 35. A new Consent Decree Paragraph 154a is inserted into and made a part of Section VIII of the Consent Decree as follows: "Beginning no later than December 31, 2008, PSEG Fossil shall have installed and shall operate PM CEMS technology at Mercer Unit 1 and Mercer Unit 2 in accordance with 40 C.F.R. Part 60, App. B, Performance Specification 11, and App. F Procedure 2. Beginning no later than December 31, 2010, PSEG Fossil shall have installed and shall operate PM CEMS technology at Hudson Unit 2, in accordance with 40 C.F.R. Part 60, App. B, Performance Specification 11, and App. F Procedure 2. The installation and operation of PM CEMS in no way affects the applicability of Consent Decree Paragraphs 74 or 93."
- 36. A new Consent Decree Paragraph 154b is inserted into and made a part of Section VIII of the Consent Decree as follows: "The PM CEMS required by Consent Decree Paragraph 154a shall include a continuous particle mass monitor measuring particulate matter concentration, directly or indirectly, on an hourly average basis and a diluent monitor used to convert the concentration to units of lb/mmBTU. PSEG Fossil shall maintain, in an electronic database, the hourly average emission values of all PM CEMS in lb/mmBTU. No later than 180 days prior to the deadline for commencing operation of the PM CEMS required by Paragraph 154a, PSEG Fossil shall submit to EPA and NJDEP for review and approval pursuant to Paragraphs 94–98 of the Consent Decree a proposed Quality Assurance/Quality Control ("QA/QC") protocol that PSEG Fossil will follow in calibrating the PM CEMS. In its protocol,

PSEG Fossil shall use 40 C.F.R. Part 60, App. B, Performance Specification 11, and App. F
Procedure 2. PSEG Fossil shall include in its QA/QC protocol a description of any periods in
which it proposes that the PM CEMS may not be in operation in accordance with Performance
Specification 11. Upon approval by EPA and NJDEP, PSEG Fossil shall implement the QA/QC
protocol in accordance with the terms set forth therein. PSEG Fossil shall operate each
PM CEMS at all times that the Unit it serves is in operation, except as provided for in the
QA/QC protocol approved by EPA and NJDEP."

X. ENVIRONMENTAL MITIGATION PROJECTS FOR THE STATE OF NEW JERSEY

37. A new Consent Decree Paragraph 154c is inserted into and made a part of Section VIII of the Consent Decree as follows: "Within 30 days of the date of entry of an order approving this Amendment, PSEG Fossil shall submit to NJDEP for review and approval, pursuant to Paragraphs 94 through 98 of the Consent Decree, proposed plans for environmental mitigation projects to reduce particulate matter from diesel engines within the New Jersey air shed region. Upon approval, PSEG Fossil shall implement these projects in compliance with the terms and schedule in the approved plans. In performing these particulate matter reduction projects, PSEG Fossil shall spend \$3.25 million (present value in 2006 dollars)."

XI. CIVIL PENALTY

38. A new Consent Decree Paragraph 160a is inserted as follows: "Within thirty calendar days of entry of an order approving this Amendment, PSEG Fossil shall pay to the United States a civil penalty in the amount of \$4.25 million. The civil penalty shall be paid by Electronic Funds Transfer ("EFT") to the United States Department of Justice, in accordance with current EFT procedures, referencing the USAO File Number and DOJ Case Number 90-5-

2-1-1866/1 and the civil action case name and case number of this action. The costs of EFT shall be PSEG Fossil's responsibility. Payment shall be made in accordance with instructions provided by the Financial Litigation Unit of the U.S. Attorney's Office for the District of New Jersey. Any funds received after 4:00 p.m. (EST) shall be credited on the next business day. PSEG Fossil shall provide notice of payment, referencing the USAO File Number, DOJ Case Number 90-5-2-1-1866/1, and the civil action case name and case number, to the Department of Justice and to EPA, as provided in Consent Decree Paragraph 197. Failure to timely pay the civil penalty shall subject PSEG Fossil to interest accruing from the date payment is due until the date payment is made at the rate prescribed by 28 U.S.C. § 1961, and shall render PSEG Fossil liable for all charges, costs, fees, and penalties established by law for the benefit of a creditor or of the United States in securing payment."

39. A new Consent Decree Paragraph 160b is inserted as follows: "Within thirty calendar days of entry of an order approving this Amendment, PSEG Fossil shall pay to the State of New Jersey a civil penalty in the amount of \$1.75 million. Payment shall be made by check or wire transfer payable to 'Treasurer, State of New Jersey' and shall be submitted to:

Department of Environmental Protection Administrator, Air Compliance & Enforcement 401 E. State Street P.O. Box 422 Trenton, NJ 08625–0422"

XII. STIPULATED PENALTIES

40. Consent Decree Paragraph 162(d) is replaced with the following: "For failure to operate an ESP, the Mercer 1 FGD, or the SCRs at Mercer Units 1 and 2 when the Unit associated with these devices is in operation, except as permitted by Paragraphs 47, 63, 80,

and 87: \$10,000 per day, per violation, for the first 30 days, and \$27,500 per day, per violation, thereafter."

- 41. A new Consent Decree Paragraph 162(p) is inserted as follows: "For failure to operate the Hudson Unit 2 SNCR, Mercer 2 FGD, or the baghouses at Mercer Units 1 and 2 when the Unit associated with these devices is in operation, except as permitted by Paragraphs 47, 68, 87a, and 87b: \$10,000 per day, per violation, for the first 30 days, and \$32,500 per day, per violation, thereafter.
- 42. A new Consent Decree Paragraph 162(q) is inserted as follows: "For failure to implement the pollution reduction measures required by Paragraphs 13–15 of this Amendment: \$10,000 per day, per violation, for the first 30 days, and \$32,500 per day, per violation, thereafter."
- 43. A new Consent Decree Paragraph 162(r) is inserted as follows: "For failure to timely pay the civil penalty as specified in Section XI (Civil Penalty) of this Amendment: \$10,000 per day for the first thirty days, and \$32,500 per day thereafter."
- 44. A new Consent Decree Paragraph 162(s) is inserted as follows: "For all violations of a 90-Day Rolling Average Emission Rate: (1) Less than 5% in excess of limit—\$2,500 per day, per violation; (2) more than 5% but less than 10% in excess of limit—\$5,000 per day, per violation; (3) equal to or greater than 10% in excess of limit—\$10,000 per day, per violation;"
- 45. A new Consent Decree Paragraph 162(t) is inserted as follows: "For failure to permanently surrender allowances in accordance with Consent Decree Paragraph 102a: \$32,500 per day, per violation, plus \$1,000 per SO₂ or NO_x Allowance, and the surrender of SO₂ and NO_x

Allowances in an amount equal to four times the number of SO₂ and NO_x Allowances used, sold, or transferred in violation of this Amendment."

- 46. A new Consent Decree Paragraph 162(u) is inserted as follows: "For failure to comply with the emission caps in accordance with Consent Decree Paragraph 98a: \$100,000 per ton, per year for the first 100 tons over the limit, and \$120,000 per ton, per year for each additional ton over the limit."
- 47. A new Consent Decree Paragraph 162(v) is inserted as follows: "For failure to permanently Shut Down Kearny Units 7 and 8 in accordance with Consent Decree Paragraph 98d: \$32,500 per day, per violation."
- 48. A new Consent Decree Paragraph 162(w) is inserted as follows: "For failure to meet the FGD milestone, SCR milestone, or baghouse milestone dates in Paragraphs 4, 7, and 10 of this Amendment: \$5,000 per day, per violation for the first thirty days, and \$15,000 per day, per violation thereafter."
- 49. A new Consent Decree Paragraph 162(x) is inserted as follows: "For failure to commence operation of the FGD, SCR, and baghouse at Hudson Unit 2 by December 31, 2010, unless PSEG Fossil has Shut Down this Unit on or before that date: \$32,500 per day, per violation, plus the surrender of SO₂ and NO_x Allowances in an amount equal to three times the total number of SO₂, NO_x, and PM tons emitted after December 31, 2010, that would not have otherwise been emitted had PSEG Fossil installed the FGD, SCR, and baghouse in a timely manner."
- 50. A new Consent Decree Paragraph 162(y) is inserted as follows: "For failure to Shut Down Hudson Unit 2 by December 31, 2008, if PSEG Fossil has elected to do so, except as otherwise provided in Paragraph 19 of this Amendment: \$32,500 per day, per violation, plus the

surrender of SO₂ and NO_x Allowances in an amount equal to three times the total number of SO₂, NO_x, and PM tons emitted after December 31, 2008."

XIII. FORCE MAJEURE

that, depending upon the circumstances related to an event and PSEG Fossil's response to such circumstances, the kinds of events listed below could also qualify as Force Majeure Events within the meaning of this Section: construction, labor, or equipment delay or failures; natural gas and gas transportation availability delay or failures; acts of War; acts of terrorism; and orders by government officials, acting under and authorized by applicable law, that direct PSEG Fossil to supply electricity in response to a legally-declared, system-wide (or state-wide) emergency, provided that the issuance of such an order after PSEG Fossil has elected to Shut Down Hudson Unit 2, Mercer Unit 1, or Mercer Unit 2 shall not qualify as a Force Majeure Event unless PSEG Fossil can establish that the emergency giving rise to the order was caused by circumstances beyond its control, or the control of any entity owned by PSEG Fossil, and that the emergency giving rise to the order could not have been prevented by the exercise of due diligence by PSEG Fossil."

XIV. COMPLETE AGREEMENT

52. Consent Decree Paragraph 200 is replaced with the following: "The Consent Decree, which includes this Amendment, constitutes the final, complete, and exclusive agreement and understanding among the Parties with respect to the settlement embodied in the Consent Decree. The Parties acknowledge that there are no representations, agreements, or understandings relating to the settlement other than those expressed contained in the Consent Decree."

XV. GENERAL PROVISIONS

- 53. *Effective Date*. The effective date of this Amendment shall be the date upon which this Court enters an order approving this Amendment.
- 54. *Modification*. Except as otherwise allowed by law or as provided in Section XIII (Force Majeure) and Section XIV (Dispute Resolution) of the Consent Decree, there shall be no modification of this Amendment without written approval by the United States, PSEG Fossil, and New Jersey, and approval of such modification by this Court.
- 55. Signatories. This Amendment may be signed in counterparts, and such counterpart signature pages shall be given full force and effect. The undersigned representative of PSEG Fossil certifies he is fully authorized to enter into the terms and conditions of this Amendment and to execute and legally bind PSEG Fossil.
- Amendment agree and acknowledge that final approval by the United States and entry of this Amendment is subject to the procedures of 28 C.F.R. § 50.7, which provides for notice of the lodging of this Amendment in the Federal Register, an opportunity for public comment, and the right of the United States to withdraw or withhold consent if comments disclose facts or considerations which indicate that the Amendment is inappropriate, improper, or inadequate. PSEG Fossil shall not oppose entry of this Amendment by this Court or challenge any provision of this Amendment unless the United States or New Jersey has notified PSEG Fossil in writing that the United States or New Jersey no longer supports entry of the Amendment.
- 57. *Final Judgment*. Upon approval and entry of this Amendment by the Court, this Amendment shall constitute a final judgment between the United States, the State of New Jersey, and PSEG Fossil.

SO ORDERED, THIS	DAY OF, 2006.	
	UNITED STATES DISTRICT COURT JUDG	E

FOR THE UNITED STATES OF AMERICA:

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FOR THE STATE OF NEW JERSEY:

LISA JACKSON

Commissioner

New Jersey Department of Environmental

Protection

LISA MORELLI

Deputy Attorney General

Division of Law

Department of Law and Public Safety

FOR PSEG FOSSIL LLC:

PSEG FOSSIL LLC

UNITED STATES DISTRICT COURT EASTERN DISTRICT OF TENNESSEE AT KNOXVILLE

STATE OF ALABAMA AND THE ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT, COMMONWEALTH OF KENTUCKY, STATE OF NORTH CAROLINA ex rel. ATTORNEY GENERAL ROY COOPER, and STATE OF TENNESSEE,	
Plaintiffs,))))
v. TENNESSEE VALLEY AUTHORITY))) JUDGE) Civil Action No
Defendant))))
NATIONAL PARKS CONSERVATION ASSOCIATION, INC., SIERRA CLUB, and OUR CHILDREN'S EARTH FOUNDATION, Plaintiffs,	
v. TENNESSEE VALLEY AUTHORITY))))) JUDGE) Civil Action No
Defendant))

CONSENT DECREE

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EXHIBIT 2 – PROPOSED CONSENT AGREEMENT AND FINAL ORDER	

WHEREAS, the States of Alabama, North Carolina, and Tennessee and the Commonwealth of Kentucky (collectively the "States"), have jointly filed a complaint for injunctive relief and civil penalties pursuant to Ala. Code § 22-22A-5(18), (19), Ky. Rev. Stat. § 224.99-010 to -020, Tenn. Code Ann. § 68-201-111, -115(b)(5), -117, and Section 304 of the Clean Air Act (the "Act"), 42 U.S.C. § 7604, alleging that Defendant Tennessee Valley Authority ("TVA") made major modifications to major emitting facilities, and failed to obtain the necessary permits and install the controls necessary under the Prevention of Significant Deterioration ("PSD") and Nonattainment New Source Review ("Nonattainment NSR") provisions of the Act and the federally approved and enforceable State Implementation Plans ("SIPs") for Alabama, Kentucky, and Tennessee, to reduce emissions of oxides of nitrogen (NO_x), sulfur dioxide (SO₂), and/or particulate matter ("PM"); further alleging related claims under the New Source Performance Standards, minor new source review ("minor NSR"), and Title V programs; and further alleging that such emissions damage human health and the environment;

WHEREAS, National Parks Conservation Association, Sierra Club, and Our Children's Earth Foundation (collectively the "Citizen Plaintiffs") have jointly filed a complaint for injunctive and declaratory relief and civil penalties pursuant to the federal Clean Air Act, 42 U.S.C. §§ 7401 through 7671q, alleging that TVA made major modifications to major emitting facilities and failed to obtain the necessary permits and install the controls necessary under the PSD and Nonattainment NSR provisions of the Act and the EPA-approved SIPs for the States of Alabama and Tennessee, and the Commonwealth of Kentucky to reduce emissions of NO_x, SO₂,

and/or PM and further alleging related claims under the New Source Performance Standards and minor NSR;

WHEREAS, on November 10, 2004, the State of North Carolina gave notice to TVA and other required parties, pursuant to Section 304 of the Act, 42 U.S.C. § 7604, of its intent to sue TVA regarding the same alleged violations that EPA had alleged in an administrative compliance order that EPA had issued to TVA first on November 3, 1999, and which was subsequently amended several times, including on April 10, 2000,

WHEREAS, on October 30, 2000, December 13, 2000, July 21, 2003, and September 30, 2008, to the extent it was necessary, the Citizen Plaintiffs gave notice to TVA and other required parties pursuant to Section 304 of the Act, 42 U.S.C. § 7604, of their intent to sue TVA regarding the claims alleged in their complaint;

WHEREAS, the States' complaint alleges, <u>inter alia</u>, claims upon which relief can be granted against TVA pursuant to Ala. Code § 22-22A-5(18), (19), Ky. Rev. Stat. §§ 224.99-010 to -020, Tenn. Code Ann. §§ 68-201-111, -115(b)(5), -117, Section 304 of the Act, 42 U.S.C. § 304, and 28 U.S.C. § 1355;

WHEREAS, the Citizen Plaintiffs' complaint alleges claims upon which relief can be granted against TVA pursuant to the Clean Air Act's PSD program, 42 U.S.C. §§ 7470-7492, Nonattainment NSR program, 42 U.S.C. §§ 7501-7515, New Source Performance Standards, 42 U.S.C. § 7411, NSPS Subparts A and Da, 40 C.F.R. § 60.1 et seq., 40 C.F.R. § 60.40a et seq., minor NSR, the EPA-approved SIPs for the States of Tennessee and Alabama, and the Commonwealth of Kentucky, and 28 U.S.C. § 1355;

WHEREAS, EPA issued an administrative compliance order to TVA pursuant to Sections 113 and 167 of the Act, 42 U.S.C. §§ 7413, 7477, alleging that TVA violated, inter alia, the PSD and Nonattainment NSR programs of the Act, its implementing regulations, and the relevant SIPs at several of the coal-fired electric generating units that TVA owns and operates when it made certain physical changes without obtaining the necessary permits and installing the controls necessary to reduce emissions of NO_x, SO₂, and PM;

WHEREAS, in the administrative compliance order, EPA directed TVA to come into compliance with the Act;

WHEREAS, the United States Environmental Appeals Board ("EAB") issued a Final Order on Reconsideration in In re Tennessee Valley Auth., 9 E.A.D 357 (EAB 2000), in which it found that TVA had violated the PSD and Nonattainment NSR programs of the Act, its implementing regulations, and the relevant SIPs, and directed TVA to come into compliance with the Act;

WHEREAS, TVA petitioned for review of the administrative compliance order and the EAB's Final Order on Reconsideration in the United States Court of Appeals for the Eleventh Circuit, which concluded that EPA's administrative proceedings, and the Act provisions under which the order was issued, violated due process, Tennessee Valley Auth. v. Whitman, 336 F.3d 1236, 1244, 1260 (11th Cir. 2003), cert. denied, 541 U.S. 1030 (2004); Brief for Respondent in Opposition to a Writ of Certiorari ("Brief for Respondent") at 4, National Parks Conservation Ass'n et al. v. Tennessee Valley Auth., 554 U.S. 917 (2008) (No. 07-867), and which then held that the unconstitutionality of the Clean Air Act provision meant that EPA's order was not a

"final agency action" and that the court of appeals therefore lacked jurisdiction to review it, see Brief for Respondent at 4 (citing Whitman, 336 F.3d at 1248, 1260);

WHEREAS, through a Clean Air Act Federal Facilities Compliance Agreement

("Compliance Agreement"), <u>In re Tennessee Valley Auth.</u>, Docket No. CAA-04-2010-1760

(Exhibit 1 to this Consent Decree), and a Consent Agreement and Final Order, <u>In re Tennessee</u>

<u>Valley Auth.</u>, Docket No. CAA-04-2010-1528(b) (Exhibit 2 to this Consent Decree), EPA and

TVA are resolving the violations alleged in the amended administrative compliance order and the Final Order on Reconsideration;

WHEREAS, when entered, this Consent Decree will secure by way of injunction the same relief as the Compliance Agreement and that, therefore, TVA's operations will be governed by both the Compliance Agreement and this Consent Decree;

WHEREAS, the States, Citizen Plaintiffs, and TVA (the "Parties") anticipate that this Consent Decree (and EPA and TVA anticipate that the Compliance Agreement), including the installation and operation of pollution control technology and other measures adopted pursuant to this Consent Decree and the Compliance Agreement, will achieve significant reductions of emissions from the TVA System and thereby significantly improve air quality;

WHEREAS, TVA is now undertaking a process to transform itself into a cleaner power system by reducing emissions from its coal-fired power plants, by retiring some coal-fired units, and by relying more on lower-emitting or non-emitting generation like natural gas and nuclear units and energy-efficiency and demand response programs;

WHEREAS, TVA disagreed with, and continues to disagree with, the allegations of the administrative compliance order and the findings of fact and conclusions of law of the Final Order on Reconsideration by the EAB, and denies that it violated the Act as so alleged and found (see Whitman, 336 F.3d at 1244-45);

WHEREAS, TVA wishes to resolve, without the uncertainty and expense associated with further litigation, the claims of EPA and other parties that it has violated any provisions of the Act's PSD, Nonattainment NSR, New Source Performance Standards ("NSPS"), minor NSR, or (to the extent related to such PSD, Nonattainment NSR, NSPS, and minor NSR claims) Title V Operating Permit programs by way of the activities identified in the administrative compliance order and/or the complaints or other similar activities TVA has conducted at its coal-fired electricity generating plants;

WHEREAS, as specified in Paragraph 158 of this Consent Decree, TVA has agreed to an expedited schedule to obtain the appropriate Clean Water Act National Pollutant Discharge Elimination System permits for the wastewater discharges from its flue gas desulfurization ("FGD") systems should EPA promulgate a final rule containing revisions to the Effluent Limitations Guidelines;

WHEREAS, TVA plans to seek public review and comment during the environmental reviews conducted pursuant to the National Environmental Policy Act for the construction and operation of any combustion turbine and combined cycle electric generating plants it proposes to add to its system; and

WHEREAS, the Parties have agreed, and the Court, by entering this Consent Decree finds, that this Consent Decree has been negotiated in good faith and at arm's length; that this settlement is fair, reasonable, and in the public interest, and consistent with the goals of the Act, and that entry of this Consent Decree without further litigation is the most appropriate means of resolving this matter;

NOW, THEREFORE, without any admission by TVA, and without adjudication of the violations alleged in the complaints, it is hereby ORDERED, ADJUDGED, AND DECREED as follows:

I. JURISDICTION AND VENUE

1. This Court has jurisdiction over this action, the subject matter herein, and the Parties consenting hereto, pursuant to 28 U.S.C. §§ 1331, 1355, and 1367, and Section 304 of the Clean Air Act (the "Act"), 42 U.S.C. § 7604. Solely for purposes of this Consent Decree, venue is proper under 28 U.S.C. §§ 1391(b) and (c) and 1395. Solely for purposes of this Consent Decree and the underlying complaints, and for no other purpose, TVA waives all objections and defenses that it may have to the Court's jurisdiction over this action, to the Court's jurisdiction over TVA, and to venue in this District. TVA shall not challenge the terms of this Consent Decree or this Court's jurisdiction to enter and enforce this Consent Decree. Solely for purposes of the complaints filed by the Plaintiffs in this matter and resolved by this Consent Decree, for the purposes of entry and enforcement of this Consent Decree, and for no other purpose, TVA waives any defense or objection based on standing. Except as expressly provided herein, this

Consent Decree shall not create any rights in or obligations of any party other than the Plaintiffs and TVA.

II. PARTIES BOUND

2. Upon entry, the provisions of this Consent Decree shall apply to and be binding upon the Parties and their successors and assigns, and TVA's officers, employees and agents, solely in their capacities as such.

III. COMPLIANCE PROGRAM

3. TVA shall be responsible for providing a copy of this Consent Decree to all vendors, suppliers, consultants, contractors, agents, and any other company or other organization retained to perform any of the work required by this Consent Decree. Notwithstanding any retention of contractors, subcontractors, or agents to perform any work required under this Consent Decree, TVA shall be responsible for ensuring that all work is performed in accordance with the requirements of this Consent Decree. For this reason, in any action to enforce this Consent Decree, TVA shall not assert as a defense the failure of its officers, directors, employees, servants, agents, or contractors to take actions necessary to comply with this Consent Decree, unless TVA establishes that such failure resulted from a Force Majeure Event, as defined in Paragraph 166 of this Consent Decree.

A. DEFINITIONS

4. Every term expressly defined by this Consent Decree shall have the meaning given to that term by this Consent Decree and, except as otherwise provided in this Consent Decree, every other term used in this Consent Decree that is also a term under the Act or the

regulations implementing the Act shall mean in this Consent Decree what such term means under the Act or those implementing regulations.

- 5. "Alabama" means the State of Alabama, Alabama Department of Environmental Management.
- 6. "Baghouse" means a full stream (fabric filter) particulate emissions control device.
- 7. "Boiler Island" means a Unit's (a) fuel combustion system (including bunker, coal pulverizers, crusher, stoker, and fuel burners); (b) combustion air system; (c) steam generating system (firebox, boiler tubes, and walls); and (d) draft system (excluding the stack), all as further described in "Interpretation of Reconstruction," by John B. Rasnic U.S. EPA (Nov. 25, 1986) and attachments thereto.
- 8. "Capital Expenditure" means all capital expenditures, as defined by Generally Accepted Accounting Principles as those principles exist as of the Date of Lodging of this Consent Decree, excluding the cost of installing or upgrading pollution control devices.
- 9. "Citizen Plaintiffs" means, collectively, National Parks Conservation Association, Sierra Club, and Our Children's Earth Foundation.
- 10. "CEMS" means, for obligations involving NO_x and SO_2 under this Consent Decree, the devices defined in 40 C.F.R. § 72.2 and installed and maintained as required by 40 C.F.R. Part 75, and for obligations involving PM, the continuous emission monitors installed and maintained as described in 40 C.F.R. § 60.49Da(v).

- 11. "Clean Air Act" or "Act" means the federal Clean Air Act, 42 U.S.C. §§ 7401-7671q, and its implementing regulations.
- 12. "Compliance Agreement" or "Federal Facilities Compliance Agreement" means the Clean Air Act agreement entered into between EPA and TVA, Docket No. CAA-04-2010-1760, and which is Exhibit 1 to this Consent Decree.
- 13. "Consent Decree" or "Decree" means this Consent Decree and the appendices attached hereto, which are incorporated into this Consent Decree.
- 14. "Consent Decree Obligation Date" means the Effective Date of the Compliance Agreement, as the term "Effective Date" is defined in the Compliance Agreement, which date is , 2011.
- 15. "Continuously Operate" or "Continuous Operation" means that when a pollution control technology or combustion control is used at a Unit (including, but not limited to, SCR, FGD, PM Control Device, SNCR, Low NO_x Burner ("LNB"), Overfire Air ("OFA") or Separated Overfire Air ("SOFA")), it shall be operated at all times such Unit is in operation (except during a Malfunction that is determined to be a Force Majeure Event), so as to minimize emissions to the greatest extent technically practicable consistent with the technological limitations, manufacturers' specifications, fire prevention codes, and good engineering and maintenance practices for such pollution control technology or combustion control and the Unit.
- 16. "Date of Entry" means the date this Consent Decree is approved or signed by the United States District Court Judge.

- 17. "Date of Lodging" means the date that this Consent Decree was filed for lodging with the Clerk of the Court for the United States District Court for the Eastern District of Tennessee, Knoxville Division.
 - 18. "Day" means calendar day unless otherwise specified in this Consent Decree.
- 19. "Emission Rate" means the number of pounds of pollutant emitted per million British thermal units of heat input ("lb/mmBTU"), measured in accordance with this Consent Decree.
- 20. "ESP" means electrostatic precipitator, a pollution control device for the reduction of PM.
 - 21. "EPA" means the United States Environmental Protection Agency.
- 22. "Flue Gas Desulfurization System" or "FGD" means a pollution control device with one or more absorber vessels that employs flue gas desulfurization technology for the control of SO₂ emissions. Unless Paragraph 85 expressly requires the installation and Continuous Operation of a Wet FGD, TVA may install either a Wet FGD or a Dry FGD.
- 23. "Greenhouse Gases" means the air pollutant defined at 40 C.F.R § 86.1818-12(a) as of the Date of Lodging of this Consent Decree as the aggregate group of six greenhouse gases: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. This definition continues to apply even if 40 C.F.R § 86.1818-12(a) is subsequently revised, stayed, vacated or otherwise modified.
- 24. "Improved Unit" for NO_x means a TVA System Unit equipped with an SCR or scheduled under this Consent Decree to be equipped with an SCR (or equivalent control

technology approved pursuant to Paragraph 199) or Repowered to Renewable Biomass (as defined herein). A Unit may be an Improved Unit for one pollutant without being an Improved Unit for another. Any Other Unit in the TVA System can become an Improved Unit for NO_x if it is equipped with an SCR (or equivalent control technology approved pursuant to Paragraph 199) and the requirement to Continuously Operate the SCR or equivalent control technology is incorporated into a federally-enforceable non-Title V permit, or if it is Repowered to Renewable Biomass (as defined herein).

- 25. "Improved Unit" for SO₂ means a TVA System Unit equipped with an FGD or scheduled under this Consent Decree to be equipped with an FGD (or equivalent control technology approved pursuant to Paragraph 199) or Repowered to Renewable Biomass (as defined herein). A Unit may be an Improved Unit for one pollutant without being an Improved Unit for another. Any Other Unit in the TVA System can become an Improved Unit for SO₂ if it is equipped with an FGD (or equivalent control technology approved pursuant to Paragraph 199) and the requirement to Continuously Operate the FGD or equivalent control technology is incorporated into a federally-enforceable non-Title V permit, or it is Repowered to Renewable Biomass (as defined herein).
- 26. "Kentucky" means the Commonwealth of Kentucky, Energy and Environment Cabinet.
 - 27. "lb/mmBTU" means one pound per million British thermal units.
- 28. "Malfunction" means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal

or usual manner. Failures that are caused in part by poor maintenance or careless operation are not Malfunctions.

- 29. "MW" means a megawatt or one million Watts.
- 30. "National Ambient Air Quality Standards" or "NAAQS" means national ambient air quality standards that are promulgated pursuant to Section 109 of the Act, 42 U.S.C. § 7409.
 - 31. "New CC/CT Unit" shall have the meaning indicated in Paragraph 117, below.
- 32. "NSPS" means New Source Performance Standards within the meaning of Part A of Subchapter I of the Act, 42 U.S.C. § 7411, and 40 C.F.R. Part 60.
- 33. "Nonattainment NSR" means the nonattainment area new source review program within the meaning of Part D of Subchapter I of the Act, 42 U.S.C. §§ 7501-7515, 40 C.F.R. Part 51, and the federally-approved Nonattainment NSR provisions of the Alabama, Kentucky, and Tennessee State Implementation Plans ("SIPs"), including Ala. Admin. Code r. 335-3-14-.05, 401 Ky. Admin. Regs. 51:052, Tenn. Comp. R. & Regs.1200-3-9-.01(5), and the Memphis/Shelby County local program.
- 34. "NO_x" means oxides of nitrogen, measured in accordance with the provisions of this Consent Decree.
- 35. "NO_x Allowance" means an authorization or credit to emit a specified amount of NO_x that is allocated or issued under an emissions trading or marketable permit program of any kind that has been established under the Act and/or the Alabama, Kentucky, or Tennessee SIPs.
 - 36. "North Carolina" means the State of North Carolina.

- 37. "Other Unit" means any Unit at the Shawnee Plant that is not an Improved Unit for the pollutant in question.
- 38. "Operational or Ownership Interest" means part or all of TVA's legal or equitable operational or ownership interest in any Unit in the TVA System or any New CC/CT Unit(s).
- 39. "Parallel Provision" means a requirement or prohibition of this Consent Decree that is also a requirement or prohibition of the Compliance Agreement.
 - 40. "Parties" means the Plaintiffs and TVA. "Party" means one of the Parties.
- 41. "PM" means particulate matter, as measured in accordance with the requirements of this Consent Decree.
- 42. "PM Control Device" means any device, including an ESP or a Baghouse, which reduces emissions of PM. If a Wet FGD is the only device controlling PM on a particular Unit, then the Wet FGD is the PM Control Device.
- 43. "PM Emission Rate" means the number of pounds of filterable PM emitted per million British thermal units of heat input ("lb/mmBTU"), as measured in accordance with this Consent Decree.
 - 44. "Plaintiffs" means collectively the States and the Citizen Plaintiffs.
- 45. "PSD" means Prevention of Significant Deterioration within the meaning of Part C of Subchapter I of the Act, 42 U.S.C. §§ 7470 7492 and 40 C.F.R. Part 52, and the federally-approved PSD provisions of the Alabama, Kentucky, and Tennessee SIPs, including Ala. Admin. Code r. 335-3-14-.04, 401 Ky. Admin. Reg. 51:017, Tenn. Comp. R. & Regs. 1200-3-9-.01(4), and the Memphis/Shelby County local program.

- 46. "Region 4 Air Director" means the EPA Region 4 Director of Air, Pesticides and Toxics Management Division.
 - 47. "Remove from Service" means:
- a. with regard to the John Sevier plant, that two (2) of the four (4) Units shall cease to operate and emit any pollutants whatsoever by the dates specified in Paragraphs 69 and 85 for the 2 Units to be Removed from Service unless and until an SCR and FGD are installed and commence Continuous Operation for each such Unit, or the Unit(s) is Repowered to Renewable Biomass or Retired, which shall occur by no later than the second date specified in Paragraphs 69 and 85 for the 2 Units that are Removed from Service provided that TVA may select which 2 Units at the John Sevier plant it will Remove from Service and that the remaining 2 Units shall be Retired as set forth in Paragraphs 69 and 85, and
- b. with regard to Colbert Units 1-5, that such Units shall cease to operate and emit any pollutants whatsoever by the dates specified in Paragraphs 69 and 85 unless and until, by no later than three (3) years thereafter, an SCR and FGD are installed and commence Continuous Operation for each such Unit(s) or the Unit(s) is Repowered to Renewable Biomass or Retired, as specified therein.
- 48. "Renewable Biomass" means, solely for purposes of this Consent Decree, any organic matter that is available on a renewable basis from non-Federal land or from federal land that TVA manages, including renewable plant material; waste material, including crop residue; other vegetative waste material, including wood waste and wood residues; animal waste and byproducts; construction, food and yard waste; and residues and byproducts from wood pulp or

paper products facilities. Biomass is renewable if it originates from forests that remain forests, or from croplands and/or grasslands that remain cropland and/or grassland or revert to forest.

Biomass residues and byproducts from wood pulp or paper products facilities includes byproducts, residues, and waste streams from agriculture, forestry, and related industries, but does not include used oil or expired pesticides. "Renewable Biomass" does not include any treated wood, including but not limited to, railroad ties, painted woods, or wood that has been treated with pentachlorophenol, copper-based and borate-based compounds, or creosote.

- 49. "Repower" or "Repowered" means Repower to Renewable Biomass or Repowered to Renewable Biomass.
- 50. "Repower to Renewable Biomass" or "Repowered to Renewable Biomass" for purposes of this Consent Decree means a TVA System Unit that is repowered to combust a fuel other than coal. Such a Repowered Unit shall only combust Renewable Biomass; provided, however, that such Repowered Unit may co-fire a fuel other than Renewable Biomass (but not used oil, expired pesticides, or any treated wood, including but not limited to, railroad ties, painted wood, or wood that has been treated with pentachlorophenol, copper-based and borate-based compounds, or creosote) up to six percent (6%) of heat input each calendar year for the Unit. Notwithstanding Section III.H (Resolution of Claims Against TVA) and Paragraph 116, for Shawnee Unit 10 and any other TVA System Unit that TVA Repowers to Renewable Biomass pursuant to Paragraphs 69 or 85, TVA shall apply for all required permits. A new source review permit under the PSD and/or Nonattainment NSR programs is a required permit within the meaning of this Paragraph; such a Repowered Unit is a "new emissions unit" as that

term is defined in 40 C.F.R. §§ 52.21(b)(7)(i), 51.165(a)(1)(vii)(A), and 51.166(b)(7)(i), and the relevant SIP; and such Unit shall be subject to the test described in 40 C.F.R. §§ 52.21(a)(2)(iv)(d), 51.165(a)(2)(ii)(D), and 51.166(a)(7)(d), and the relevant SIP. In such permitting action, TVA shall apply to include the limitation on co-firing a fuel other than Renewable Biomass as specified above. Any TVA System Unit that has the option to Repower to Renewable Biomass in Paragraphs 69 and 85 that TVA elects to Repower to Renewable Biomass as the Control Requirement under this Consent Decree, shall be subject to the prohibitions in Section III.E (Prohibition on Netting or Offsets From Required Controls). If Shawnee Unit 10 is Repowered to Renewable Biomass, it shall be subject to the prohibitions in Section III.E (Prohibition on Netting or Offsets From Required Controls) regarding netting credits.

TVA shall permanently cease to operate the Unit such that the Unit cannot legally burn any fuel nor produce any steam for electricity production and TVA shall comply with applicable state and/or federal requirements for permanently retiring a coal-fired electric generating unit, including removing the Unit from the relevant state's air emissions inventory, and amending all applicable permits so as to reflect the permanent shutdown status of such Unit. Nothing herein shall prevent TVA from seeking to re-start the Retired Unit provided that TVA applies for, and obtains, all required permits. A new source review permit under the PSD and/or Nonattainment NSR programs is a required permit within the meaning of this Paragraph; such Retired Unit shall be a "new emissions unit" as that term is defined in 40 C.F.R. \$\\$ 52.21(b)(7)(i), 51.165(a)(1)(vii)(A), and 51.166(b)(7)(i), and the relevant SIP; and such

Retired Unit shall be subject to the test described in 40 C.F.R. §§ 52.21(a)(2)(iv)(d), 51.165(a)(2)(ii)(D), and 51.166(a)(7)(d), and the relevant SIP.

- 52. "Selective Catalytic Reduction" or "SCR" means a pollution control device that employs selective catalytic reduction technology for the reduction of NO_x emissions.
- 53. "Selective Non-Catalytic Reduction" or "SNCR" means a pollution control device for the reduction of NO_x emissions that utilizes ammonia or urea injection into the boiler.
- 54. "Startup" and "Shutdown" mean, as to each of those terms, the definition of those respective terms in 40 C.F.R. § 60.2.
- 55. "States" or "the States" refers collectively to Alabama, Kentucky, North Carolina, and Tennessee.
- 56. "SO₂" means sulfur dioxide, as measured in accordance with the provisions of this Consent Decree.
- 57. "SO₂ Allowance" means an authorization or credit to emit a specified amount of SO₂ that is allocated or issued under an emissions trading or marketable permit program of any kind that has been established under the Act or the Alabama, Kentucky, or Tennessee SIPs.
- 58. "Surrender" or "surrender of allowances" means, for purposes of SO₂ or NO_x allowances, permanently surrendering allowances as required by this Consent Decree from the accounts administered by EPA and Alabama, Kentucky, and Tennessee for all Units in the TVA System, so that such allowances can never be used thereafter by any entity to meet any compliance requirement under the Act, a SIP, or this Consent Decree.

- 59. "System-Wide Annual Tonnage Limitation" means the number of tons of the pollutant in question that may be emitted collectively from the TVA System and any New CC/CT Units during the relevant calendar year (i.e., January 1 through December 31), and shall include all emissions of the pollutant emitted during all periods of operation, including Startup, Shutdown, and Malfunction.
- 60. "Tennessee" means the State of Tennessee, Tennessee Department of Environment and Conservation ("TDEC").
- 61. "Tennessee State Implementation Plan" and "Tennessee Title V program" shall include, when applicable, the new source review provisions of the Memphis/Shelby County local program, and its implementing regulations, and its Title V permit program.
- 62. "TVA" means Tennessee Valley Authority, a federal agency and instrumentality of the United States.
- 63. "TVA System" means solely for purposes of this Consent Decree, the following coal-fired, electric steam generating Units (with nameplate MW capacity of each Unit, for identification purposes only) or such coal-fired Unit that is Repowered to Renewable Biomass, located at the following plants:
 - a Allen Unit 1 (330 MW), Allen Unit 2 (330 MW), and Allen Unit 3 (330 MW) located at the Allen Fossil Plant near Memphis, Tennessee;
 - Bull Run Unit 1 (950 MW) located at the Bull Run Fossil Plant near Oak
 Ridge, Tennessee;

- Colbert Unit 1 (200 MW), Colbert Unit 2 (200 MW), Colbert Unit 3 (200 MW), Colbert Unit 4 (200 MW), and Colbert Unit 5 (550 MW) located at the Colbert Fossil Plant in Tuscumbia, Alabama;
- d. Cumberland Unit 1 (1300 MW) and Cumberland Unit 2 (1300 MW)
 located at the Cumberland Fossil Plant in Cumberland City, Tennessee;
- e. Gallatin Unit 1 (300 MW), Gallatin Unit 2 (300 MW), Gallatin Unit 3 (327.6 MW), and Gallatin Unit 4 (327.6 MW) located at the Gallatin Fossil Plant in Gallatin, Tennessee;
- f. John Sevier Unit 1 (200 MW), John Sevier Unit 2 (200 MW), John Sevier Unit 3 (200 MW), and John Sevier Unit 4 (200 MW) located at the John Sevier Fossil Plant near Rogersville, Tennessee;
- g. Johnsonville Unit 1 (125 MW), Johnsonville Unit 2 (125 MW),
 Johnsonville Unit 3 (125 MW), Johnsonville Unit 4 (125 MW),
 Johnsonville Unit 5 (147 MW), Johnsonville Unit 6 (147 MW),
 Johnsonville Unit 7 (172.8 MW), Johnsonville Unit 8 (172.8 MW),
 Johnsonville Unit 9 (172.8 MW), and Johnsonville Unit 10 (172.8 MW)
 located at the Johnsonville Fossil Plant near Waverly, Tennessee;
- h. Kingston Unit 1 (175 MW), Kingston Unit 2 (175 MW), Kingston Unit 3 (175 MW), Kingston Unit 4 (175 MW), Kingston Unit 5 (200 MW), Kingston Unit 6 (200 MW), Kingston Unit 7 (200 MW), Kingston Unit 8

- (200 MW), and Kingston Unit 9 (200 MW) located at the Kingston Fossil Plant near Kingston, Tennessee;
- i. Paradise Unit 1 (704 MW), Paradise Unit 2 (704 MW), and Paradise Unit
 3 (1150.2 MW) located at the Paradise Fossil Plant in Drakesboro,
 Kentucky;
- j. Shawnee Unit 1 (175 MW), Shawnee Unit 2 (175 MW), Shawnee Unit 3 (175 MW), Shawnee Unit 4 (175 MW), Shawnee Unit 5 (175 MW), Shawnee Unit 6 (175 MW), Shawnee Unit 7 (175 MW), Shawnee Unit 8 (175 MW), Shawnee Unit 9 (175 MW), and Shawnee Unit 10 (175 MW) located at the Shawnee Fossil Plant near Paducah, Kentucky; and
- k. Widows Creek Unit 1 (140.6 MW), Widows Creek Unit 2 (140.6 MW), Widows Creek Unit 3 (140.6 MW), Widows Creek Unit 4 (140.6 MW), Widows Creek Unit 5 (140.6 MW), Widows Creek Unit 6 (140.6 MW), Widows Creek Unit 7 (575 MW), and Widows Creek Unit 8 (550 MW) located at the Widows Creek Fossil Plant near Stevenson, Alabama.
- 64. "Title V Permit" means the permit required of TVA's major sources under Subchapter V of the Act, 42 U.S.C. §§ 7661-7661e; Ala. Code §§ 22-22A-1 to -16, §§ 22-28-1 to -23 (2006 Rplc. Vol.), and Ala. Admin. Code r. 335-3-16; Ky. Rev. Stat. Ann. §§ 224.20-100 to -120, and 401 Ky. Admin. Reg. 52:020; and Tenn. Comp. R. & Regs. R. 1200-3-9-.02.
- 65. "Unit" means collectively, the coal pulverizer, stationary equipment that feeds coal to the boiler, the boiler that produces steam for the steam turbine, the steam turbine, the

generator, the equipment necessary to operate the generator, steam turbine and boiler, and all ancillary equipment, including pollution control equipment. An electric steam generating station may comprise one or more Units. "Unit" shall also include any coal-fired TVA System Unit identified in Paragraph 63 that is Repowered to Renewable Biomass pursuant to this Consent Decree.

- 66. "VOC" means volatile organic compounds as defined in 40 C.F.R. § 51.100.
- B. NO_x EMISSION REDUCTIONS AND CONTROLS
- 1. NO_x Emission Limitations.
- 67. <u>System-Wide Annual Tonnage Limitations for NO_x</u>. During each calendar year specified in the table below, all Units in the TVA System and any New CC/CT Units constructed pursuant to Paragraph 117, collectively, shall not emit NO_x in excess of the following System-Wide Annual Tonnage Limitations:

Calendar Year	System-Wide Tonnage Limitation for NO _x
2011	100,600
2012	100,600
2013	90,791
2014	86,842
2015	83,042
2016	70,667
2017	64,951
2018, and each year thereafter	52,000

68. If TVA elects to Remove from Service any or all of Colbert Units 1-5 either pursuant to Paragraph 69 or Paragraph 85, then the System-Wide Annual Tonnage Limitations

for NO_x in each calendar year for which such Unit(s) is Removed from Service shall be adjusted as follows:

Unit	Tons by Which System-Wide Annual Tonnage Limitation for NO _x Shall be Reduced If Unit is Removed From Service in a Calendar Year
Colbert Unit 1	700 tons
Colbert Unit 2	500 tons
Colbert Unit 3	500 tons
Colbert Unit 4	500 tons
Colbert Unit 5	1,200 tons

2. NO_x Control Requirements.

69. No later than the dates set forth in the table below, and continuing thereafter, TVA shall install and commence Continuous Operation of the pollution control technology identified therein or, if indicated in the table, Retire or Repower each Unit identified therein, or, solely for Colbert Units 1-4 and two (2) Units at the John Sevier plant, Remove from Service as defined herein:

Plant	Unit	Control Requirement	Date
Allen	Unit 1	SCR	Consent Decree Obligation Date
Allen	Unit 2	SCR	Consent Decree Obligation Date
Allen	Unit 3	SCR	Consent Decree Obligation Date
Bull Run	Unit 1	SCR	Consent Decree Obligation Date
Colbert	Unit 1	Remove from Service, SCR, Repower to Renewable Biomass, or Retire	June 30, 2016

Plant	Unit	Control Requirement	Date
Colbert	Unit 2	Remove from Service, SCR, Repower to Renewable Biomass, or Retire June 30, 2016	
Colbert	Unit 3	Remove from Service, SCR, Repower to Renewable Biomass, or Retire June 30, 2016	
Colbert	Unit 4	Remove from Service, SCR, Repower to Renewable Biomass, or Retire	
Colbert	Unit 5	SCR	Consent Decree Obligation Date
Cumberland	Unit 1	SCR	Consent Decree Obligation Date
Cumberland	Unit 2	SCR	Consent Decree Obligation Date
Gallatin	Unit 1	SCR, Repower to Renewable Biomass, or Retire	December 31, 2017
Gallatin	Unit 2	SCR, Repower to Renewable Biomass, or Retire	December 31, 2017
Gallatin	Unit 3	SCR, Repower to Renewable December 31, 2017 Biomass, or Retire	
Gallatin	Unit 4	SCR, Repower to Renewable Biomass, or Retire	December 31, 2017
John Sevier	2 Units	Retire	December 31, 2012
John Sevier	2 other Units	Remove from Service	December 31, 2012
		SCR, Repower to Renewable Biomass, or Retire	December 31, 2015
Johnsonville	Units	Retire	6 Units by December 31, 2015
	1 - 10		4 additional Units by December 31, 2017
Kingston	Unit 1	SCR	Consent Decree Obligation Date

Plant	Unit	Control Requirement	Date
Kingston	Unit 2	SCR	Consent Decree Obligation Date
Kingston	Unit 3	SCR	Consent Decree Obligation Date
Kingston	Unit 4	SCR	Consent Decree Obligation Date
Kingston	Unit 5	SCR	Consent Decree Obligation Date
Kingston	Unit 6	SCR	Consent Decree Obligation Date
Kingston	Unit 7	SCR	Consent Decree Obligation Date
Kingston	Unit 8	SCR	Consent Decree Obligation Date
Kingston	Unit 9	SCR	Consent Decree Obligation Date
Paradise	Unit 1	SCR	Consent Decree Obligation Date
Paradise	Unit 2	SCR	Consent Decree Obligation Date
Paradise	Unit 3	SCR	Consent Decree Obligation Date
Shawnee	Unit 1	SCR, Repower to Renewable Biomass, or Retire	December 31, 2017
Shawnee	Unit 4	SCR, Repower to Renewable Biomass, or Retire	December 31, 2017
Widows Creek	Units	Retire	2 Units by July 31, 2013
	1-6		2 additional Units by July 31, 2014
			2 additional Units by July 31, 2015
Widows Creek	Unit 7	SCR	Consent Decree Obligation Date
Widows Creek	Unit 8	SCR	Consent Decree Obligation Date

- 70. Notwithstanding Paragraph 69, TVA's failure to (a) complete installation and commence Continuous Operation of a pollution control technology by the date specified in the table in Paragraph 69 or (b) Repower to Renewable Biomass by the date specified in the table in Paragraph 69, shall not be a violation of this Consent Decree if such Unit:
- (i) ceases to operate and emit any pollutants whatsoever at least sixty (60) days before the date specified in the table in Paragraph 69, and
- (ii) the installation is completed and the Unit commences Continuous

 Operation of the pollution control technology specified in the table in Paragraph 69 or as a

 Repowered Unit no later than ninety (90) days after the date specified in the table in Paragraph

 69. If TVA fails to commence Continuous Operation of the pollution control technology or the

 Repowered Unit ninety (90) days after such date, then TVA shall be subject to stipulated

 penalties for the entire period commencing on the date specified in the Table in Paragraph 69.
- 71. Beginning upon the Consent Decree Obligation Date and continuing thereafter, TVA shall (a) Continuously Operate existing LNB, OFA, and SOFA combustion controls at all Units in the TVA System and (b) Continuously Operate existing SNCR technology at all Units in the TVA System equipped with such technology as of the Date of Lodging of this Consent Decree (i.e., John Sevier Units 1-4 and Johnsonville Units 1-4) unless and until such Unit is equipped with an SCR and TVA Continuously Operates such SCR pursuant to this Consent Decree, or such Unit is Retired or Repowered pursuant to this Consent Decree.
- 72. For TVA System Units with two or more methods specified in the Control Requirement column in the table in Paragraph 69, above, TVA shall provide notice to EPA, the

States, and the Citizen Plaintiffs pursuant to Section VIII (Notices) of this Consent Decree of its election as to which of the Control Requirement methods it will employ at such Unit by no later than three (3) years prior to the date specified in the table for that Unit. For the Units at the John Sevier plant, TVA shall provide notice to EPA, the States, and the Citizen Plaintiffs pursuant to Section VIII (Notices) of this Consent Decree of its election as to which two (2) Units it will Retire and which two (2) Units it will at least initially Remove from Service, by no later than June 30, 2012. For any TVA System Unit that TVA timely elects to control with SCR or Repower to Renewable Biomass, TVA may change its election to Retire at any time prior to the date specified in the table in Paragraph 69. TVA shall provide notice to EPA, the States, and the Citizen Plaintiffs pursuant to Section VIII (Notices) of its decision to Retire the Unit, with an explanation for its decision to change the election, by no later than ten (10) business days following its decision to change its election from SCR or Repower to Renewable Biomass to Retire.

- 73. Solely for the Units at the Colbert plant, if TVA elects the Remove from Service option, it shall provide notice to EPA, the States, and the Citizen Plaintiffs pursuant to Section VIII (Notices) at the time such Units are required to be Removed from Service as to which method specified in the Control Requirement column in the table in Paragraph 69 it will employ at such Unit.
 - 3. Use and Surrender of NO_x Allowances.
- 74. TVA shall not use NO_x Allowances to comply with any requirement of this Consent Decree, including by claiming compliance with any emission limitation required by this

Consent Decree by using, tendering, or otherwise applying NO_x Allowances to offset any excess emissions.

- 75. Beginning with calendar year 2011, and continuing each calendar year thereafter, TVA shall surrender all NO_x Allowances allocated to the TVA System for that calendar year that TVA does not need in order to meet its own federal and/or state Clean Air Act regulatory requirements for the TVA System for that calendar year. However, NO_x Allowances allocated to the TVA System may be used by TVA to meet its own federal and/or state Clean Air Act regulatory requirements for the Units included in the TVA System.
- 76. Nothing in this Consent Decree shall prevent TVA from purchasing or otherwise obtaining NO_x Allowances from another source for purposes of complying with federal and/or state Clean Air Act regulatory requirements (<u>i.e.</u>, emissions trading or marketable permit programs) to the extent otherwise allowed by law.
- 77. The requirements of this Consent Decree pertaining to TVA's use and surrender of NO_x Allowances are permanent injunctions not subject to any termination provision of this Consent Decree.

4. Super-Compliance Allowances.

78. Notwithstanding Paragraph 75, in each calendar year beginning in 2011, and continuing thereafter, TVA may sell, bank, use, trade, or transfer any NO_x Allowances made available in that calendar year as a result of maintaining actual NO_x emissions from the combined total of (a) the TVA System and (b) any New CC/CT Unit(s) constructed pursuant to Paragraph 117 below the System-Wide Annual Tonnage Limitations for NO_x for such calendar year ("Super-Compliance Allowances"); provided, however, that reductions in NO_x emissions that

TVA utilizes as provided in Paragraph 117 to support the permitting of a New CC/CT Unit(s) shall not be available to generate Super-Compliance Allowances within the meaning of this Paragraph in the calendar year in which TVA utilizes such emission reductions and all calendar years thereafter. TVA shall timely report the generation of all Super-Compliance NO_x Allowances in accordance with Section III.I (Periodic Reporting) of this Consent Decree, and shall specifically identify any Super-Compliance NO_x Allowances that TVA generates from Retiring a TVA System Unit and that TVA did not utilize for purposes of Paragraph 117.

- 5. Method for Surrender of NO_x Allowances.
- 79. TVA shall surrender all NO_x Allowances required to be surrendered pursuant to Paragraph 75 by April 30 of the immediately following calendar year.
- 80. For all NO_x Allowances required to be surrendered, TVA shall first submit a NO_x Allowance transfer request form to EPA's Office of Air and Radiation's Clean Air Markets

 Division directing the transfer of such NO_x Allowances to the EPA Enforcement Surrender

 Account or to any other EPA account that EPA may direct in writing. As part of submitting these transfer requests, TVA shall irrevocably authorize the transfer of these NO_x Allowances and identify -- by name of account and any applicable serial or other identification numbers or station names -- the source and location of the NO_x Allowances being surrendered.
 - 6. NO_x Monitoring Provisions.
- 81. TVA shall use CEMS in accordance with 40 C.F.R. Part 75 to monitor its emissions of NO_x from the TVA System Units and any New CC/CT Unit(s) for purposes of demonstrating compliance with the applicable System-Wide Annual Tonnage Limitations specified in Paragraph 67 of this Consent Decree.

C. SO₂ EMISSION REDUCTIONS AND CONTROLS

- 1. SO₂ Emission Limitations.
- 82. <u>System-Wide Annual Tonnage Limitations for SO₂</u>. During each calendar year specified in the table below, all Units in the TVA System and any New CC/CT Unit(s) constructed pursuant to Paragraph 117, collectively, shall not emit SO₂ in excess of the following System-Wide Annual Tonnage Limitations:

Calendar Year	System-Wide Tonnage Limitation for SO ₂
2011	285,000
2012	285,000
2013	235,518
2014	228,107
2015	220,631
2016	175,626
2017	164,257
2018	121,699
2019, and each year thereafter	110,000

83. If TVA elects to Remove from Service any or all of Colbert Units 1-5 either pursuant to Paragraph 69 or Paragraph 85, then the System-Wide Annual Tonnage Limitations for SO₂ in each calendar year for which such Unit(s) is Removed from Service shall be adjusted as follows:

Calendar Year	Tons by Which System-Wide Annual Tonnage Limitation for SO ₂ Shall be Reduced If Unit is Removed From Service in a Calendar Year
Colbert Unit 1	700 tons
Colbert Unit 2	1,100 tons
Colbert Unit 3	1,000 tons
Colbert Unit 4	1,100 tons
Colbert Unit 5	2,600 tons

84. If TVA must shut down one or more of its nuclear units for more than one hundred and twenty (120) consecutive days within calendar year 2011 or within calendar year 2012 because of a forced outage or in response to a safety concern as required by the Nuclear Regulatory Commission, then the System-Wide Annual Tonnage Limitation for SO₂ for that calendar year shall be 295,000 tons rather than 285,000 tons as specified in the table in Paragraph 82. If TVA must shut down one or more of its nuclear units for more than one hundred and twenty (120) consecutive days within calendar year 2013 or within calendar year 2014 because of a forced outage or in response to a safety concern as required by the Nuclear Regulatory Commission, then the System-Wide Annual Tonnage Limitation for SO₂ for calendar year 2013 shall be 241,700 tons rather than 235,518 tons as specified in the table in Paragraph 82 and the System-Wide Annual Tonnage Limitation for SO₂ for calendar year 2014 shall be 234,000 tons rather than 228,107 tons as specified in the table in Paragraph 82. In order to put EPA, the States, and the Citizen Plaintiffs on notice of this potential event, TVA shall provide notice to EPA, the States, and the Citizen Plaintiffs pursuant to Section VIII (Notices), and include a summary of the circumstances causing the shut down and TVA's efforts to bring the unit back on line, commencing no later than thirty (30) days following the shutdown of a nuclear unit, and continuing every thirty (30) days thereafter until either (a) the unit comes back online or (b) the unit remains shut down for one hundred twenty (120) consecutive days, whichever is earlier. In this circumstance, TVA shall, to the extent practicable, increase utilization of any Units in the TVA System that are controlled with FGDs and/or SCRs and/or any New CC/CT Unit(s)

constructed pursuant to Paragraph 117 to replace the lost power generation from the nuclear unit before increasing utilization of uncontrolled TVA System Units.

2. SO₂ Control Requirements.

85. No later than the dates set forth in the table below, and continuing thereafter, TVA shall install and commence Continuous Operation of the pollution control technology at each Unit identified therein or, if indicated in the table, Retire or Repower each Unit identified therein, or, solely for Colbert Units 1-5 and two (2) Units at the John Sevier plant, Remove from Service as defined herein:

Plant	Unit	Control Requirement	Date
Allen	Unit 1	FGD or Retire December 31, 2018	
Allen	Unit 2	FGD or Retire	December 31, 2018
Allen	Unit 3	FGD or Retire December 31, 2018	
Bull Run	Unit 1	Wet FGD	Consent Decree Obligation Date
Colbert	Unit 1	Remove from Service, FGD, Repower to Renewable Biomass, or Retire	
Colbert	Unit 2	Remove from Service, FGD, Repower to Renewable Biomass, or Retire	June 30, 2016
Colbert	Unit 3	Remove from Service, FGD, Repower to Renewable Biomass, or Retire	June 30, 2016
Colbert	Unit 4	Remove from Service, FGD, Repower to Renewable Biomass, or Retire	
Colbert	Unit 5	Remove from Service, FGD or Retire December 31, 2015	
Cumberland	Unit 1	Wet FGD	Consent Decree Obligation Date

Plant	Unit	Control Requirement	Date
Cumberland	Unit 2	Wet FGD	Consent Decree Obligation Date
Gallatin	Unit 1	FGD, Repower to Renewable Biomass, or Retire	December 31, 2017
Gallatin	Unit 2	FGD, Repower to Renewable Biomass, or Retire	December 31, 2017
Gallatin	Unit 3	FGD, Repower to Renewable Biomass, or Retire	December 31, 2017
Gallatin	Unit 4	FGD, Repower to Renewable Biomass, or Retire	December 31, 2017
John Sevier	2 Units	Retire	December 31, 2012
John Sevier	2 other Units	Remove from Service	December 31, 2012
		FGD, Repower to Renewable Biomass, or Retire	December 31, 2015
Johnsonville	Units	Retire	6 Units by December 31, 2015
	1 - 10		4 additional Units by December 31, 2017
Kingston	Unit 1	Wet FGD	Consent Decree Obligation Date
Kingston	Unit 2	Wet FGD	Consent Decree Obligation Date
Kingston	Unit 3	Wet FGD	Consent Decree Obligation Date
Kingston	Unit 4	Wet FGD	Consent Decree Obligation Date
Kingston	Unit 5	Wet FGD	Consent Decree Obligation Date
Kingston	Unit 6	Wet FGD	Consent Decree Obligation Date
Kingston	Unit 7	Wet FGD	Consent Decree Obligation Date
Kingston	Unit 8	Wet FGD	Consent Decree Obligation Date
Kingston	Unit 9	Wet FGD Consent Decree Obligation Date	
Paradise	Unit 1	FGD Upgrade to 93% Removal Efficiency	December 31, 2012

Plant	Unit	Control Requirement	Date
Paradise	Unit 2	FGD Upgrade to 93% Removal Efficiency	December 31, 2012
Paradise	Unit 3	Wet FGD	Consent Decree Obligation Date
Shawnee	Unit 1	FGD, Repower to Renewable Biomass, or Retire	December 31, 2017
Shawnee	Unit 4	FGD, Repower to Renewable Biomass, or Retire	December 31, 2017
Widows	Units	Retire	2 Units by July 31, 2013
Creek	1-6		2 additional Units by July 31, 2014
			2 additional Units by July 31, 2015
Widows	Unit 7	Wet FGD	Consent Decree Obligation
Creek			Date
Widows	Unit 8	Wet FGD	Consent Decree Obligation
Creek			Date

Notwithstanding any requirement specified in the preceding table to Continuously Operate a Wet FGD at Kingston Units 1-9, TVA shall not be required to Continuously Operate such Wet FGD(s) until either: (a) TDEC authorizes disposal of gypsum in the Class II landfill (IDL 73-0211) which, as of the Date of Lodging of this Consent Decree, is prohibited pursuant to TDEC's Order dated December 17, 2010 in Case No. SWM10-0010 or (b) September 20, 2011, whichever occurs sooner. During the period when this exemption is in effect, TVA shall (a) burn coal at Kingston that achieves a 30-day rolling average emission rate for SO₂ of no greater than 1.1 lb/mmBTU and (b) operate Kingston only after Bull Run is dispatched first. This exemption shall not relieve TVA of its obligation to comply with the 2011 SO₂ System-Wide Annual Tonnage Limitation and shall not relieve TVA of any other control requirements relating to Kingston, except as provided in Paragraph 100.

- 86. Notwithstanding Paragraph 85, TVA's failure to (a) complete installation and commence Continuous Operation of a pollution control technology by the date specified in the table in Paragraph 85 or (b) Repower to Renewable Biomass by the date specified in the table in Paragraph 85, shall not be a violation of this Consent Decree if such Unit:
- (i) ceases to operate and emit any pollutants whatsoever at least sixty (60) days before the date specified in the table in Paragraph 85, and
- (ii) the installation is completed and the Unit commences Continuous

 Operation of the pollution control technology specified in the table in Paragraph 85 or as a

 Repowered Unit no later than ninety (90) days after the date specified in the table in Paragraph

 85. If TVA fails to commence Continuous Operation of the pollution control technology or the

 Repowered Unit ninety (90) days after such date, then TVA shall be subject to stipulated

 penalties for the entire period commencing on the date specified in the Table in Paragraph 85.
- 87. Upon the Consent Decree Obligation Date, and continuing thereafter, emissions of SO₂ from Shawnee Units 1-10 shall not exceed 1.2 lb/mmBTU. Compliance with this limitation shall be demonstrated using the procedures specified in the Clean Air Act operating permit for the Shawnee facility.
- 88. For TVA System Units with two or more methods specified in the Control Requirement column in the table in Paragraph 85, above, TVA shall provide notice to EPA, the States, and the Citizen Plaintiffs pursuant to Section VIII (Notices) of its election as to which of the Control Requirement methods it will employ at such Unit by no later than three (3) years prior to the date specified in the Table for that Unit. For the Units at the John Sevier plant, TVA shall provide notice to EPA, the States, and the Citizen Plaintiffs pursuant to Section VIII

(Notices) of this Consent Decree of its election as to which two (2) Units it will Retire and which two (2) Units it will at least initially Remove from Service, by no later than June 30, 2012. For any TVA System Unit that TVA timely elects to control with FGD or Repower to Renewable Biomass, TVA may change its election to Retire at any time prior to the date specified in the table in Paragraph 85. TVA shall provide notice to EPA, the States, and the Citizen Plaintiffs pursuant to Section VIII (Notices) of its decision to Retire the Unit, with an explanation for its decision to change the election, by no later than ten (10) business days following its decision to change its election from FGD or Repower to Renewable Biomass to Retire.

- 89. Solely for the Units at the Colbert plant, if TVA elects the Remove from Service option, it shall provide notice to EPA, the States, and the Citizen Plaintiffs pursuant to Section VIII (Notices) at the time such Units are required to be Removed from Service as to which method specified in the Control Requirement column in the table in Paragraph 85 it will employ at such Unit.
 - 3. Use and Surrender of SO₂ Allowances.
- 90. TVA shall not use SO₂ Allowances to comply with any requirement of this Consent Decree, including by claiming compliance with any emission limitation required by this Consent Decree by using, tendering, or otherwise applying SO₂ Allowances to offset any excess emissions.
- 91. Beginning with calendar year 2011, and continuing each calendar year thereafter, TVA shall surrender all SO₂ Allowances allocated to the TVA System for that calendar year that TVA does not need in order to meet its own federal and/or state Clean Air Act regulatory requirements for the TVA System Units for that calendar year. However, SO₂ Allowances

allocated to the TVA System may be used by TVA to meet its own federal and/or state Clean Air Act regulatory requirements for the TVA System Units.

- 92. Nothing in this Consent Decree shall prevent TVA from purchasing or otherwise obtaining SO₂ Allowances from another source for purposes of complying with federal and/or state Clean Air Act regulatory requirements (<u>i.e.</u>, emissions trading or marketable permit programs) to the extent otherwise allowed by law.
- 93. The requirements in this Consent Decree pertaining to TVA's use and surrender of SO₂ Allowances are permanent injunctions not subject to any termination provision of this Consent Decree.
 - 4. Super-Compliance Allowances.
- 94. Notwithstanding Paragraph 91, in each calendar year beginning in 2011, and continuing thereafter, TVA may sell, bank, use, trade, or transfer any SO₂ Allowances made available in that calendar year as a result of maintaining actual SO₂ emissions from the combined total of (a) the TVA System and (b) any New CC/CT Unit(s) constructed pursuant to Paragraph 117 below the System-Wide Annual Tonnage Limitations for SO₂ for such calendar year ("Super-Compliance Allowances"); provided, however, that reductions in SO₂ emissions that TVA utilizes as provided in Paragraph 117 to support the permitting of a New CC/CT Unit(s) shall not be available to generate Super-Compliance Allowances within the meaning of this Paragraph in the calendar year in which TVA utilizes such emission reductions and all calendar years thereafter. TVA shall timely report the generation of all Super-Compliance SO₂

shall specifically identify any Super-Compliance SO₂ Allowances that TVA generates from Retiring a TVA System Unit and that TVA did not utilize for purposes of Paragraph 117.

- 5. Method for Surrender of SO₂ Allowances.
- 95. TVA shall surrender all SO₂ Allowances required to be surrendered pursuant to Paragraph 91 by April 30 of the immediately following year.
- 96. For all SO₂ Allowances required to be surrendered, TVA shall first submit an SO₂ Allowance transfer request form to EPA's Office of Air and Radiation's Clean Air Markets

 Division directing the transfer of such SO₂ Allowances to the EPA Enforcement Surrender

 Account or to any other EPA account that EPA may direct in writing. As part of submitting these transfer requests, TVA shall irrevocably authorize the transfer of these SO₂ Allowances and identify -- by name of account and any applicable serial or other identification numbers or station names -- the source and location of the SO₂ Allowances being surrendered.
 - 6. SO₂ Monitoring Provisions.
- 97. TVA shall use CEMS in accordance with 40 C.F.R. Part 75 to monitor its emissions of SO₂ from the TVA System Units and any New CC/CT Unit(s) for purposes of demonstrating compliance with the applicable System-Wide Annual Tonnage Limitations specified in Paragraph 82 of this Consent Decree.

D. PM EMISSION REDUCTIONS AND CONTROLS

- 1. Optimization of Existing PM Control Devices.
- 98. Beginning sixty (60) days after the Consent Decree Obligation Date, and continuing thereafter, TVA shall Continuously Operate each PM Control Device on each Unit in the TVA System. TVA shall, at a minimum, to the extent reasonably practicable and consistent

with manufacturers' specifications, the operational design of the Unit, and good engineering practices (a) fully energize each section of the ESP for each Unit, and where applicable, operate each compartment of the Baghouse (except for a Baghouse compartment that, as part of the original design of the Baghouse when it was first constructed, is a spare compartment); (b) operate automatic control systems on each ESP to maximize PM collection efficiency; and (c) maintain power levels delivered to the ESPs, and where applicable, replace bags as needed on each Baghouse as needed to maximize collection efficiency.

99. TVA shall complete and submit to EPA for review and approval in accordance with Section III.J (Review and Approval of Submittals) of the Compliance Agreement, with copies of such submittal to the States and the Citizen Plaintiffs pursuant to Section VIII (Notices) of this Consent Decree, a PM emission control optimization study for each TVA System Unit except for (a) Colbert Unit 5, Paradise Units 1 and 2, and Widows Creek Unit 8, (b) those Units that TVA is required to Retire pursuant to Paragraphs 69 and 85, (c) those Units that TVA elects to Retire pursuant to Paragraphs 69 and 85, and (d) those Units at which TVA has installed and commenced Continuous Operation of a new PM Control Device. The PM emission control optimization study shall, for the range of fuels used by the Unit, recommend the best available maintenance, repair, and operating practices to optimize the PM Control Device availability and performance in accordance with manufacturers' specifications, the operational design of the Unit, and good engineering practices. TVA shall retain a qualified contractor to assist in the performance and completion of each study. TVA shall perform each study and implement the EPA-approved recommendations in accordance with the following schedule:

Date	Studies Completed, New PM Control Devices Identified To Be Installed, Or Units Elected To Be Retired Pursuant To Paragraphs 69 And 85		Recommendations I New PM Control Do Or Units Retired Pu Election As Require 69 And 85	evices Installed, ursuant To
	Individual Year Cumulative		Individual Year	Cumulative
12/31/2011	6	6	0	0
12/31/2012	8	14	1	1
12/31/2013	6	20	4	5
12/31/2014	6	26	10	15
12/31/2015	3	29	10	25
12/31/2016	4	33	8	33
12/31/2017	4	37	4	37
12/31/2018	0	37	0	37
12/31/2019	0	37	0	37

TVA shall submit each such PM emission control optimization study to EPA for review and approval (in consultation with the States and Citizen Plaintiffs) pursuant to Section III.J (Review and Approval of Submittals) at least nine (9) months before the date specified in the table in this Paragraph for TVA to implement the recommendations. TVA shall maintain each PM Control Device in accordance with the approved PM emission control optimization study or other alternative actions as approved by EPA (in consultation with the States and the Citizen Plaintiffs).

2. PM Emission Rates.

100. No later than the dates set forth in the table below, and continuing thereafter, TVA shall Continuously Operate the PM Control Devices at each Unit identified therein so that each Unit or Units served by a common stack achieve and maintain a PM Emission Rate of no greater than 0.030 lb/mmBTU as determined by stack testing:

Plant	Unit	Date
Allen	Units 1-3	December 31, 2018
Bull Run	Unit 1	Consent Decree Obligation Date
Colbert	Unit 5	December 31, 2015
Gallatin	Units 1-4	December 31, 2017
Kingston	Units 1-9	Consent Decree Obligation Date, subject to the exemption provided in Paragraph 85 for the Continuous Operation of the Wet FGDs

3. PM Emissions Monitoring.

a. PM Stack Tests.

- 101. Beginning in calendar year 2011, and continuing in each calendar year thereafter, TVA shall conduct a PM stack test for filterable PM at each TVA System Unit or Units served by a common stack that combust fossil fuels at any time in that calendar year.
- 102. Beginning in calendar year 2011, and continuing for three (3) consecutive calendar years thereafter, TVA shall conduct a PM stack test for condensable PM at each TVA System Unit or Units served by a common stack that combust fossil fuels at any time in that calendar year.
- 103. The annual stack test requirement imposed on each TVA System Unit by this Section may be satisfied by stack tests conducted by TVA as required by its permits from Alabama, Kentucky, and Tennessee for any year that such stack tests are required under the permits, provided that reference methods and procedures for performing such stack tests are consistent with the requirements specified in this Consent Decree.

- 104. Filterable PM. The reference methods and procedures for performing PM stack tests for filterable PM and for determining compliance with the PM Emission Rate shall be the applicable reference methods and procedures specified in the relevant Clean Air Act permit for the plant. TVA shall calculate the PM Emission Rate from the stack test results in accordance with 40 C.F.R. § 60.8(f). The results of each PM stack test shall be submitted to EPA, the States, and the Citizen Plaintiffs pursuant to Section VIII (Notices) of this Consent Decree within forty-five (45) days of completion of each test.
- 105. <u>Condensable PM.</u> The reference methods and procedures for performing PM stack tests to monitor condensable PM shall be those specified in 40 C.F.R. Part 51, Appendix M, Method 202. TVA shall calculate the Emission Rate for condensable PM from the stack test results in accordance with 40 C.F.R. § 60.8(f). The results of each PM stack test shall be submitted to EPA, the States, and the Citizen Plaintiffs pursuant to Section VIII (Notices) of this Consent Decree within forty-five (45) days of completion of each test.
- 106. Although stack testing shall be used to determine compliance with the PM Emission Rate established by this Consent Decree, data from PM CEMS shall be used, at a minimum, to monitor progress in reducing PM emissions.

b. PM CEMS.

107. TVA shall install, correlate, maintain, and operate PM CEMS as specified below. Each PM CEMS shall comprise a continuous particle mass monitor measuring PM concentration, directly or indirectly, on an hourly average basis and a diluent monitor used to convert the concentration to units of lb/mmBTU. The PM CEMS installed at each stack, or, at Kingston, installed at each flue within the stack, must be appropriate for the anticipated stack

conditions. TVA shall maintain, in an electronic database, the hourly average emission values produced by each PM CEMS in lb/mmBTU. Except for periods of monitor malfunction, maintenance, or repair, TVA shall continuously operate the PM CEMS at all times when at least one Unit it serves is operating.

- shall submit to EPA for review and approval pursuant to Section III.J (Review and Approval of Submittals) of the Compliance Agreement, with copies of such submittal to the States and the Citizen Plaintiffs pursuant to Section VIII (Notices) of this Consent Decree, a plan for the installation and correlation of each PM CEMS and a proposed Quality Assurance/Quality Control ("QA/QC") protocol that shall be followed in correlating such PM CEMS. At TVA's option, and to the extent practicable, TVA may submit one plan and one QA/QC protocol that shall take into account Unit-specific measures, as needed, for the PM CEMS required by Paragraphs 107 and 109. In developing both the plan for installation and correlation of the PM CEMS and the QA/QC protocol, TVA shall use the criteria set forth in 40 C.F.R. Part 60, Appendix B, Performance Specification 11, and Appendix F, Procedure 2. Following approval by EPA (in consultation with the States and the Citizen Plaintiffs) of the plan(s) and protocol(s), TVA shall thereafter operate each PM CEMS in accordance with the approved plan(s) and QA/QC protocol(s).
- 109. No later than twelve (12) months after the date that EPA approves the plan for installation and correlation of the PM CEMS and the QA/QC protocol, TVA shall install, correlate, maintain and operate six (6) PM CEMS on stacks at the following Units: Paradise Unit

- 3, Bull Run Unit 1, Colbert Unit 5, Kingston Units 1-9 (one (1) PM CEMS on each flue), and Shawnee Units 1-5.
- 110. In the event that TVA elects to Retire a Unit scheduled to receive a PM CEMS or, with respect to Colbert Unit 5, elects the Remove from Service option, TVA shall locate a PM CEMS (either the same PM CEMS or a new PM CEMS) at an alternate Unit in the TVA System. TVA shall provide notice to EPA, the States, and the Citizen Plaintiffs pursuant to Section VIII (Notices) of the alternate Unit by no later than three (3) years prior to the date that the Unit specified in Paragraph 109 is Retired or Removed from Service. TVA shall comply with all the requirements of this Section for such PM CEMS. The deadline identified in Paragraph 108 shall be adjusted to twelve (12) months after TVA's notice pursuant to this Paragraph.
- 111. No later than ninety (90) days after TVA begins operation of the PM CEMS, TVA shall conduct tests of each PM CEMS to demonstrate compliance with the PM CEMS installation and correlation plan(s) and QA/QC protocol(s). Within forty-five (45) days of each such test, TVA shall submit the results to EPA, the States, and the Citizen Plaintiffs pursuant to Section VIII (Notices) of this Consent Decree.
- 112. When TVA submits the applications for amendments to its Title V Permits pursuant to Paragraph 154, those applications shall include a Compliance Assurance Monitoring ("CAM") plan, under 40 C.F.R. Part 64, for the PM Emission Rate specified in Paragraph 100. The PM CEMS required by Paragraphs 107 and 109 may be used in that CAM plan for Bull Run Unit 1, Colbert Unit 5, and Kingston Units 1-9.

c. PM Reporting.

- Decree for TVA to achieve and maintain a PM Emission Rate at any TVA System Unit, TVA shall conduct a stack performance test for PM that demonstrates compliance with the Emission Rate required by this Consent Decree. Within forty-five (45) days of the performance test, TVA shall submit the results of the performance test to EPA, the States, and the Citizen Plaintiffs pursuant to Section VIII (Notices) of this Consent Decree. TVA may use the annual stack test requirement established in Paragraph 101, above, to satisfy its obligation to conduct a performance test as required by this Paragraph.
- 114. Following the installation of each PM CEMS, TVA shall begin and continue to report, pursuant to Section III.I (Periodic Reporting), the data recorded by the PM CEMS, expressed in lb/mmBTU on a three-hour (3-hour) rolling average basis and a twenty-four-hour (24-hour) rolling average basis in electronic format to EPA, the States, and the Citizen Plaintiffs including identification of each 3-hour average and 24-hour average above the applicable PM Emission Rate for Bull Run Unit 1, Colbert Unit 5, and Kingston Units 1-9, as required by Paragraph 100.

E. PROHIBITION ON NETTING OR OFFSETS FROM REQUIRED CONTROLS

115. Emission reductions that result from actions to be taken by TVA after the Consent Decree Obligation Date to comply with the requirements of this Consent Decree shall not be considered as creditable contemporaneous emission decreases for the purpose of netting or offset under the Act's PSD and Nonattainment NSR programs (including any applicable SIP provisions).

- 116. The limitations on the generation and use of netting credits and offsets set forth in the previous Paragraph do not apply to emission reductions achieved at a particular TVA System Unit that are greater than those required under this Consent Decree for that particular TVA System Unit. For purposes of this Paragraph, and except as otherwise provided in Paragraph 50, emission reductions achieved at a particular TVA System Unit are greater than those required under this Consent Decree only if they result from the actions described in Subparagraphs 116.a and/or 116.b, below:
- a. controlling Shawnee Units 2, 3, 5, 6, 7, 8 and/or 9 to reduce emissions of NO_x and/or SO_2 beyond the requirements of Paragraphs 71 and 87 of this Consent Decree through a federally-enforceable emission limitation, provided that TVA is not otherwise required by the Act or the applicable SIP to control such Units to reduce emissions of NO_x and/or SO_2 , or
- b. for emission reductions of NO_x, except for Shawnee Unit 10, Retiring a TVA

 System Unit that does not have the Retire option in the Control Requirement column in the Table in Paragraph 69 except to the extent that TVA Retires such Unit as Additional MW pursuant to Paragraph 119.b, and provided that TVA is not otherwise required by the Act or the applicable SIP to Retire such Unit; and for emission reductions of SO₂, except for Shawnee Unit 10, Retiring a TVA System Unit that does not have the Retire option in the Control Requirement column in the Table in Paragraph 85 except to the extent that TVA Retires such Unit as Additional MW pursuant to Paragraph 119.b, and provided that TVA is not otherwise required by the Act or the applicable SIP to Retire such Unit.
- 117. Notwithstanding Paragraph 115, TVA may utilize emission reductions of NO_x, SO₂, VOCs, and PM resulting solely from Retiring up to two thousand seven hundred (2,700)

MW from the TVA System, as creditable contemporaneous emission decreases for the purpose of obtaining netting credits for these four pollutants to construct and operate no more than a total of four thousand (4,000) MW of new combined cycle ("CC") combustion turbine electric generating units ("New CC Units") and simple cycle ("CT") turbine electric generating units ("New CT Units") (collectively referred to herein as "New CC/CT Units") to be located at the stationary source where a TVA System Unit is Retired, subject to the limitations described in this Paragraph and Subparagraphs. Of the total 4,000 MW specified herein, TVA shall not construct more than a total of two thousand (2,000) MW of CT capacity.

- a. The emission reductions of NO_x, SO₂, VOC, and PM resulting from Retiring a TVA System Unit that TVA intends to utilize for netting purposes to avoid major NSR for such New CC/CT Unit must be contemporaneous and otherwise creditable within the meaning of the Act and the applicable SIP, and TVA must comply with, and is subject to, all requirements and criteria for creating contemporaneous creditable decreases as set forth in 40 C.F.R. § 52.21(b) and the applicable SIP, subject to the limitations of this Paragraph 117.
- b. TVA must apply for, and obtain, minor NSR permits for the construction and operation of such New CC/CT Unit(s) from the relevant permitting authority. Such minor NSR permit must include federally-enforceable emission limitations that reflect either Best Available Control Technology ("BACT") or Lowest Achievable Emission Rate ("LAER"), as appropriate, depending upon the attainment classification for the relevant regulated pollutants for which TVA is utilizing emission reductions as provided in this Paragraph to net out of major new source review and that will be emitted from such New CC/CT Unit(s) (including NO_x, SO₂, and PM regulated as primary criteria pollutants and NO_x, SO₂, and VOCs regulated as precursor

pollutants to the formation of the criteria pollutants PM_{2.5} and Ozone) in the area where such New CC/CT Units will be located. The relevant permitting authority where the New CC/CT Units will be constructed shall determine emission limitations for NO_x, SO₂, VOCs, PM, PM₁₀ and PM_{2.5} that reflect BACT or LAER, as appropriate, consistent with Sections 165(a)(4), 169(3), 171(3), and 173(a)(2) of the Act, 42 U.S.C. §§ 7475(a)(4), 7479(3), 7501(3), and 7503(a)(3); 40 C.F.R. §§ 52.21(b)(12) and 51.165(a)(1)(xiii); the applicable SIP; and relevant EPA guidance and/or interpretations pertaining to determining BACT and LAER, including EPA's "New Source Review Workshop Manual – Prevention of Significant Deterioration and Nonattainment Area Permitting" (Draft Oct. 1990). In no event shall the emission limitations determined by the relevant permitting authority for NO_x, SO₂, VOC, and PM_{2.5} (filterable) be any less stringent than the emission limitations set forth in Appendix B to this Consent Decree. The emission limitations set forth in Appendix B serve solely as the minimum stringency for emission limitations that will be determined by the relevant permitting authority for such New CC/CT Units and shall not be presumed to be BACT or LAER. Although the permitting authority as part of the permitting action described in this Paragraph shall not determine BACT or LAER to be less stringent than the emission limitations set forth in Appendix B, nothing in this Consent Decree (including Appendix B) shall prevent the permitting authority from establishing more stringent emission limitations than those set forth in Appendix B. For purposes of the permitting action described in this Paragraph, TVA shall not assert that this Consent Decree (including Appendix B) supports imposing a BACT or LAER emission limitation that is no more stringent than the emission limitations set forth in Appendix B.

- c. For the minor NSR permitting action specified in Subparagraph 117.b, above, the relevant permitting authority shall comply with the public participation requirements in its SIP for major NSR permitting actions, including: Ala. Admin. Code r. 335-3-14-.01(7) for permitting actions in Alabama, 401 Ky. Admin. Regs. 52:100 for permitting actions in Kentucky, and Tenn. Comp. R. & Regs.1200-3-9-.01(4)(1) for permitting actions in Tennessee. TVA shall provide notice and a copy of its permit application to EPA, the States, and the Citizen Plaintiffs pursuant to Section VIII (Notices) concurrent with its permit application submission to the relevant permitting authority.
- d. All emissions of NO_x and SO_2 from any New CC/CT Unit(s) where TVA has utilized netting credits in order to construct such New CC/CT Unit as provided in this Paragraph, shall be treated as emissions from a TVA System Unit solely for purposes of the System-Wide Annual Tonnage Limitations for NO_x and SO_2 and such emissions of NO_x and SO_2 from the New CC/CT Unit(s) are therefore subject to, and shall be included under, the System-Wide Annual Tonnage Limitations for NO_x and SO_2 for the relevant calendar year(s) as specified in the tables in Paragraphs 67 and 82.
- e. Nothing in this Paragraph affects the Unit-specific schedule specified in the tables in Paragraphs 69 and 85 for each TVA System Unit.
- 118. For every emission reduction of NO_x and SO₂ that TVA utilizes as provided in Paragraph 117 to construct a New CC/CT Unit(s), such reduction shall not be available to generate Super-Compliance Allowances within the meaning of Paragraphs 78 and 94 in the calendar year in which TVA utilizes such emission reductions and all calendar years thereafter. In the next periodic progress report required pursuant to Section III.I (Periodic Reporting), TVA

shall report the amount of emission reductions of NO_x and the amount of emission reductions of SO₂ resulting from Retiring a TVA System Unit that TVA utilized as netting credits as provided in Paragraph 117 to construct a New CC/CT Unit(s).

- 119. Notwithstanding Paragraphs 115, TVA may utilize emission reductions of Greenhouse Gases resulting solely from Retiring a TVA System Unit as creditable contemporaneous emission decreases for the purpose of obtaining netting credits for Greenhouse Gases to construct and operate no more than a total of four thousand (4,000) MW of New CC Units to be located at the stationary source where a TVA System Unit is Retired, subject to the limitations described in this Paragraph and Subparagraphs 119.a through 119.c, below.
- a. The emission reductions of Greenhouse Gases resulting from Retiring a TVA System Unit that TVA intends to utilize for netting purposes to avoid major NSR for such New CC Unit must be contemporaneous and otherwise creditable within the meaning of the Clean Air Act and the applicable SIP, and TVA must comply with, and is subject to, all requirements and criteria for creating contemporaneous creditable decreases as set forth in 40 C.F.R. § 52.21(b) and the applicable SIP, subject to the limitations of this Paragraph.
- b. For every one (1) MW of New CC Unit capacity that TVA proposes to construct and operate by utilizing Greenhouse Gas emission reductions to avoid major NSR for such New CC Unit, TVA shall Retire at least one (1) MW from the TVA System that is above and beyond the 2,728.8 MW that TVA is required to Retire pursuant to Paragraphs 69 and 85 (referred to herein as "Additional MW"). TVA shall Retire such Additional MW from the TVA System either within one (1) year from the date the New CC Unit commences operation or by no later than the date set forth in the table in Paragraphs 69 and 85 for the TVA System Unit that TVA is

Retiring pursuant to this Paragraph, whichever is sooner. Emission reductions resulting from Retiring such Additional MW are subject to Paragraph 115.

- c. Greenhouse Gas emission reductions resulting from Retiring a TVA System Unit may only be available to TVA for netting purposes to avoid major NSR permitting requirements for Greenhouse Gases for the construction and operation of a New CC Unit if TVA satisfies the following requirements: (i) TVA must apply for a minor NSR permit described in Paragraph 117 for the construction and operation of such New CC Unit by no later than June 30, 2012, (ii) TVA must commence construction of the New CC Unit that is the subject of such minor NSR permit application by no later than January 1, 2015, and (iii) by no later than thirty (30) days after the date TVA commences construction of such New CC Unit, TVA must provide notice pursuant to Paragraphs 72 and 88 as to which TVA System Unit(s) TVA will Retire in order for TVA to Retire the requisite Additional MW.
- 120. Nothing in this Consent Decree shall prevent anyone, including EPA, the States, and the Citizen Plaintiffs from submitting comments during the public comment period specified in Subparagraph 117.c regarding the emission limitations developed by the permitting authority as required by Subparagraph 117.b, including comments regarding the stringency of the emission limitations prescribed in Appendix B, or taking any other lawfully permissible action to challenge any permitting authority's determination pursuant to Subparagraph 117.b or the minor NSR permitting action for such New CC/CT Units.
- 121. Nothing in this Consent Decree is intended to preclude the emission reductions generated under this Consent Decree from being considered by EPA or Alabama, Kentucky, or Tennessee for the purpose of attainment demonstrations submitted pursuant to § 110 of the Act,

42 U.S.C. § 7410, or in determining impacts on NAAQS, PSD increment, or air quality related values, including visibility, in a Class I area.

F. ENVIRONMENTAL MITIGATION PROJECTS

- 122. TVA shall fund the Environmental Mitigation Projects ("Projects") described in this Section. These Projects will result in a further reduction of NO_x, SO₂, and PM emissions, and additionally will have the collateral benefit of reducing Greenhouse Gases. TVA shall make payments to the States as further described below in an amount that is no less than \$60 million to fund Projects described below. As specified in Section V.F of the Compliance Agreement (Environmental Mitigation Projects), TVA shall spend no less than \$290 million to implement the projects described in Appendix C to the Compliance Agreement.
- 123. As set forth below, the States, by and through their respective Attorneys General or General Counsel, may each submit to TVA Projects within the categories identified for funding. The funds for these Projects will be allocated amongst the States as follows: Tennessee \$26.4 million, Kentucky \$11.2 million, North Carolina \$11.2 million and Alabama \$11.2 million. These amounts are referred to below as each State's "allocation."
- 124. Beginning in 2011, TVA shall disburse to each State the amounts requested by each State, provided that, in any year, TVA shall disburse no more than one-fifth (1/5) of the State's allocation plus any amount by which the State received less than one-fifth (1/5) of its allocation in any prior years until all timely requests have been paid in full by TVA. If by January 31, 2017 any funds remain for which a State has not made a request, TVA shall promptly, but no later than February 29, 2017, notify the States of the remaining amount and the States shall have until March 31, 2017 to jointly provide TVA an agreed-upon method for

equitably reallocating the remaining funds to be spent on Projects identified in this Section by no later than December 31, 2017. In the event the States are unable to agree on a reallocation method, the remaining funds shall by reallocated using the same allocation percentages identified in the preceding Paragraph. TVA shall be obligated to disburse only those funds that are requested by December 31, 2017 in accordance with this Subsection. For funding requests by States commensurate with this Subsection, TVA shall pay funds as requested within thirty (30) days after being notified in writing by the State of its request.

- 125. The States shall use their best efforts to identify Projects that are located in TVA's power service area or the Tennessee River watershed and shall give a preference to such Projects over Projects outside these areas. However, any Project funding requested by a State that is within the categories identified in Paragraph 128, shall be funded by TVA in accordance with this Paragraph regardless of where in the State the funds will be utilized. TVA shall not have approval rights over the Projects.
- 126. As an alternative to the method set forth in Paragraph 124, in any year any two or more States may agree together that any State may request any amount individually up to the remainder of its allocation, provided that the total funding requested by the agreeing States for that year does not exceed the maximum TVA would otherwise be required to disburse under Paragraph 124 to the agreeing States for that year.
- 127. If TVA wishes to use signage, written materials, publications or events to recognize its funding of these Projects, TVA shall clearly state and identify that the funding is being provided pursuant to this Consent Decree.

- 128. <u>Categories of Projects</u>. The States agree to use money funded by TVA to implement Projects either from the following categories or for the Projects identified in Appendix C to the Compliance Agreement:
- a. Purchase and installation of photo-voltaic cells and/or solar thermal systems on buildings;
 - b. Implementation of projects that reduce idling time from motor vehicles;
- c. Projects to conserve energy in new and existing buildings, mobile homes, and modular buildings, including efficient lighting, appliance efficiency improvement projects, weatherization projects, and projects that meet the ENERGY STAR and Home Performance with ENERGY STAR Building qualifications, the Leadership in Energy and Environmental Design ("LEED") Green Building Rating System or an equivalent energy efficiency program approved by the State, or other innovative building efficiency projects approved by the State and/or appropriate review committee;
 - d. Construction of wind or solar renewable energy production facilities;
- e. Installation of cogeneration units (wherein a single fuel source simultaneously produces electricity and useful heat) at industrial manufacturing plants or institutions such as universities, hospitals, prisons, and military bases;
- f. Projects that assist smart regional planning to reduce vehicle miles traveled and improve regional air quality;
 - g. Installation of geothermal equipment;
- h. Funding of agricultural and forestry sector use and production of renewable energy and carbon sequestration including but not limited to:

- anaerobic digestion of poultry, swine, and dairy manure to produce
 methane as a fuel source to displace conventional fuel use,
- installation of wind and solar power projects at farms to power irrigation and provide heat and/or hot water for farm operations,
- production of biodiesel from high oil producing crops grown and converted on-farm for on-farm use,
- funding the procurement of land and necessary equipment to
 establish urban farms and support the education and institution of
 urban farming practices in these communities,
- purchasing land buffering national or state forests, parks, and refuges that link important ecological systems in the region to support carbon sequestration efforts,
- use of agricultural or forestry waste products in support of biofuel production,
- development of co-products and by-products of biofuel production
 from agricultural or forestry resources, and
- other innovative agricultural or forestry projects, including education and training, that meet environmental improvement standards and are approved by the State and/or review committee;
- i. Creation of a sustainable revolving loan program or other financing mechanism for homeowners to purchase and install energy efficiency and/or conservation measures with a two (2) to ten (10) year payback period where the repayment occurs over the

defined payback period;

- j. Promotion of the use of landfill gas to convert methane to electricity and/or useful heat;
- k. Establishment and/or promotion of a tourist shuttle service for key tourist routes in and around the Great Smoky Mountain National Park where the shuttles are powered by electricity, fuel cell, or natural gas and/or funding of the purchase of vehicles and/or operation and maintenance of the equipment;
- l. Sponsoring a wood and/or coal burning appliance changeout and retrofit campaign that replaces, retrofits, and/or upgrades inefficient, higher polluting wood/coal burning appliances (e.g., non-EPA certified wood stoves, old technology outdoor wood-fired hydronic heaters) with Energy Star qualified heat pumps, EPA Phase II qualified hydronic-heaters, EPA certified wood stoves and/or cleaner, more energy-efficient wood pellet burning appliances;
- m. Implementation of projects to improve energy efficiency or renewable energy projects at water treatment and waste water treatment plants; and
- n. Development, manufacture, and commercialization of innovative energy efficiency and renewable energy equipment and biofuel production.

G. CIVIL PENALTY

- 129. TVA shall pay a total of \$10,000,000 in civil penalties as further described in this Section.
- 130. Pursuant to, and as specified in, Paragraph 91 of the Consent Agreement and Final Order in In re Tennessee Valley Auth., Docket No. CAA-04-2010-1528(b), TVA shall pay the sum of \$8,000,000 in civil penalties to EPA.

Within thirty (30) days after the Date of Entry of this Consent Decree, TVA shall 131. pay a total of \$2,000,000 in civil penalties to Alabama, Kentucky, and Tennessee. TVA shall pay a civil penalty to Alabama in the amount of \$500,000. Payment shall be made by check made out to the Alabama Department of Environmental Management and shall be mailed to: Office of General Counsel, Alabama Department of Environmental Management, PO Box 301463, Montgomery, Alabama, 36130-1463. TVA shall pay a civil penalty to Kentucky in the amount of \$500,000. Payment shall be made by check made out to the Kentucky State Treasurer and shall be mailed to: Jeff Cummins, Acting Director, Division of Enforcement, 300 Fair Oaks Lane, Frankfort, Kentucky, 40601. TVA shall pay a civil penalty to Tennessee in the amount of \$1,000,000. Payment shall be made by check made out to Treasurer, State of Tennessee and shall be mailed to: Tennessee Department of Environment & Conservation, Division of Fiscal Services – Consolidated Fees Section, 14th Floor L&C Tower, 401 Church Street, Nashville, Tennessee 37243 and shall reference this Consent Decree. At the time of payment, TVA shall also provide notice of its payment to EPA, the States, and Citizen Plaintiffs pursuant to Section VIII (Notices) of this Consent Decree, referencing the civil action case name and case number.

H. RESOLUTION OF CLAIMS AGAINST TVA

132. Except as expressly provided in Paragraphs 134-135 below, the States and the Citizen Plaintiffs agree that this Consent Decree resolves all civil claims arising from any modifications commenced at any TVA System Unit that could have been alleged against TVA prior to the Date of Lodging of this Consent Decree for violations of (a) Sections 165 and 173 of Parts C and D of Subchapter I of the Act, 42 U.S.C. §§ 7475 and 7503, and the implementing PSD and Nonattainment NSR provisions of the relevant SIPs, (b) Section 111 of the Act, 42

- U.S.C. §§ 7411, and 40 C.F.R. §§ 60.14 and 60.15, (c) Sections 502(a) and 504(a) of the Act, 42 U.S.C. §§ 7661a(a) and 7661c(a), but only to the extent that such claims are based on TVA's failure to obtain an operating permit that reflects applicable requirements imposed under the PSD and Nonattainment NSR provisions of Subchapter I or Section 111 of the Act, and (d) the federally approved and enforceable minor NSR programs of Alabama, Kentucky, and Tennessee.
- 133. The States and Citizen Plaintiffs expressly do not join in giving TVA the covenant provided by EPA through Paragraph 139 of the Compliance Agreement, and reserve their rights to bring any actions against TVA for any claims arising after the Date of Lodging of this Consent Decree.
- 134. Notwithstanding Paragraph 133, the States and the Citizen Plaintiffs release TVA from any civil claim that may arise under the PSD and/or Nonattainment NSR provisions of the Act as described in Paragraph 132 (i.e., 42 U.S.C. §§ 7475 and 7503) and the implementing provisions of the relevant SIP, for TVA's performance of activities that this Consent Decree expressly directs TVA to undertake pursuant to Paragraphs 69 and 85 (within Alabama, which meet the criteria of Ala. Admin. Code r. 335-3-14-.04(8)(m)), except to the extent that (a) such activities would cause a significant increase in the emission of a regulated NSR pollutant other than NO_x, SO₂, and PM, in which event this release will not extend to any claim relating to such regulated NSR pollutant for which there is a significant increase or (b) a Unit is Repowered to Renewable Biomass.
- 135. Solely with regard to claims of the Citizen Plaintiffs, the claims of the Citizen Plaintiffs resolved by Paragraph 132 above do not include any claims based upon the regulated pollutant sulfuric acid mist ("SAM" or "H₂SO₄").

I. PERIODIC REPORTING

- 136. Beginning six (6) months after the Consent Decree Obligation Date, and continuing annually on April 30 each year thereafter until conditional termination of enforcement through this Consent Decree as provided in Paragraph 214, and in addition to any other express reporting requirement in this Consent Decree, TVA shall submit to EPA, the States, and the Citizen Plaintiffs a progress report in compliance with Appendix A.
- 137. In any periodic progress report submitted pursuant to this Section, TVA may incorporate by reference information previously submitted under its Title IV and/or Title V permitting requirements, provided that TVA attaches the Title IV and/or Title V permit report, or the relevant portion thereof, and provides a specific reference to the provisions of the Title IV and/or Title V permit report that are responsive to the information required in the periodic progress report.
- Other express reporting requirements. In addition to the annual progress reports required pursuant to Paragraph 136 and Appendix A, TVA shall submit to EPA, the States, and the Citizen Plaintiffs the information otherwise required by this Consent Decree in the manner and by the dates set forth herein, including but not limited to, the information required by Paragraphs 72, 73, 84, 88, 89, 104, 105, 110, 111, 113, 131, 139, 148, 157, and 191 and Subparagraph 117.c.
- 139. In addition to the progress reports required pursuant to this Section, TVA shall provide a written report to EPA, the States, and the Citizen Plaintiffs of any violation of the requirements of this Consent Decree within fifteen (15) days of when TVA knew or should have known of any such violation. In this report, TVA shall explain the cause or causes of the

violation and all measures taken or to be taken by TVA to prevent such violations in the future and measures taken or to be taken to mitigate the environmental effects of such violation, if any.

140. Each report shall be signed by TVA's Vice President of Environmental Permitting and Compliance or his or her equivalent or designee of at least the rank of Vice President, and shall contain the following certification:

This information was prepared either by me or under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my evaluation, or the direction and my inquiry of the person(s) who manage the system, or the person(s) directly responsible for gathering the information, I hereby certify under penalty of law that, to the best of my knowledge and belief, this information is true, accurate, and complete. I understand that there are significant penalties for submitting false, inaccurate, or incomplete information to EPA.

J. REVIEW AND APPROVAL OF SUBMITTALS

- 141. Whenever a plan, report, or other submission required by this Consent Decree is required to be submitted to EPA for review or approval, EPA (in consultation with the States and the Citizen Plaintiffs) may approve the submittal or decline to approve it and provide written comments explaining the basis for declining such approval. Within sixty (60) days of receiving written comments from EPA, TVA shall either (a) revise the submittal consistent with the written comments and provide the revised submittal to EPA with copies to the States and the Citizen Plaintiffs pursuant to Section VIII (Notices) of this Consent Decree; or (b) submit the matter for dispute resolution pursuant to Section VIII (Dispute Resolution) of the Compliance Agreement.
- 142. Upon receipt of EPA's final approval of the submittal, or upon completion of dispute resolution under the Compliance Agreement and, if applicable, dispute resolution under Section VI (Dispute Resolution) of this Consent Decree as provided by Section IV (Coordination

of Oversight and Enforcement) of this Consent Decree, TVA shall implement the approved submittal in accordance with the schedule specified therein or, if subject to dispute resolution pursuant to Section VI (Dispute Resolution) of this Consent Decree as provided by Section IV (Coordination of Oversight and Enforcement) of this Consent Decree, a schedule established by the Court.

K. STIPULATED PENALTIES

143. For any failure by TVA to comply with the terms of this Consent Decree, and subject to the provisions of Sections IV (Coordination of Oversight and Enforcement), V (Force Majeure), and VI (Dispute Resolution), TVA shall pay, within thirty (30) days after receipt of written demand to TVA by a State or the Citizen Plaintiffs, the following stipulated penalties:

Consent Decree Violation	Stipulated Penalty
a. Failure to pay the civil penalty as specified in Section III.G (Civil Penalty) of this Consent Decree	\$10,000 per day
b. Failure to comply with any applicable PM Emission Rate where the violation is less than five percent (5%) in excess of the limits set forth in this Consent Decree	\$2,500 per day per violation
c. Failure to comply with any applicable PM Emission Rate where the violation is equal to or greater than five percent (5%) but less than ten percent (10%) in excess of the limits set forth in this Consent Decree	\$5,000 per day per violation
d. Failure to comply with any applicable PM Emission Rate where the violation is equal to or greater than ten percent (10%) in excess of the limits set forth in this Consent Decree	\$10,000 per day per violation

Consent Decree Violation	Stipulated Penalty
e. Failure to comply with an applicable System-Wide Annual Tonnage Limitation for SO ₂ set forth in this Consent Decree	\$5,000 per ton for the first 1,000 tons, and \$10,000 per ton for each additional ton above 1,000 tons, plus the surrender of SO ₂ Allowances in an amount equal to two (2) times the number of tons by which the limitation was exceeded.
f. Failure to Remove from Service as required by Paragraphs 69 and 85 of this Consent Decree any one or more of the following Units: the two (2) Units at the John Sevier plant that TVA indicated pursuant to Paragraphs 72 and 88 that it will Remove from Service and Colbert Units 1-5	\$10,000 per day per violation during the first thirty (30) days, \$37,500 per day per violation thereafter
g. Failure to comply with an applicable System-Wide Annual Tonnage Limitation for NO_x set forth in this Consent Decree	\$5,000 per ton for the first 1,000 tons, and \$10,000 per ton for each additional ton above 1,000 tons, plus the surrender of annual NO _x Allowances in an amount equal to two (2) times the number of tons by which the limitation was exceeded.
h. Failure to comply with the requirements for NO _x or SO ₂ in Paragraphs 71 or 87 of this Consent Decree	\$2,500 per day per violation
i. Failure to provide notice as required by Paragraphs 72, 73, 84, 88, and/or 89 of this Consent Decree	\$1,000 per day for the first fifteen (15) days, \$15,000 per day for each day thereafter
j. Failure to install, commence operation of, and/or Continuously Operate a pollution control technology as required by Paragraphs 69, 85, and/or 98 of this Consent Decree	\$10,000 per day per violation during the first thirty (30) days, \$37,500 per day per violation thereafter
k. Failure to Retire or Repower a Unit as required by Paragraphs 69 and 85 of this Consent Decree	\$10,000 per day per violation during the first thirty (30) days, \$37,500 per day per violation thereafter

Consent Decree Violation	Stipulated Penalty
1. Failure to comply with the PM optimization requirements of Paragraph 99 of this Consent Decree	\$2,500 per day per violation during the first thirty (30) days, \$7,500 per day per violation thereafter
m. Failure to install and/or operate CEMS as required under this Consent Decree	\$1,000 per day per violation
n. Failure to conduct stack tests for PM as required under this Consent Decree	\$1,000 per day per violation
o. Failure to apply for any permit required under this Consent Decree	\$1,000 per day per violation
p. Failure to timely submit, modify, and/or implement, as approved, the reports, plans, studies, analyses, protocols, and/or other submittals required by this Consent Decree	\$750 per day per violation during the first ten (10) days, \$1,000 per day per violation thereafter
q. Using, selling, banking, trading, or transferring SO ₂ Allowances except as permitted under this Consent Decree	The surrender of SO ₂ Allowances in an amount equal to four (4) times the number of SO ₂ Allowances used, sold, banked, traded, or transferred in violation of this Consent Decree
r. Failure to surrender SO ₂ Allowances as required under this Consent Decree	(a) \$37,500 per day plus (b) \$1,000 per allowance not surrendered
s. Using, selling, banking, trading, or transferring NO_x Allowances except as permitted under this Consent Decree	The surrender of NO _x Allowances in an amount equal to four (4) times the number of NO _x Allowances used, sold, banked, traded, or transferred in violation of this Consent Decree
t. Failure to surrender NO _x Allowances as required under this Consent Decree	(a) \$37,500 per day plus (b) \$1,000 per allowance not surrendered
u. Using emission reductions from Retiring a TVA System	\$2,500 per day per violation during the first 30 days, \$10,000

Consent Decree Violation	Stipulated Penalty
Unit except as provided in Paragraphs 116 and 117 of this Consent Decree	per day per violation thereafter
v. Failing to comply with the requirements of Paragraph 117 of this Consent Decree if TVA uses emission reductions from Retiring a TVA System Unit to construct a New CC/CT Unit	\$2,500 per day per violation during the first thirty (30) days, \$10,000 per day per violation thereafter
w. Failing to comply with the requirements of Paragraph 119 of this Consent Decree if TVA uses emission reductions in Greenhouse Gases to construct a New CC Unit	\$2,500 per day per violation during the first thirty (30) days, \$10,000 per day per violation thereafter
x. Failure to fund the Environmental Mitigation Projects in compliance with Section III.F (Environmental Mitigation Projects) of this Consent Decree	\$5,000 per day for the first thirty (30) days, \$10,000 per day for each day thereafter
y. Any other violation of this Consent Decree	\$1,000 per day per violation

- 144. All stipulated penalties shall begin to accrue on the day after the performance is due or on the day a violation occurs, whichever is applicable, and shall continue to accrue until performance is satisfactorily completed or until the violation ceases, whichever is applicable. Nothing in this Consent Decree shall prevent the simultaneous accrual of separate stipulated penalties for separate violations of this Consent Decree.
- 145. TVA shall pay all stipulated penalties within thirty (30) days of receipt of written demand to TVA from any or all Plaintiffs (referred to herein as the "demanding Party"), and shall continue to make such payments every thirty (30) days thereafter until the violation(s) no longer continues, unless TVA elects within fifteen (15) business days of receipt of written demand to TVA from the demanding Party to dispute the accrual of stipulated penalties in accordance with the provisions in Section VI (Dispute Resolution) of this Consent Decree, subject to Section IV (Coordination of Oversight and Enforcement) of this Consent Decree.

- 146. Stipulated penalties shall continue to accrue as provided in accordance with Paragraph 144 during any dispute, with interest on accrued stipulated penalties payable and calculated at the rate established by the Secretary of the Treasury, pursuant to 28 U.S.C. § 1961, but need not be paid until the following:
- a. If the dispute is resolved by agreement, or by a written summary of the demanding Party that is not challenged within the time permitted pursuant to Section VI (Dispute Resolution) of this Consent Decree and that is not submitted to the Court for resolution, accrued stipulated penalties agreed or determined to be owing, together with accrued interest, shall be paid within thirty (30) days of the effective date of the agreement;
- b. If the dispute is submitted to the Court and the demanding Party prevails in whole or in part, TVA shall pay, within sixty (60) days of receipt of the Court's decision or order, all accrued stipulated penalties determined to be owing, together with interest accrued on such penalties determined by the Court to be owing, except as provided in Subparagraph c, below;
- c. If the Court's decision is appealed by either TVA or the demanding Party, TVA shall, within fifteen (15) days of receipt of the final appellate court decision, pay all accrued stipulated penalties determined to be owing, together with interest accrued on such stipulated penalties determined to be owing by the appellate court.
- 147. Notwithstanding any other provision of this Consent Decree, the accrued stipulated penalties agreed to by the demanding Party and TVA, or determined through dispute resolution, to be owing may be less than the stipulated penalty amounts set forth in Paragraph 143.

- 148. Monetary stipulated penalties due and owing to Alabama, Kentucky, or Tennessee shall be paid in the manner specified in Paragraph 131. Monetary stipulated penalties due and owing as a result of a demand from North Carolina or the Citizen Plaintiffs shall be paid as specified in Section 304(g)(1) of the Act, 42 U.S.C. § 7604(g)(1). At the time of payment, TVA shall provide notice of payment to EPA, the States, and the Citizen Plaintiffs, referencing the relevant case names and case numbers in accordance with Section VIII (Notices) of this Consent Decree. All SO₂ and NO_x Allowance surrender stipulated penalties shall comply with the allowance surrender procedures set forth in Paragraphs 80 (for NO_x) and 96 (for SO₂).
- 149. The stipulated penalties provided for in this Consent Decree shall be in addition to any other rights, remedies, or sanctions available to the demanding Party by reason of TVA's failure to comply with any requirement of this Consent Decree or applicable law, except that for any violation of the Act for which this Consent Decree provides for payment of a stipulated penalty, TVA shall be allowed a credit for stipulated penalties paid against any statutory penalties also imposed for such violation.

L. PERMITS

- 150. Unless expressly stated otherwise in this Consent Decree, in any instance where otherwise applicable law or this Consent Decree requires TVA to secure a permit to authorize construction or operation of any device, including all construction and operating permits required under state law, TVA shall make such application in a timely manner.
- 151. Notwithstanding Paragraph 150, nothing in this Consent Decree shall be construed to require TVA to apply for or obtain a PSD or Nonattainment NSR permit for

physical changes in, or changes in the method of operation of, any TVA System Unit that would give rise to claims resolved by Paragraphs 132 or 134 of this Consent Decree.

- 152. When permits or permit applications are required pursuant to Paragraphs 50, 150, 154, 155, 156, and 158, TVA shall complete and submit applications for such permits to Alabama, Kentucky, and Tennessee, whichever is appropriate, to allow sufficient time for all legally required processing and review of the permit request, including requests for additional information by such States. Any failure by TVA to submit a timely permit application for TVA System Units shall bar any use by TVA of Section V (Force Majeure) of this Consent Decree, where a Force Majeure claim is based on permitting delays.
- 153. Notwithstanding the reference to Title V permits in this Consent Decree, the enforcement of such permits shall be in accordance with their own terms and the Act and its implementing regulations, including the federally approved Alabama, Kentucky, and Tennessee Title V programs. The Title V permit shall not be enforceable under this Consent Decree, although any term or limit established by or under this Consent Decree shall be enforceable under this Consent Decree regardless of whether such term has or will become part of a Title V permit, subject to the terms of Section XVI (Conditional Termination of Enforcement Under Decree) of this Consent Decree.
- 154. Within three (3) years from the Consent Decree Obligation Date, unless otherwise specified in this Paragraph, and in accordance with federal and/or state requirements for modifying or renewing a Title V permit, TVA shall amend any applicable Title V permit application, or apply for amendments to its Title V permits, to include a schedule for all systemwide, Unit-specific, and plant-specific performance, operational, maintenance, and control

technology requirements established by this Consent Decree including, but not limited to, emission rates, installation and/or Continuous Operation of SCRs and/or FGDs, tonnage limitations, and the requirements pertaining to the surrender of NO_x and SO₂ Allowances. For Units in Paragraphs 69 and 85 with two or more methods specified in the Control Requirement column and that do not have a Remove from Service option, TVA shall apply to modify, renew, or obtain any applicable Title V permit as required by this Paragraph within twelve (12) months of making an election as to the method TVA will employ for the Unit. For Units with the Remove from Service option in the Control Requirement column in Paragraphs 69 or 85, TVA shall apply to modify, renew, or obtain any applicable Title V permit as required by this Paragraph within twelve (12) months of electing to either install and operate FGD(s) and SCR(s), Repower to Renewable Biomass, or Retire.

the Control Requirement for each Unit, TVA shall (a) apply to include the requirements and limitations enumerated in this Consent Decree into federally-enforceable permits such that the requirements and limitations of this Consent Decree become and remain "applicable requirements" as that term is defined in 40 C.F.R. § 70.2 and/or (b) request site-specific amendments to the applicable SIPs for Alabama and Tennessee (but not for Kentucky) to reflect all new requirements applicable to each Unit and at each plant in the TVA System. For purposes of this Consent Decree, the federally enforceable permit(s) issued by Kentucky must be issued by Kentucky under its authority under its SIP to issue permits and not solely under Kentucky's authority to issue permits pursuant to its Title V program.

- 156. Prior to conditional termination of enforcement through this Consent Decree, TVA shall apply for and obtain enforceable provisions in its Title V permits for the TVA System that incorporate (a) any Unit-specific requirements and limitations of this Consent Decree, such as performance, operational, maintenance, and control technology requirements, (b) the requirement to Surrender NO_x and SO₂ Allowances, and (c) the System-Wide Annual Tonnage Limitations.
- 157. TVA shall provide EPA, the States, and the Citizen Plaintiffs with a copy of each application for any permit required pursuant to this Section, including any federally enforceable permit or Title V permit or modification, and any site-specific SIP amendment, as well as a copy of any permit or SIP amendment proposed as a result of such application, to allow for timely participation in any public comment opportunity.
- Limitations Guidelines for the Steam Electric Power Generating point source category, by no later than twelve (12) months after the date EPA publishes the final rule in the Federal Register (unless additional time is required for studies or data collection mandated by the final rule), TVA shall submit applications to the relevant permitting authority to obtain National Pollutant Discharge Elimination System ("NPDES") permit renewals (in the case of expiring permits); permit renewal modifications (in the case of already submitted permit renewal applications); or permit modification requests (in the case of existing, non-expired permits) to include legally-applicable requirements of the revised Effluent Limitations Guidelines relating to wastewaters from Flue Gas Desulfurization Systems in each of its NPDES permits for the TVA System Units that are subject to the revised Effluent Limitation Guidelines and are equipped with a Flue Gas

Desulfurization System. TVA shall include all the relevant information necessary for the permitting authority to expeditiously incorporate the Effluent Limitation Guideline requirements into each of TVA's NPDES permits, and shall promptly respond to any additional requests for information from the permitting authority.

159. If TVA proposes to sell or transfer to an entity unrelated to TVA ("Third Party") part or all of TVA's operational or ownership interest in a TVA System Unit, TVA shall comply with the requirements of Section IX (Sales or Transfers of Operational or Ownership Interests) with regard to that Unit prior to any such sale or transfer.

IV. COORDINATION OF OVERSIGHT AND ENFORCEMENT

- 160. Oversight and Enforcement of Parallel Provisions of the Compliance Agreement and this Consent Decree.
- a. EPA and TVA in the Compliance Agreement, and TVA, the States, and the Citizen Plaintiffs in this Consent Decree, are entering into separate agreements with Parallel Provisions to resolve TVA's alleged violations of the Act. This Section of the Consent Decree establishes the manner in which enforcement and oversight (including resolution of disputes) pertaining to Parallel Provisions will occur.
- b. Except where there is an unreasonable delay in resolving a dispute pursuant to Section VIII (Dispute Resolution) of the Compliance Agreement, a State or the Citizen Plaintiffs shall not invoke Section VI (Dispute Resolution) of this Consent Decree pertaining to a Parallel Provision until TVA has resolved any disputes between it and EPA pertaining to such Parallel Provision pursuant to Section VIII (Dispute Resolution) of the Compliance Agreement either through an agreement reached with EPA pursuant to Section VIII of the Compliance Agreement

or a decision issued by the Region 4 Air Director pursuant to Paragraph 183 of the Compliance Agreement. TVA shall not seek judicial review in any court of any agreement reached with EPA pursuant to Section VIII (Dispute Resolution) of the Compliance Agreement or any decision issued by the Region 4 Air Director pursuant to Paragraph 183 of the Compliance Agreement. Although neither the Compliance Agreement nor any determinations that EPA makes under it are before this Court for judicial review, and are not subject to this Court's judicial review now or in the future, this Court should accord appropriate weight to EPA's determinations made either pursuant to Section VIII (Dispute Resolution) of the Compliance Agreement or as provided in Paragraphs 162, 163, and 164, below. For example, where EPA's determination made either pursuant to Section VIII (Dispute Resolution) of the Compliance Agreement or as provided in Paragraphs 162, 163, or 164, below, relies on EPA's technical expertise, determinations, or interpretation of statutes EPA administers and/or of regulations EPA promulgated (among other circumstances), such determination should be entitled to judicial deference consistent with prevailing law regarding judicial deference to such agency technical expertise, determinations, or interpretation of statutes or regulations.

- c. Nothing in this Consent Decree shall be construed to affect the authority of EPA or a State under applicable federal statutes or regulations and applicable state statutes and regulations or any other applicable provisions to seek appropriate relief to address an imminent and substantial endangerment to public health or welfare, or the environment.
 - 161. Availability of Dispute Resolution under Section VI of this Consent Decree.
- a. If there has been a resolution of a dispute pertaining to a Parallel Provision pursuant to Section VIII (Dispute Resolution) of the Compliance Agreement, a State or the

Citizen Plaintiffs may only invoke the dispute resolution procedures of Section VI (Dispute Resolution) of this Consent Decree pertaining to that resolution solely to seek a resolution that is more stringent than the resolution reached through Section VIII (Dispute Resolution) of the Compliance Agreement.

- b. TVA may invoke Section VI (Dispute Resolution) of this Consent Decree regarding a Parallel Provision only (i) if a State or the Citizen Plaintiffs are acting in contravention to Section IV (Coordination of Oversight and Enforcement) of this Consent Decree or (ii) as necessary to address any conflict between this Consent Decree and the Compliance Agreement due to a change to the Compliance Agreement that is made subsequent to the Effective Date of the Compliance Agreement as that term is defined therein.
- 162. <u>Disputes Involving Parallel Provisions Resolved Through Section VIII of the Compliance Agreement.</u>
- a. If a State or the Citizen Plaintiffs invoke Section VI (Dispute Resolution) of this Consent Decree to seek a resolution of a dispute under this Consent Decree pertaining to a Parallel Provision that is more stringent than the resolution reached through Section VIII (Dispute Resolution) of the Compliance Agreement, the Court should accord appropriate weight to the resolution of the dispute by EPA under Section VIII of the Compliance Agreement as described in Subparagraph 160.b, above.
- b. TVA shall be bound by and hereby stipulates to be bound by any agreement reached with EPA pursuant to Section VIII (Dispute Resolution) of the Compliance Agreement, any decision issued by the Region 4 Air Director pursuant to Paragraph 183 of the Compliance Agreement, and/or any written determination pursuant to Subparagraph 163 and/or 164, below,

and it shall not seek relief from this Court that is less stringent than, or is otherwise in any way inconsistent with, any agreement reached with EPA pursuant to Section VIII (Dispute Resolution) of the Compliance Agreement, any decision issued by the Region 4 Air Director pursuant to Paragraph 183 of the Compliance Agreement, and/or any written determination pursuant to Paragraphs 163 and/or 164 below. TVA may inform the Court of the position that it presented to EPA during the Dispute Resolution process; provided that TVA shall not argue to this Court that any agreement reached with EPA pursuant to Section VIII (Dispute Resolution) of the Compliance Agreement or any decision issued by the Region 4 Air Director, or the basis for such decision, was wrong (either technically, legally, or factually) or otherwise in error.

- 163. Process for Requesting that the Court Exercise Jurisdiction. A Party shall provide notice as further described in this Paragraph before it can request that the Court exercise jurisdiction (including under Sections V (Force Majeure), VI (Dispute Resolution), or XI (Retention of Jurisdiction)), regarding implementation of this Consent Decree. The Party seeking to request that the Court exercise jurisdiction shall notify the other Parties to this Consent Decree and EPA of such intent pursuant to Section VIII (Notices) of this Consent Decree and shall include a description of the issue in such notice.
- a. If the issue involves a Parallel Provision that has not already been the subject of dispute and resolution pursuant to Section VIII (Dispute Resolution) of the Compliance Agreement, EPA may provide the Parties with a written determination of EPA's view regarding the issue within forty-five (45) days following the notice. No action before this Court may be taken by any Party (i) for at least fifteen (15) business days following EPA's written determination or, (ii) if EPA does not make such written determination, then for at least forty-

five (45) days following the notice described previously in this Paragraph. If TVA does not invoke Section VIII (Dispute Resolution) of the Compliance Agreement within fifteen (15) business days following receipt of EPA's written determination, then TVA shall be bound by EPA's written determination in any action before this Court regarding such issue, as described in Subparagraph 162.b, above. TVA shall furnish to the Court EPA's written determination under this Paragraph no later than the filing of its next brief, motion, or other communication with the Court regarding the issue. The Court should accord appropriate weight to EPA's written determination as described in Subparagraph 160.b, above. If TVA does invoke Section VIII (Dispute Resolution) of the Compliance Agreement within fifteen (15) business days of receipt of EPA's written determination, the Parties may not proceed in this Court until EPA and TVA have resolved such dispute pursuant to Section VIII (Dispute Resolution) of the Compliance Agreement.

b. If the issue involves a Parallel Provision that has already been the subject of dispute and resolution pursuant to Section VIII (Dispute Resolution) of the Compliance Agreement, then the Party requesting that the Court exercise jurisdiction shall provide such notice at least fifteen (15) business days before requesting that the Court exercise jurisdiction and must furnish a copy of TVA's written objection as provided in Paragraph 181 of the Compliance Agreement and the final resolution rendered pursuant to either Paragraph 182 or Paragraph 183 of Section VIII (Dispute Resolution) of the Compliance Agreement to the Court no later than the filing of its next brief, motion, or other communication with the Court regarding that issue. If EPA provides the Party with a written determination of its view regarding the issue to be presented to the Court, such Party shall furnish a copy of EPA's written determination to the

Court with its next filing. The Court should accord appropriate weight to EPA's written determination as described in Subparagraph 160.b, above.

- If the issue involves a Parallel Provision that is the subject of a dispute pursuant to Section VIII (Dispute Resolution) of the Compliance Agreement but there is an unreasonable delay in resolving the dispute under Section VIII (Dispute Resolution) of the Compliance Agreement, then the Parties may proceed in this Court prior to a resolution by EPA and TVA of such dispute. The Party requesting that the Court exercise jurisdiction shall provide such notice at least fifteen (15) business days before requesting that the Court exercise jurisdiction. No action before this Court may be taken by any Party during this 15 business day period. If the Region 4 Air Director issues a decision pursuant to Paragraph 183 of the Compliance Agreement during this 15 business day period, then TVA shall be bound by such decision in any action before this Court regarding such issue, as described in Subparagraph 162.b, above, and the Party requesting that the Court exercise jurisdiction may only seek a more stringent resolution, as described in Paragraph 161.a. Such Party must furnish a copy of the Region 4 Air Director's decision, if any, to the Court no later than the filing of its next brief, motion, or other communication with the Court regarding the issue. The Court should accord appropriate weight to the Region 4 Air Director's decision as described in Subparagraph 160.b, above.
 - 164. <u>Assessment and Collection of Stipulated Penalties.</u>
- a. TVA shall not be required to pay additional stipulated penalties under the Consent Decree for a violation of the same Parallel Provision of the Compliance Agreement if TVA has paid stipulated penalties pursuant to a demand made by EPA (in consultation with the States and the Citizen Plaintiffs). Notwithstanding the preceding sentence, TVA may be required to pay

additional stipulated penalties under this Consent Decree for a violation of the same Parallel Provision of the Compliance Agreement if the stipulated penalty that EPA demanded (and that TVA paid) is inappropriate in light of the circumstances, taking into account the appropriate weight to be accorded to EPA's written determination as described in Subparagraph 160.b, above. Nothing in this Paragraph shall prevent EPA and the States of Alabama, Kentucky, and Tennessee from sharing the payment of a stipulated penalty provided that the violation giving rise to payment of a stipulated penalty is a violation of a Parallel Provision of this Consent Decree. Where a violation of a Parallel Provision is facility specific, EPA has agreed to split the collected stipulated penalty evenly with the State where such facility is located. Where a violation of a Parallel Provision is not facility specific, EPA has agreed to split the collected stipulated penalty with the States of Alabama, Kentucky, and Tennessee as follows: 50% to EPA and 50% allocated equally among the States of Alabama, Kentucky, and Tennessee.

b. If a State or the Citizen Plaintiffs believes there has been a violation of a Parallel Provision under this Consent Decree but EPA has not taken action under the Compliance Agreement to assess stipulated penalties for such a violation through the Compliance Agreement, a State or the Citizen Plaintiffs may demand the payment of stipulated penalties pursuant to Section III.K (Stipulated Penalties) of this Consent Decree only after it has first consulted with EPA regarding the alleged violation as further described in this subparagraph. The State or the Citizen Plaintiffs shall provide EPA with a sixty (60) day period to evaluate the alleged violation and to provide a written determination as to whether it believes there is a violation of the Parallel Provision of the Compliance Agreement. The Court should accord appropriate weight to EPA's written determination as described in Subparagraph 160.b, above.

Plaintiffs may demand the payment of stipulated penalties or seek other appropriate relief as allowed by Section XI (Retention of Jurisdiction) or any other provision of this Consent Decree for TVA's failure to comply with the terms of a Parallel Provision of this Consent Decree if (i) after consulting with EPA as required in Paragraph 164.b, EPA does not take action under the Compliance Agreement to assess stipulated penalties for such alleged violation, or, as described in Paragraph 164.a., EPA assesses a stipulated penalty that is inappropriate in light of the circumstances, (ii) TVA has failed to comply with any agreement reached with EPA pursuant to Section VIII (Dispute Resolution) of the Compliance Agreement or any decision issued by the Region 4 Air Director pursuant to Paragraph 183 of the Compliance Agreement, or (iii) TVA remains in non-compliance despite assessment of stipulated penalties.

V. FORCE MAJEURE

- event that has been or will be caused by circumstances beyond the control of TVA, its contractors, or any entity controlled by TVA that delays compliance with any provision of this Consent Decree or otherwise causes a violation of any provision of this Consent Decree despite TVA's best efforts to fulfill the obligation. "Best efforts to fulfill the obligation" include using the best efforts to anticipate any potential Force Majeure Event and to address the effects of any such event (a) as it is occurring and (b) after it has occurred, such that the delay and any adverse environmental effect of the violation is minimized to the greatest extent possible.
- 167. <u>Notice of Force Majeure Events</u>. If any event occurs or has occurred that may delay compliance with or otherwise cause a violation of any obligation under this Consent

Decree, as to which TVA intends to assert a claim of Force Majeure, TVA shall notify EPA, the States, and the Citizen Plaintiffs in writing as soon as practicable, but in no event later than twenty-one (21) business days following the date TVA first knew, or by the exercise of due diligence should have known, that the event caused or may cause such delay or violation. In this notice, TVA shall reference this Paragraph of this Consent Decree and describe the anticipated length of time that the delay or violation may persist, the cause or causes of the delay or violation, all measures taken or to be taken by TVA to prevent or minimize the delay and any adverse environmental effect of the violation, the schedule by which TVA proposes to implement those measures, and TVA's rationale for attributing a delay or violation to a Force Majeure Event. TVA shall adopt all reasonable measures to avoid or minimize such delays or violations. TVA shall be deemed to know of any circumstance which TVA, its contractors, or any entity controlled by TVA knew or should have known.

- 168. Failure to Give Notice. If TVA fails to comply with the notice requirements of this Section for any Parallel Provision, EPA (in consultation with the States and the Citizen Plaintiffs) may void TVA's claim for Force Majeure as to the specific event for which TVA has failed to comply with such notice requirement. If TVA fails to comply with the notice requirements of this Section for any provision that is not a Parallel Provision of this Consent Decree ("Non-Parallel Provision") the States and the Citizen Plaintiffs may void TVA's claim for Force Majeure as to the specific event for which TVA has failed to comply with such notice requirement.
- 169. <u>Response</u>. EPA (for any Parallel Provision, and as required by the Compliance Agreement) and the States and the Citizen Plaintiffs (for any Non-Parallel Provision) shall notify

TVA in writing regarding TVA's claim of Force Majeure as soon as reasonably practicable. For any Parallel Provisions, if EPA, after consultation with the States and the Citizen Plaintiffs, agrees that a delay in performance has been or will be caused by a Force Majeure Event, the Plaintiffs and TVA under this Consent Decree (and EPA and TVA under the Compliance Agreement), shall stipulate to an extension of deadline(s) for performance of the affected compliance requirement(s) by a period equal to the delay actually caused by the event. In such circumstances, an appropriate modification shall be made pursuant to Section XII (Modification) of this Consent Decree. For any Non-Parallel Provision, if the States and the Citizen Plaintiffs agree that a delay in performance has been or will be caused by a Force Majeure Event, the Plaintiffs and TVA shall stipulate to an extension of deadline(s) for performance of the affected compliance requirement(s) by a period equal to the delay actually caused by the event. In such circumstances, an appropriate modification shall be made pursuant to Section XII (Modification) of this Consent Decree.

170. <u>Disagreement</u>. For any Parallel Provision, if EPA, after consultation with the States and the Citizen Plaintiffs, does not accept TVA's claim of Force Majeure, or if EPA and TVA cannot agree on the length of the delay actually caused by the Force Majeure Event, the matter shall be resolved in accordance with Section VIII (Dispute Resolution) of the Compliance Agreement and as provided in Section IV (Coordination of Oversight and Enforcement) of this Consent Decree. For any Parallel Provision, a Plaintiff may seek a resolution that is more stringent than the resolution reached through Section VIII (Dispute Resolution) of the Compliance Agreement as provided in Paragraph 161.a or if there is an unreasonable delay in resolving a dispute pursuant to Section VIII (Dispute Resolution) of the Compliance Agreement,

the Plaintiffs may pursue dispute resolution or other available remedies, subject to the limitations in Section IV (Coordination of Oversight and Enforcement) of this Consent Decree. For any Non-Parallel Provision, if the States and the Citizen Plaintiffs do not accept TVA's claim of Force Majeure, or if the Parties cannot agree on the length of the delay actually caused by the Force Majeure Event, the matter shall be resolved in accordance with Section VI (Dispute Resolution) of this Consent Decree.

- 171. <u>Burden of Proof.</u> In any dispute regarding Force Majeure, TVA shall bear the burden of proving that any delay in performance or any other violation of any requirement of this Consent Decree was caused by or will be caused by a Force Majeure Event. TVA shall also bear the burden of proving that TVA gave the notice required by this Section and the burden of proving the anticipated duration and extent of any delay(s) attributable to a Force Majeure Event. An extension of one compliance date based on a particular event may, but will not necessarily, result in an extension of a subsequent compliance date.
- 172. <u>Events Excluded</u>. Unanticipated or increased costs or expenses associated with the performance of TVA's obligations under this Consent Decree shall not constitute a Force Majeure Event.
- 173. Potential Force Majeure Events. Depending upon the circumstances related to an event and TVA's response to such circumstances, the kinds of events listed below are among those that could qualify as Force Majeure Events within the meaning of this Section: construction, labor, or equipment delays; Malfunction of a Unit or emission control device; unanticipated coal supply or pollution control reagent delivery interruptions; acts of God; acts of war or terrorism; and, other than by TVA, orders by a government official, government agency,

other regulatory authority, or a regional transmission organization, acting under and authorized by applicable law, that directs TVA to supply electricity in response to a system-wide (state-wide or regional) emergency. Depending upon the circumstances and TVA's response to such circumstances, failure of a permitting authority to issue a necessary permit in a timely fashion may constitute a Force Majeure Event where the failure of the permitting authority to act is beyond the control of TVA and TVA has taken all steps available to it to obtain the necessary permit, including, but not limited to submitting a complete permit application; responding to requests for additional information by the permitting authority in a timely fashion; and accepting lawful permit terms and conditions after expeditiously exhausting any legal rights to appeal terms and conditions imposed by the permitting authority.

174. As part of the resolution of any matter submitted to this Court under Section VI (Dispute Resolution) of this Consent Decree, subject to Section IV (Coordination of Oversight and Enforcement) of this Consent Decree, regarding a claim of Force Majeure, the Plaintiffs and TVA by agreement, or this Court by order, may in appropriate circumstances extend or modify the schedule for completion of work under this Consent Decree to account for the delay in the work that occurred as a result of any delay agreed to by the Plaintiffs or as approved by the Court. TVA shall be liable for stipulated penalties if applicable for its failure thereafter to complete the work in accordance with the extended or modified schedule (provided that TVA shall not be precluded from making a further claim of Force Majeure with regard to meeting any such extended or modified schedule).

VI. DISPUTE RESOLUTION

- 175. Subject to, and only as allowed by, Section IV (Coordination of Oversight and Enforcement), the dispute resolution procedures provided by this Section shall be available to resolve all disputes arising under this Consent Decree. The procedures provided in Paragraphs 176-183 are limited by the provisions set forth in Section IV (Coordination of Oversight and Enforcement) of this Consent Decree.
- 176. The dispute resolution procedure provided herein may be invoked only by one Party giving written notice to the other Parties (and EPA) advising of a dispute pursuant to this Section. The notice shall describe the nature of the dispute and shall state the noticing Party's position with regard to such dispute. The Parties receiving such a notice shall acknowledge receipt of the notice, and the Parties in dispute (and EPA) shall expeditiously schedule a meeting to discuss the dispute informally not later than fourteen (14) days following receipt of such notice.
- 177. Disputes submitted to dispute resolution under this Section shall, in the first instance, be the subject of informal negotiations among the disputing Parties (and EPA). Such period of informal negotiations shall not extend beyond thirty (30) days from the date of the first meeting among the disputing Parties' representatives unless they agree in writing to shorten or extend this period. During the informal negotiations period, the disputing Parties may also submit their dispute to a mutually agreed upon alternative dispute resolution ("ADR") forum if

the Parties agree that the ADR activities can be completed within the 30-day informal negotiations period (or such longer period as the Parties may agree to in writing).

- 178. If the disputing Parties are unable to reach agreement during the informal negotiation period, the relevant disputing Plaintiff (e.g., the Plaintiff that initiated dispute resolution pursuant to this Section through the notice described in Paragraph 176) shall provide TVA (and EPA) with a written summary of its position regarding the dispute. The written position provided by the disputing Plaintiff shall be considered binding unless, within forty-five (45) days thereafter, TVA seeks judicial resolution of the dispute by filing a petition with this Court. The disputing Plaintiff, or any other Party, may respond to the petition within forty-five (45) days of filing. The Parties shall provide to EPA copies of all filings with the Court.
- 179. In addition to any other methods set forth in this Section for altering time periods, the time periods set out in this Section may be shortened or extended upon motion to the Court of one of the Parties to the dispute, explaining the Party's basis for seeking such a scheduling modification.
- 180. As part of the resolution of any dispute under this Section, in appropriate circumstances the disputing Parties may agree, or this Court may order, an extension or modification of the schedule for the completion of the activities required under this Consent Decree to account for the delay that occurred as a result of dispute resolution. TVA shall be liable for stipulated penalties for its failure thereafter to complete the work in accordance with the extended or modified schedule, provided that TVA shall not be precluded from asserting that a Force Majeure Event has caused or may cause a delay in complying with the extended or modified schedule.

- 181. Subject only to the exceptions set forth in Paragraph 182, the dispute resolution process set forth in this Section is mandatory once a notice is served under Paragraph 176. If notice is served under Paragraph 176, no Party may seek resolution of a dispute by the Court without first completing dispute resolution pursuant to Paragraphs 176-178. The dispute resolution process pursuant to Paragraphs 176-178 may be conducted concurrently with the process specified in Paragraph 163.
- 182. Notwithstanding Paragraph 181, if the matter has already been subject to dispute and resolution pursuant to Section VIII (Dispute Resolution) of the Compliance Agreement then no Party shall be required to engage in dispute resolution pursuant to Paragraphs 176-178 and a Party may seek resolution of a dispute by the Court without first engaging in dispute resolution pursuant to Paragraphs 176-178.
- 183. The Court shall decide all disputes pursuant to applicable principles of law for resolving such dispute. In their initial filings with the Court under Paragraph 178, the disputing Parties shall state their respective positions as to the applicable standard of law for resolving the particular dispute.

VII. INFORMATION COLLECTION AND RETENTION

- 184. Any authorized representative of Alabama, Kentucky, or Tennessee, including their attorneys, contractors, and consultants, upon presentation of credentials, shall have a right of entry upon the premises of any facility in the TVA System at any reasonable time for the purpose of:
 - a. monitoring the progress of activities required under this Consent Decree;

- verifying any data or information submitted in accordance with the terms of this
 Consent Decree;
- c. obtaining samples and, upon request, splits of any samples taken by TVA or its representatives, contractors, or consultants; and
- d. assessing TVA's compliance with this Consent Decree.
- 185. TVA shall retain, and instruct its contractors and agents to preserve, all non-identical copies of all records and documents (including records and documents in electronic form) in its or its contractors' or agents' possession and/or control, and that directly relate to TVA's performance of its obligations under this Consent Decree until six (6) years following completion of performance of such obligations. This record retention requirement shall apply regardless of any TVA document retention policy to the contrary.
- 186. All information and documents submitted by TVA pursuant to this Consent

 Decree shall be subject to any requests under applicable law providing public disclosure of
 documents unless (a) the information and documents are subject to legal privileges or protection
 or (b) TVA claims and substantiates in accordance with relevant federal or state law that the
 information and documents contain confidential business information. The Citizen Plaintiffs
 shall appropriately protect all information that is either subject to legal privileges or protection or
 that TVA substantiates as confidential business information.
- 187. Nothing in this Consent Decree shall limit the authority of EPA or Alabama, Kentucky, and Tennessee to conduct tests and inspections at TVA's facilities under Section 114 of the Act, 42 U.S.C. § 7414, or any other applicable federal or state laws, regulations or permits.

VIII. NOTICES

188. Unless otherwise provided herein, whenever notifications, submissions, and/or communications are required by this Consent Decree, they shall be made in writing and addressed as follows:

As to EPA:

(If by first class mail)
Director, Air Enforcement Division
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Mail Code 2242A
Washington, DC 20460

or

(If by commercial delivery service)
Director, Air Enforcement Division
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency
Ariel Rios South Building, Room 1119
1200 Pennsylvania Avenue, NW
Washington, DC 20004

and

Director Air, Pesticides and Toxics Management Division U.S. EPA- Region 4 Sam Nunn Atlanta Federal Center 61 Forsyth Street, SW Atlanta, GA 30303-8960

As to Alabama:

Chief, Air Division Alabama Department of Environmental Management 1400 Coliseum Boulevard Montgomery, AL 36110-2059

As to Kentucky:

Director
Division for Air Quality
Energy and Environment Cabinet
200 Fair Oaks Lane
Frankfort, KY 40601

As to North Carolina:

Director NCDENR, Division of Air Quality 1641 Mail Service Center Raleigh, NC 27699-1641

Senior Deputy Attorney General Environmental Division North Carolina Department of Justice P.O. Box 629 (114 W. Edenton Street, Room 306A) Raleigh, NC 27602-0629

As to Tennessee:

Division Director/Technical Secretary
Tennessee Department of Environment & Conservation
Air Pollution Control Division
401 Church Street
L&C Annex, 9th Floor
Nashville, TN 37243-1548

As to the Citizen Plaintiffs:

George E. Hays Attorney at Law 236 West Portal Avenue #110 San Francisco, CA 94127 Office: 415/566-5414 Fax: 415/731-1609

e-mail: georgehays@mindspring.com

William J. Moore, III 1648 Osceola Street Jacksonville, FL 32204 (904) 685-2172 (phone) (904) 685-2175 (fax) wmoore@wjmlaw.net

As to TVA:

Vice President, Environmental Permitting and Compliance Tennessee Valley Authority 1101 Market Street Chattanooga, TN 37402

and

Assistant General Counsel, Environment Tennessee Valley Authority 400 West Summit Hill Drive Knoxville, TN 37902

- 189. All notifications, communications or submissions made pursuant to this Section shall be sent either by (a) overnight mail or overnight delivery service, or (b) certified or registered mail, return receipt requested. In addition to the foregoing, notification may also be made through electronic mail. All notifications, communications, and transmissions that are properly addressed and prepaid and are (a) sent by overnight, certified or registered mail shall be deemed submitted on the date they are postmarked, or (b) sent by overnight delivery service shall be deemed submitted on the date they are delivered to the delivery service.
- 190. Any Party (and EPA) may change either the notice recipient or the address for providing notices to it by serving all other Parties (and EPA) with a notice setting forth such new notice recipient or address.

IX. SALES OR TRANSFERS OF OPERATIONAL OR OWNERSHIP INTERESTS

191. If TVA proposes to sell or transfer an Operational or Ownership Interest to an entity unrelated to TVA ("Third Party"), TVA shall advise the Third Party in writing of the

existence of this Consent Decree prior to such sale or transfer, and shall send a copy of such written notification to EPA, the States, and the Citizen Plaintiffs pursuant to Section VIII (Notices) of this Consent Decree at least sixty (60) days before such proposed sale or transfer.

- 192. No sale or transfer of an Operational or Ownership Interest shall take place before the Third Party and the Plaintiffs (in consultation with EPA) have executed a modification pursuant to Section XII (Modification) of this Consent Decree making the Third Party a party to this Consent Decree and jointly and severally liable with TVA for all the requirements of this Consent Decree that may be applicable to the transferred or purchased Operational or Ownership Interests.
- 193. This Consent Decree shall not be construed to impede the transfer of any Operational or Ownership Interests between TVA and any Third Party so long as the requirements of this Consent Decree are met. This Consent Decree shall not be construed to prohibit a contractual allocation between TVA and any Third Party of the burdens of compliance with this Consent Decree, provided that TVA shall remain liable to the Plaintiffs for the obligations of the Consent Decree applicable to the transferred or purchased Operational or Ownership Interests.
- 194. If the Plaintiffs (in consultation with EPA) agree, the Plaintiffs, TVA, and the Third Party that has become a party to this Consent Decree pursuant to Paragraph 192, may execute a modification that relieves TVA of its liability under this Consent Decree for, and makes the Third Party liable for, all obligations and liabilities applicable to the purchased or transferred Operational or Ownership Interests. Notwithstanding the foregoing, however, no obligation under this Consent Decree may be assigned, transferred or released in connection with

any sale or transfer of any Ownership Interest that is not specific to the purchased or transferred Operational or Ownership Interests, including the obligations set forth in Sections III.F (Environmental Mitigation Projects) and III.G (Civil Penalty), and Paragraphs 67 and 82. TVA may propose and the Plaintiffs may agree to restrict the scope of the joint and several liability of any purchaser or transferee for any obligations of this Consent Decree that are not specific to the transferred or purchased Operational or Ownership Interests, to the extent such obligations may be adequately separated in an enforceable manner using the methods provided by or approved under Section III.L (Permits).

Ownership Interest is sold or transferred solely as collateral security in order to consummate a financing arrangement (not including a sale-leaseback), so long as TVA (a) remains the operator (as that term is used and interpreted under the Act) of the subject TVA System Unit(s); (b) remains subject to and liable for all obligations and liabilities of this Consent Decree; and (c) supplies EPA with the following certification within thirty (30) days of the sale or transfer:

Certification of Change in Ownership Interest Solely for Purpose of Consummating
Financing. We, the Chief Executive Officer(s) and General Counsel(s) of the Tennessee
Valley Authority ("TVA"), hereby jointly certify under Title 18 U.S.C. Section 1001, on
our own behalf and on behalf of TVA, that any change in TVA's Ownership Interest in
any Unit that is caused by the sale or transfer as collateral security of such Ownership
Interest in such Unit(s) pursuant to the financing agreement consummated on [insert
applicable date] between TVA and [insert applicable entity] (a) is made solely for the
purpose of providing collateral security in order to consummate a financing arrangement;
(b) does not impair TVA's ability, legally or otherwise, to comply timely with all terms
and provisions of the Consent Decree entered in Alabama et al. v. Tennessee Valley
Auth., [insert case number] (E.D. Tenn. filed April 2011); (c) does not affect TVA's
operational control of any Unit covered by that Consent Decree in a manner that is
inconsistent with TVA's performance of its obligations under the Consent Decree; and (d)
in no way affects the status of TVA's obligations or liabilities under that Consent Decree.

X. EFFECTIVE DATE

196. The effective date of this Consent Decree shall be the Date of Entry.

XI. RETENTION OF JURISDICTION

197. The Court shall retain jurisdiction of this case after the Date of Entry of this Consent Decree to enforce compliance with the terms and conditions of this Consent Decree and to take any action necessary or appropriate for the interpretation, construction, execution, or modification of the Consent Decree, or for adjudication of disputes. During the term of this Consent Decree, any Party to this Consent Decree may apply to the Court for any relief necessary to construe or effectuate this Consent Decree.

XII. MODIFICATION

198. Except for a Party's request to modify this Consent Decree to conform to any modification to the Compliance Agreement, the terms of this Consent Decree may be modified only by a subsequent written agreement signed by the Parties. A Party shall provide notice to all other Parties (and to EPA) at least ten (10) business days before moving this Court to modify this Consent Decree to conform it to any modification of the Compliance Agreement. Except as otherwise specified herein, where the modification constitutes a material change to any term of this Consent Decree, it shall be effective only upon approval by the Court.

XIII. GENERAL PROVISIONS

199. At any time prior to conditional and/or partial termination of enforcement through this Consent Decree, TVA may request approval from EPA to implement a pollution control technology or pollution reduction activity for SO₂ or NO_x other than what is required by this Consent Decree. In seeking such approval, TVA must demonstrate that such alternative control

technology or activity is capable of achieving and maintaining pollution reductions equivalent to an FGD (for SO₂) or SCR (for NO_x) at the Units in the TVA System at which TVA seeks approval to implement such other control technology or activity for SO₂ or NO_x. Approval of such a request is solely at the discretion of EPA (in consultation with the States and the Citizen Plaintiffs) provided that TVA shall not implement (and the Compliance Agreement prohibits EPA from approving) an alternative control technology or activity if TVA fails to demonstrate that such alternative control technology or activity is capable of achieving and maintaining pollution reductions equivalent to an FGD (for SO₂) or SCR (for NO_x) at the Units in the TVA System. If EPA approves TVA's request, nothing in this Paragraph shall relieve TVA from complying with any other requirement of this Consent Decree applicable to such Unit (e.g., the requirement to obtain a federally enforceable non-Title V permit that includes the Unit-specific performance, operational, maintenance, and control technology requirements for such Unit in addition to the system-wide requirements and any plant-wide requirements also applicable to such Unit).

- 200. This Consent Decree is not a permit. Compliance with the terms of this Consent Decree does not guarantee compliance with any applicable federal, state, and/or local laws and/or regulations. The emission limitations set forth herein do not relieve TVA from any obligation to comply with other state and federal requirements under the Act, including TVA's obligation to satisfy any modeling requirements set forth in the Act.
 - 201. This Consent Decree does not apply to any claim(s) of alleged criminal liability.
- 202. In any subsequent action initiated by EPA, the States, or the Citizen Plaintiffs relating to the facilities covered by this Consent Decree, TVA shall not assert any defense or

claim based upon principles of waiver, <u>res judicata</u>, collateral estoppel, issue preclusion, claim preclusion, or claim splitting, or any other defense based upon the contention that the claims raised by EPA and/or any of the States or the Citizen Plaintiffs in the subsequent proceeding were brought, or should have been brought, in the instant case; provided, however, that nothing in this Paragraph is intended to affect the validity of Section III.H (Resolution of Claims Against TVA).

- Decree shall relieve TVA of its obligation to comply with all applicable federal, state, and/or local laws and/or regulations, including, but not limited to, TVA's obligation to apply for a Clean Water Act NPDES permit(s) or permit renewal for the discharge of wastewater from the operation of the FGDs at any TVA System Unit, and in connection with any such application or application for permit renewal, to provide the NPDES permitting authority with all information necessary to appropriately characterize effluent from its operations and develop, if applicable, appropriate effluent limitations; provided, however, that no claimed violation of this provision regarding NPDES permitting shall be enforceable as a violation of this Consent Decree, by way of stipulated penalty or otherwise. Subject to the provisions in Section III.H (Resolution of Claims Against TVA), nothing contained in this Consent Decree shall be construed to prevent or limit the rights of EPA, the States, or the Citizen Plaintiffs to obtain penalties or injunctive relief under the Act or other federal, state, or local statutes, regulations, or permits.
- 204. Nothing in this Consent Decree is intended to, or shall, alter or waive any applicable law (including but not limited to any defenses, entitlements, challenges, or

clarifications related to the Credible Evidence Rule, 62 Fed. Reg. 8314 (Feb. 24, 1997)) concerning the use of data for any purpose under the Act.

- 205. Each limit and/or other requirement established by or under this Consent Decree is a separate, independent requirement.
- 206. Performance standards, emissions limits, and other quantitative standards set by or under this Consent Decree must be met to the number of significant digits in which the standard or limit is expressed. For example, an Emission Rate of 0.100 is not met if the actual Emission Rate is 0.101. TVA shall round the fourth significant digit to the nearest third significant digit, or the third significant digit to the nearest second significant digit, depending upon whether the limit is expressed to three or two significant digits. For example, if an actual Emission Rate is 0.1004, that shall be reported as 0.100, and shall be in compliance with an Emission Rate of 0.100, and if an actual Emission Rate is 0.1005, that shall be reported as 0.101, and shall not be in compliance with an Emission Rate of 0.100. TVA shall report data to the number of significant digits in which the standard or limit is expressed.
- 207. Except as otherwise provided by law, this Consent Decree does not limit, enlarge or affect the rights of any Party to this Consent Decree as against any third parties.
- 208. This Consent Decree constitutes the final, complete and exclusive agreement and understanding among the Parties with respect to the settlement embodied in this Consent Decree, and supersedes all prior agreements and understandings among the Parties related to the subject matter herein. No document, representation, inducement, agreement, understanding, or promise constitutes any part of this Consent Decree or the settlement it represents, nor shall they be used in construing the terms of this Consent Decree.

XIV. SIGNATORIES AND SERVICE

- 209. Each undersigned representative of the Parties certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind to this document the Party he or she represents.
- 210. This Consent Decree may be signed in counterparts, and such counterpart signature pages shall be given full force and effect.
- 211. Each Party hereby agrees to accept service of process by mail with respect to all matters arising under or relating to this Consent Decree and to waive the formal service requirements set forth in Rule 4 of the Federal Rules of Civil Procedure and any applicable Local Rules of this Court, including but not limited to, service of a summons.

XV. PUBLIC COMMENT

212. The Parties agree and acknowledge that entry of this Consent Decree shall occur only after EPA has completed the public notice and comment process that is specified in Paragraph 211 of the Compliance Agreement. The Parties shall not oppose entry of this Consent Decree by this Court or challenge any provision of this Consent Decree unless EPA has notified TVA, the States, and the Citizen Plaintiffs in writing that due to the substance of comments received during the notice and comment period specified in Paragraph 211 of the Compliance Agreement, EPA no longer consents to the Compliance Agreement as originally executed by EPA and TVA. The Parties reserve the right to seek, prior to entry, modifications to this Consent Decree consistent with any modifications that EPA and TVA make to the Compliance Agreement pursuant to Paragraph 211 of the Compliance Agreement.

XVI. CONDITIONAL TERMINATION OF ENFORCEMENT UNDER DECREE

- 213. <u>Termination as to Completed Tasks at a Unit.</u> As soon as TVA completes a requirement of this Consent Decree pertaining to a particular Unit that is not ongoing or recurring, TVA may, by written letter to the States and the Citizen Plaintiffs, seek termination of the provision or provisions of this Consent Decree that imposed the requirement.
- 214. <u>Conditional Termination of Enforcement Through the Consent Decree.</u> After TVA:
- a. has successfully completed construction of all pollution control technology or such other Control Requirement described in Paragraphs 69 and 85, and has maintained Continuous Operation of all pollution control technology or such other Control Requirement at the TVA System Units as required by this Consent Decree for at least two (2) years; and
- b. has obtained final permits and/or site-specific SIP amendments (i) as required by Section III.L (Permits) of this Consent Decree, (ii) that cover all Units in this Consent Decree, and (iii) that include as enforceable permit terms all of the Unit-specific and TVA System performance, operational, maintenance, and control technology requirements specified in this Consent Decree;

then TVA may so certify these facts to the States and the Citizen Plaintiffs. If the States and the Citizen Plaintiffs (in consultation with EPA) do not object in writing with specific reasons within forty-five (45) days of receipt of TVA's certification, then, for any Consent Decree violations that occur after the certification is submitted, the States and the Citizen Plaintiffs shall pursue enforcement through the applicable permit(s) required pursuant to Paragraphs 50, 150, 154, 155, 156, and 158 and/or other enforcement authority, and not through this Consent Decree.

215. Resort to Enforcement under this Consent Decree. Notwithstanding Paragraph 214, if enforcement of a provision in this Consent Decree cannot be pursued by the States and the Citizen Plaintiffs under the applicable permits required by this Consent Decree or other enforcement authority, or if a Consent Decree requirement was intended to be part of a permit and did not become or remain part of such permit, then such requirement may be enforced under the terms of this Consent Decree at any time.

XVI. FINAL JUDGMENT

216. Upon approval and entry of this Consent Decree by the Court, this Consent Decree shall constitute a final judgment among the Parties.

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Alabama et al.

v. <u>Tennessee Valley Auth.</u>

FOR THE STATE OF ALABAMA AND THE ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT:

LANCE R. LEFLEUR, Director Alabama Department of Environmental Management 1400 Coliseum Boulevard Montgomery, AL 36130-1463

LUTHER STRANGE, Attorney General

By:
S. SHAWN SIBLEY (ASB-2802-Y49S)
Assistant Attorney General and
Associate General Counsel
Alabama Department of
Environmental Management
1400 Coliseum Boulevard
Montgomery, AL 36130-1463

Alabama et al.

v. <u>Tennessee Valley Auth.</u>

FOR THE COMMONWEALTH OF KENTUCKY:

DR. LEONARD K. PETERS, Secretary Energy and Environment Cabinet 500 Mero Street 12th Floor, Capital Plaza Tower Frankfort, Kentucky 40601

C. MICHAEL HAINES, General Counsel Energy and Environment Cabinet Office of General Counsel 2 Hudson Hollow Road Frankfort, Kentucky 40601

Alabama et al.

v. <u>Tennessee Valley Auth.</u>

FOR THE STATE OF NORTH CAROLINA:

ROY COOPER

Attorney General North Carolina Department of Justice P.O. Box 629 114 West Edenton Street Raleigh, NC 27602 (919) 716-6400

Alabama et al.

v. <u>Tennessee Valley Auth.</u>

FOR THE STATE OF TENNESSEE:

ROBERT E. COOPER, JR. Attorney General & Reporter

Tenn. BPR No. 21524

Alabama et al.
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FOR NATIONAL PARKS CONSEVATION ASSOCIATION:

ELIZABETH FAYAD General Counsel

Alabama et al.

v. <u>Tennessee Valley Auth.</u>

FOR SIERRA CLUB:

BRUCE E. NILLES Deputy Conservation Director

Alabama et al.
v.
Tennessee Valley Auth.

FOR OUR CHILDREN'S EARTH FOUNDATION:

TIFFANY SCHAUER Executive Director

Alabama et al.

v. <u>Tennessee Valley Auth.</u>

FOR THE TENNESSEE VALLEY AUTHORITY:

TOM KILGORE

President and Chief Executive Officer Tennessee Valley Authority

APPENDIX A

REPORTING REQUIREMENTS

I. Annual Reporting Requirements

Beginning six (6) months after the Consent Decree Obligation Date, and continuing annually on April 30 each year thereafter, TVA shall submit annual reports to EPA, the States, and the Citizen Plaintiffs electronically as required by Section III.I (Periodic Reporting). EPA, the States, and the Citizen Plaintiffs reserve the right to request such information in hard copy. In such annual reports, TVA shall include the following information:

A. System-Wide Annual Tonnage Limitations for NO_x and SO₂

TVA shall report the following information: (1) the total actual annual tons of the pollutant emitted from each Unit or, for Units sharing a common stack, the total actual annual tons of the pollutant emitted from each combined stack, within the TVA System and any New CC/CT Units during the prior calendar year; (2) the total actual annual tons of the pollutant emitted from the TVA System and any New CC/CT Units during the prior calendar year; (3) the difference, if any, between the System-Wide Annual Tonnage Limitation for the pollutant in that calendar year and the amount reported in subparagraph (2); and (4) for each pollutant, (a) the annual average emission rate, expressed as lb/mmBTU, for each Unit within the TVA System and any New CC/CT Units in the prior calendar year and (b) the annual average emission rate, expressed as lb/mmBTU, for the entire TVA System and any New CC/CT Units during the prior calendar year. Data submitted pursuant to this subsection shall be based upon CEMS pursuant to Paragraphs 81 and 97.

If TVA was subject to an adjusted System-Wide Annual Tonnage Limitation specified in Paragraphs 68 and 83 in the calendar year covered by the annual report, it shall report the following: (1) the Units at which the adjusted System-Wide Annual Tonnage Limitations in Paragraphs 68 and 83 apply and (2) the adjusted aggregate System-Wide Annual Tonnage Limitation.

B. Continuous Operation of Pollution Control Technology or Combustion Controls

TVA shall report the date that it commenced Continuous Operation of each SCR, FGD, PM Control Device, SNCR, LNB, OFA, and SOFA that TVA is required to Continuously Operate pursuant to this Consent Decree in the calendar year covered by the annual report.

TVA shall report, for any SCR, FGD, PM Control Device, SNCR, LNB, OFA, and SOFA that TVA is required to Continuously Operate during the calendar year covered by the annual report, the duration of any period during which that pollution

control technology or combustion control did not Continuously Operate, including the specific dates and times that such pollution control technology or combustion control did not operate, the reason why TVA did not Continuously Operate such pollution control technology or combustion control, and the measures taken to reduce emissions of the pollutant controlled by such pollution control technology or combustion control.

TVA shall include a statement in each annual report describing the actions it took to optimize the PM Control Devices as required by Paragraph 98 in the relevant calendar year.

C. Installation of NO_x, SO₂, and PM Control Devices

TVA shall report on the progress of construction (including upgrades) of SCRs and FGDs (and new PM Control Devices, if any) required by this Consent Decree including: (1) if construction is not underway, any available information concerning the construction schedule, including the dates of any major contracts executed during the prior calendar year, and any major components delivered during the prior calendar year; (2) if construction is underway, the estimated percent of installation as of the end of the prior calendar year, the current estimated construction completion date, and a brief description of completion of significant milestones during the prior calendar year, including a narrative description of the current construction status (e.g. foundations completed, absorber installation proceeding, all material on-site, new stack erection completed, etc.); (3) a list of all permits needed to construct and operate the device, the date TVA applied for such permits, and the status of the permit applications; and (4) once construction is complete, the dates the equipment was placed in service and any performance/emissions testing that was performed during the prior calendar year. For purposes of the FGD upgrade at Paradise Units 1 and 2, TVA shall demonstrate, with supporting documentation, that the construction activities performed to upgrade the FGDs at Paradise Units 1 and 2 were designed to upgrade the FGDs to a 93% removal efficiency.

D. Unit Retirements

Beginning on April 30 of the year following TVA's obligation pursuant to this Consent Decree to Retire a TVA System Unit, and continuing annually thereafter until all TVA System Units required to be Retired have been Retired, TVA shall report the date it Retired such Unit and a description of the actions TVA took to Retire such Unit within the meaning of Paragraph 51.

E. Repower to Renewable Biomass

If TVA elects the Repower to Renewable Biomass option for a TVA System Unit, in the next annual report following such election, and continuing annually thereafter, TVA shall report on the progress of its efforts to Repower such TVA System Unit including: (1) if construction is not underway, any available information concerning the construction schedule, including the dates of any major contracts executed during the

prior calendar year, and any major components delivered during the prior calendar year; (2) if construction is underway, the estimated percent of installation as of the end of the prior calendar year, the current estimated construction completion date, and a brief description of completion of significant milestones during the prior calendar year, including a narrative description of the current construction status; (3) a list of all permits needed to construct and operate the Repowered Unit, the date TVA applies for such permits, and the status of the permit applications; and (4) once construction is complete, the dates the Repowered Unit was placed in service and any performance/emissions testing that was performed during the prior calendar year.

F. PM Emission Control Optimization Study

Beginning on April 30 of the year following TVA's obligation to implement the EPA-approved recommendations required by Paragraph 99, TVA shall include a statement describing how it maintained each PM Control Device in accordance with the EPA-approved PM emission control optimization study.

G. Reporting Requirements for NO_x and SO₂ Allowances

1. Reporting Requirements for NO_x and SO₂ Surrendered Allowances

TVA shall report the number of NO_x and SO_2 Allowances that were allocated to it under any programs and the number of NO_x and SO_2 Allowances surrendered pursuant to Paragraphs 75 and 91 for the prior calendar year. TVA shall include the mathematical basis supporting its calculation of NO_x and SO_2 Allowances surrendered.

2. <u>Reporting Requirements for NO_x and SO₂ Super-Compliance</u> Allowances

TVA shall report any Super-Compliance NO_x or SO₂ Allowances that it generated as provided in Paragraphs 78 and 94 for the prior calendar year. TVA shall include the mathematical basis supporting its calculation of Super-Compliance NO_x or SO₂ Allowances. TVA shall also specifically identify the amount, if any, of Super-Compliance NO_x and SO₂ Allowances that TVA generated from Retiring a TVA System Unit that TVA did not utilize for purposes of Paragraph 117 (New CC/CT Units).

H. New CC/CT Units

TVA shall report all information necessary to determine compliance with Paragraphs 117-119. In particular, TVA shall report whether it has applied for a minor NSR permit as described in Subparagraph 117.b and 119.c to construct a New CC/CT Unit, and shall confirm that it timely provided a copy of the permit application to EPA, the States, and the Citizen Plaintiffs as required by Subparagraph 117.c and Paragraph 155. TVA shall report the amount of emission reductions of NO_x and the amount of emission reductions of SO₂ resulting from Retiring a TVA System Unit that TVA utilized as netting credits as provided in Paragraph 117. TVA shall report the amount of emission

reductions of Greenhouse Gases resulting from Retiring a TVA System Unit that TVA utilized as netting credits as provided in Paragraph 119. TVA shall describe how the emissions decreases on which it is relying in order to construct a New CC/CT Unit as provided in Paragraph 117 and 119 are both contemporaneous and otherwise creditable within the meaning of the Clean Air Act and the applicable SIP. In making these demonstrations, TVA shall provide unit-by-unit explanations and calculations. TVA shall include a description of the emission limitations determined by the relevant permitting authority as described in Subparagraph 117.b, and how such emission limitations are consistent with this Consent Decree and Appendix B. TVA shall provide all relevant information, including an appropriate mathematical calculation, to demonstrate that any emission decrease upon which it relied for purposes of Paragraph 117 was not used to generate a Super-Compliance NO_x or SO₂ Allowance in the calendar year in which TVA relies upon such emission reduction and all calendar years thereafter. TVA shall provide all information necessary to determine compliance with the conditions established in Paragraphs 119.b-119.c.

I. NO_x, SO₂, and PM CEMS Malfunction, Repair, or Maintenance

TVA shall report all periods when a CEMS required by this Consent Decree was not operating, including periods of monitor malfunction, repair, or maintenance in the prior calendar year.

J. PM CEMS Data

In an electronic, spreadsheet format, TVA shall submit the data recorded by the PM CEMS, expressed in lb/mmBTU, on a three-hour (3-hour) rolling average basis and a twenty-four-hour (24-hour) rolling average basis, and shall include identification of each 3-hour average and 24-hour average above the 0.030 lb/mmBTU PM Emission Rate for Bull Run Unit 1, Colbert Unit 5, and Kingston Units 1-9, for the prior calendar year. If TVA locates a PM CEMS at another Unit in the TVA System pursuant to Paragraph 110, and such Unit is also subject to a PM Emission Rate pursuant to Paragraph 100, TVA shall also include identification of each 3-hour average exceededance for such Unit.

K. SO₂ Emission Rate at Shawnee

TVA shall submit all data necessary to determine whether emissions of SO₂ from Shawnee Units 1-10 exceeded 1.2 lb/mmBTU in the prior calendar year.

L. PM Stack Tests & PM Emission Rates

TVA shall submit the complete report for the stack tests performed pursuant to Paragraphs 101 and 102 in the prior calendar year. TVA shall describe at which TVA System Units, if any, TVA did not perform a stack test in the relevant calendar year. TVA shall separately identify the stack test reports for the TVA System Units subject to a PM Emission Rate under this Consent Decree.

M. Environmental Mitigation Projects

TVA shall report funds disbursed to the States pursuant to Paragraphs 122-124 and 126 of the Consent Decree in the prior calendar year.

N. Other Unit at Shawnee Becomes Improved Unit

If TVA decides to make an Other Unit at the Shawnee Plant an Improved Unit, TVA shall so state in the next annual report it submits after making such decision, and shall comply with the reporting requirements specified in Section I.C of this Appendix and any other reporting or notice requirements in accordance with the Consent Decree.

O. Emission Reductions Greater than those Required Under this Consent Decree

TVA shall report whether, in the relevant calendar year, it claimed to have achieved emission reductions at a particular TVA System Unit that are greater than those emission reductions required under this Consent Decree for the particular TVA System Unit as provided in Paragraph 116. If TVA did not claim to have achieved emission reductions at a particular TVA System Unit that are greater than those emission reductions required under this Consent Decree, it shall so state. If TVA did, for any purpose, claim to achieve emission reductions at a particular TVA System Unit that are greater than those required under this Consent Decree for that particular TVA System Unit, TVA shall include a description of how it achieved such emission reductions, including a mathematical calculation in support of the claimed emission reductions, an explanation of how such emission reductions are greater than those required under this Consent Decree, and the manner in which such emission reductions were either relied upon or used for purposes of permitting actions, non-permitting actions, or otherwise.

II. Deviation Reports

TVA shall report all deviations from the requirements of the Consent Decree that occur during the calendar year covered by the annual report, identifying the date and time that the deviation occurred, the date and time the deviation was corrected, the cause of any corrective actions taken for each deviation, if necessary, and the date that the deviation was initially reported under Paragraph 156.

III. Submission Pending Review

In each annual report, TVA shall include a list of all plans or submissions made pursuant to this Consent Decree during the calendar year covered by the annual report and all prior calendar years since the Consent Decree Obligation Date, the date(s) such plans or submissions were submitted to EPA for review or approval, and shall identify which, if any, are still pending review and approval by EPA upon the date of the submission of the annual report.

IV. Other Information Necessary to Determine Compliance

To the extent that information not expressly identified herein is necessary to determine TVA's compliance with the requirements of this Consent Decree for the calendar year covered by the annual report, and such information has not otherwise been submitted, TVA shall provide such information as part of the annual report required pursuant to Section III.I (Periodic Reporting) of the Consent Decree and TVA shall provide such other information that is deemed necessary by EPA in consultation with the States.

V. Information Previously Submitted under Title V Permitting Requirements

In any periodic progress report submitted pursuant to Section III.I (Periodic Reporting) of the Consent Decree and this Appendix, TVA may incorporate by reference information previously submitted under its Title IV or Title V permitting requirements, provided that TVA attaches the Title IV and/or Title V permit report, or the relevant portion thereof, and provides a specific reference to the provisions of the Title IV and/or Title V permit report that are responsive to the information required in the periodic progress report.

APPENDIX B

EMISSION LIMITATIONS FOR NEW CC/CT UNITS

This Appendix B sets forth emission limitations for certain regulated NSR pollutants for the purpose of constructing New CC/CT Units pursuant to Paragraph 117 of the Consent Decree. The emission limitations set forth in this Appendix serve solely as the minimum stringency for emission limitations to be determined by the relevant permitting authority for such New CC/CT Units as described in Paragraph 117, and shall not be presumed to be BACT or LAER. Although the permitting authority as part of the permitting action described in Paragraph 117 of the Consent Decree shall not determine BACT or LAER to be less stringent than the emission limitations set forth herein, nothing in the Consent Decree or this Appendix shall prevent the permitting authority from establishing more stringent emission limitations than those set forth in this Appendix. For purposes of the permitting action described in Paragraph 117 of the Consent Decree, TVA shall not assert that the Consent Decree (including this Appendix) supports imposing a BACT or LAER emission limitation that is no more stringent than the emission limitations set forth herein.

The permitting authority will determine BACT and LAER, as appropriate, for NO_x, SO₂, VOC, PM, PM₁₀, and PM_{2.5} for all periods of operation, including startup, shutdown, combustion tuning, and fuel switching as part of the minor NSR permitting action described in Paragraph 117. The emission limitations only for NO_x and VOC described in this Appendix do not apply during startup, shutdown, combustion tuning, and fuel switching. For purposes of startup and shutdown, the permitting authority will consider appropriate technologies, methodologies, and other practices to reduce or minimize emissions during such events (such as the use of an auxiliary boiler to preheat the catalyst, the use of Rapid Start Process, and by limiting the number and duration of startups and shutdowns, among other things) as part of the BACT/LAER analysis. In addition to any other limitations determined by the permitting authority, combustion tuning shall be limited to no more than four (4) hours per event and the total event hours in a calendar year shall not exceed twenty (20) hours. The permitting authority shall require TVA to include advance notice of the details of such combustion tuning event and the proposed tuning schedule. An event, for purposes of the 4-hour event limit, shall begin to run when TVA first commences the combustion tuning process at a unit and shall conclude once TVA has completed all tuning-related activities and returns the unit to normal operation. For purposes of this Appendix, and in addition to any other limitations determined by the permitting authority, the type of fuel switching for which the NO_x and VOC emission limitations described in this Appendix do not apply shall be for oil-to-gas switching not to exceed thirty (30) minutes per each oil-to-gas fuel switch and gas-to-oil switching not to exceed fifteen (15) minutes per each gas-to-oil fuel switch.

The New CC/CT Units constructed pursuant to Paragraph 117 of the Consent Decree shall combust Natural Gas as the primary fuel, which shall contain no more than one (1) grain sulfur per one hundred (100) standard cubic feet ("Gr S/100 SCF"). Ultra-Low Sulfur Diesel ("ULSD") Fuel Oil containing no more than 0.0015% sulfur by weight may be used as an alternate fuel, provided that the use of such fuel is limited to no more than five hundred (500)

hours during any calendar year or one hundred (100) hours during any calendar year, as specified in the Tables below. Units subject to an ULSD Fuel Oil operational limitation of 100 hours during any calendar year shall only combust ULSD Fuel Oil for either Testing or during periods of Natural Gas Curtailment. For purposes of this Appendix, the term "Testing" shall mean the infrequent start-up of a unit not for purposes of generating electricity but to ensure that the unit is physically capable of operating. For purposes of this Appendix, the term "Natural Gas Curtailment" shall mean a restriction or limitation imposed by a third-party beyond TVA's control on TVA's ability to obtain or use Natural Gas. If TVA Retires one or more of the Units at the Allen Fossil Plant identified in Paragraph 63 of the Consent Decree and seeks to construct a New CC/CT Unit co-located at the Allen Fossil Plant pursuant to Paragraph 117 of the Consent Decree, then, in addition to Natural Gas and ULSD Fuel Oil, TVA may also request that the permitting authority authorize it to co-fire biogas from the Memphis Public Works waste treatment plant at such New CC/CT Units, which is the same biogas that TVA co-fires at the Allen Fossil Plant as of the Consent Decree Obligation Date of this Consent Decree.

The Tables in this Appendix do not contain emission limitations for filterable or condensable PM_{10} or condensable $PM_{2.5}$. The permitting authority will determine BACT and LAER, as appropriate, for all fractions of PM that are regulated NSR pollutants as of the time of the permitting action, including filterable and condensable $PM_{2.5}$, as part of the permitting process required pursuant to Paragraph 117 of the Consent Decree.

The NO_x emission limitations in Sections B, C, and D do not require the installation of selective catalytic reduction (SCR) technology. However, the Parties recognize that SCR is technically feasible for CT units.

Tables A.1 and A.2 set forth the minimum stringency emission limitations for New CC Units. Tables B.1, B.2, C.1, C.2, D.1, and D.2 set forth the minimum stringency emission limitations for New CT Units. As set forth in Tables B.1 and C.1, New CT Units located in an attainment area shall either be subject to an overall hours of operation limitation of no more than thirteen hundred (1,300) hours in a rolling twelve-month (12-month) period or have no overall hours of operation limitation. As set forth in Tables A.2, B.2, C.2, and D.2, all New CC/CT Units (whether in attainment or nonattainment areas) will have a limitation on the use of ULSD.

A. Emission Limitations for New CC Units

As part of the minor NSR permitting action described in Paragraph 117 of the Consent Decree, the permitting authority shall establish emission limitations that are no less stringent than those set forth in Table A.1 for New CC Units firing Natural Gas and Table A.2 for New CC Units firing ULSD Fuel Oil. Additionally, as part of the minor NSR permitting action described in Paragraph 117 of the Consent Decree, the permitting authority shall impose a condition that limits the New CC Units to firing no more than 500 hours of ULSD Fuel Oil in a calendar year.

Table A.1 – Emission Limitations for Natural Gas-fired operation

Pollutant	Emission Rate	Averaging Period	Periods of Operation Subject to an Alternate BACT/LAER Emission Limitation to Be Established by the Permitting Authority as Part of the Permitting Process
NO_x	2.0 parts per million (ppm) at 15% O ₂	8-hour rolling average	Startup, shutdown, combustion tuning, fuel switching
SO_2	1 Gr S/100 SCF	12-month rolling average	All periods of operation are subject to the emission limitation set forth in this Table (hereinafter referred to as "NA")
Filterable PM _{2.5}	0.005 lb/mmBTU	Average of three 1- hour runs from stack test in accordance with reference method	NA
VOC	1.5 ppm at 15% O ₂ without duct firing 2.0 ppm at 15% O ₂ with duct firing	Average of three 1- hour runs from stack test in accordance with reference method	Startup, shutdown, combustion tuning, fuel switching

Table A.2 – Emission Limitations for ULSD Fuel Oil-fired operation (not to exceed 500 hours during any calendar year)

Pollutant	Emission Rate	Averaging Period	Periods of Operation Subject to an Alternate BACT/LAER Emission Limitation to Be Established by the Permitting Authority as Part of the Permitting Process
NO _x	8.0 ppm at 15% O ₂	8-hour rolling average	Startup, shutdown, combustion tuning, fuel switching
SO_2	15 ppm S	NA	NA
Filterable PM _{2.5}	0.015 lb/mmBTU	Average of three 1- hour runs from stack test in accordance with reference method	NA
VOC	4.0 ppm at 15% O ₂	Average of three 1- hour runs from stack test in accordance with reference method	Startup, shutdown, combustion tuning, fuel switching

B. Emission Limitations for New CT Units Located in Attainment Areas Subject to an Operational Limitation of 1,300 Hours in a 12-Month Period

As part of the minor NSR permitting action described in Paragraph 117 of the Consent Decree, the permitting authority shall establish emission limitations that are no less stringent than those set forth in: (i) Table B.1 for New CT Units firing Natural Gas if they are located in an attainment area and are subject to an overall hours of operation limitation of no more than 1,300 hours in a rolling 12-month period and (ii) Table B.2 for New CT Units firing ULSD Fuel Oil if they are located in an attainment area and are subject to an overall hours of operation limitation of no more than 1,300 hours in a rolling 12-month period, and which must be subject to an operational limitation for ULSD Fuel Oil that limits the New CT Units to firing no more than 500 hours of ULSD Fuel Oil in a calendar year.

Table B.1 – Emission Limitations for Natural Gas-fired Operation

Pollutant	Emission Rate	Averaging Period	Periods of Operation Subject to an Alternate BACT/LAER Emission Limitation to Be Established by the Permitting Authority as Part of the Permitting Process
NO_x	9.0 ppm at 15% O ₂	8-hour rolling average	Startup, shutdown, combustion tuning, fuel switching
SO_2	1 Gr S/100 SCF	12-month rolling average	NA
Filterable PM _{2.5}	0.005 lb/mmBTU	Average of three 1- hour runs from stack test in accordance with reference method	NA
VOC	3.0 ppm at 15% O ₂	Average of three 1- hour runs from stack test in accordance with reference method	Startup, shutdown, combustion tuning, fuel switching

Table B.2 – Emission Limitations for ULSD Fuel Oil-fired Operation (not to exceed 500 hours during any calendar year)

Pollutant	Emission Rate	Averaging Period	Periods of Operation Subject to an Alternate BACT/LAER Emission Limitation to Be Established by the Permitting Authority as Part of the Permitting Process
NO _x	42 ppm at 15% O ₂	8-hour rolling average	Startup, shutdown, combustion tuning, fuel switching
SO_2	15 ppm S	NA	NA
Filterable	0.015 lb/mmBTU	Average of three 1-	NA

Pollutant	Emission Rate	Averaging Period	Periods of Operation Subject to an Alternate BACT/LAER Emission Limitation to Be Established by the Permitting Authority as Part of the Permitting Process
PM _{2.5}		hour runs from stack test in accordance with reference method	
VOC	5.0 ppm at 15% O ₂	Average of three 1- hour runs from stack test in accordance with reference method	Startup, shutdown, combustion tuning, fuel switching

C. Emission Limitations for New CT Units Located in Attainment Areas with No Hours of Operation Limit

As part of the minor NSR permitting action described in Paragraph 117 of the Consent Decree, the permitting authority shall establish emission limitations that are no less stringent than those set forth in: (i) Table C.1 for New CT Units firing Natural Gas if they are located in an attainment area and are not subject to an overall hours of operation limitation of no more than 1,300 hours in a rolling 12-month period and (ii) Table C.2 for New CT Units firing ULSD Fuel Oil if they are located in an attainment area and are not subject to an overall hours of operation limitation of no more than 1,300 hours in a rolling 12-month period, and which must be subject to an operational limitation for ULSD Fuel Oil that limits the New CT Units to firing no more than 100 hours of ULSD Fuel Oil in a calendar year, and further limiting the use of ULSD Fuel Oil at such New CT Units for purposes of Testing or during periods of Natural Gas Curtailment only. If the permitting authority, as part of the minor NSR permitting action for a New CT Unit firing ULSD Fuel Oil to be located in an attainment area with no overall hours of operation limitation, requires TVA to install and operate an SCR and achieve a NO_x emission rate of no greater than 6.0 ppm at 15% O₂ over an eight-hour (8-hour) rolling average rather than 42 ppm at 15% O₂ over an 8-hour rolling average as specified in Table C.2 below, then the 500 hour calendar year operational limitation described in Section B shall apply instead of the 100 hour calendar year operational limitation specified in this Section C.

Table C.1 – Emission Limitations for Natural Gas-fired Operation

Pollutant	Emission Rate	Averaging Period	Periods of Operation Subject to an Alternate BACT/LAER Emission Limitation to Be Established by the Permitting Authority as Part of the Permitting Process
NO _x	5.0 ppm at 15% O ₂	8-hour rolling average	Startup, shutdown, combustion tuning, fuel switching
SO_2	1 Gr S/100 SCF	12-month rolling average	NA

Pollutant	Emission Rate	Averaging Period	Periods of Operation Subject to an Alternate BACT/LAER Emission Limitation to Be Established by the Permitting Authority as Part of the Permitting Process
Filterable PM _{2.5}	0.005 lb/mmBTU	Average of three 1- hour runs from stack test in accordance with reference method	NA
VOC	1.5 ppm at 15% O ₂	Average of three 1- hour runs from stack test in accordance with reference method	Startup, shutdown, combustion tuning, fuel switching

Table C.2 – Emission Limitations for ULSD Fuel Oil-fired Operation (not to exceed 100 hours during any calendar year, and only for either Testing or Natural Gas Curtailment)

Pollutant	Emission Rate	Averaging Period	Periods of Operation Subject to an Alternate BACT/LAER Emission Limitation to Be Established by the Permitting Authority as Part of the Permitting Process
NO _x	42 ppm at 15% O ₂	8-hour rolling average	Startup, shutdown, combustion tuning, fuel switching
SO_2	15 ppm S	NA	NA
Filterable PM _{2.5}	0.015 lb/mmBTU	Average of three 1- hour runs from stack test in accordance with reference method	NA
VOC	4.0 ppm at 15% O ₂	Average of three 1- hour runs from stack test in accordance with reference method	Startup, shutdown, combustion tuning, fuel switching

D. Emission Limitations for New CT Units Located In Nonattainment Areas With or Without an Hours of Operation Limit

As part of the minor NSR permitting action described in Paragraph 117 of the Consent Decree, the permitting authority shall establish emission limitations that are no less stringent than those set forth in: (i) Table D.1 for New CT Units firing Natural Gas if they are located in a nonattainment area and (ii) Table D.2 for New CT Units firing ULSD Fuel Oil if they are located in a nonattainment area and which must be subject to an operational limitation for ULSD Fuel Oil that limits the New CT Units to firing no more than 100 hours of ULSD Fuel Oil in a calendar year, and further limiting the use of ULSD Fuel Oil at such New CT Units for purposes of Testing or during periods of Natural Gas Curtailment only. If the permitting authority, as part

of the minor NSR permitting action for a New CT Unit firing ULSD Fuel Oil to be located in a nonattainment area, requires TVA to install and operate an SCR and achieve a NO_x emission rate of no greater than 6.0 ppm at 15% O_2 over an 8-hour rolling average rather than 42 ppm at 15% O_2 over an 8-hour rolling average as specified in Table D.2 below, then the 500 hour calendar year operational limitation described in Section B shall apply instead of the 100 hour calendar year operational limitation specified in this Section D.

Table D.1 – Emission Limitations for Natural Gas-fired Operation

Pollutant	Emission Rate	Averaging Period	Periods of Operation Subject to an Alternate BACT/LAER Emission Limitation to Be Established by the Permitting Authority as Part of the Permitting Process
NO_x	5.0 ppm at 15% O ₂	8-hour rolling average	Startup, shutdown, combustion tuning, fuel switching
SO_2	1 Gr S/100 SCF	12-month rolling average	NA
Filterable PM _{2.5}	0.005 lb/mmBTU	Average of three 1- hour runs from stack test in accordance with reference method	NA
VOC	1.5 ppm at 15% O ₂	Average of three 1- hour runs from stack test in accordance with reference method	Startup, shutdown, combustion tuning, fuel switching

Table D.2 – Emission Limitations for ULSD Fuel Oil-fired Operation (not to exceed 100 hours during any calendar year, and only for either Testing or Natural Gas Curtailment)

Pollutant	Emission Rate	Averaging Period	Periods of Operation Subject to an Alternate BACT/LAER Emission Limitation to Be Established by the Permitting Authority as Part of the Permitting Process
NO _x	42 ppm at 15% O ₂	8-hour rolling average	Startup, shutdown, combustion tuning, fuel switching
SO_2	15 ppm S	NA	NA
Filterable PM _{2.5}	0.015 lb/mmBTU	Average of three 1- hour runs from stack test in accordance with reference method	NA

Pollutant	Emission Rate	Averaging Period	Periods of Operation Subject to an Alternate BACT/LAER Emission Limitation to Be Established by the Permitting Authority as Part of the Permitting Process
VOC	4.0 ppm at 15% O ₂	Average of three 1- hour runs from stack test in accordance with reference method	Startup, shutdown, combustion tuning, fuel switching



PM_{2.5} SIP (Supplemental)

Appendix C

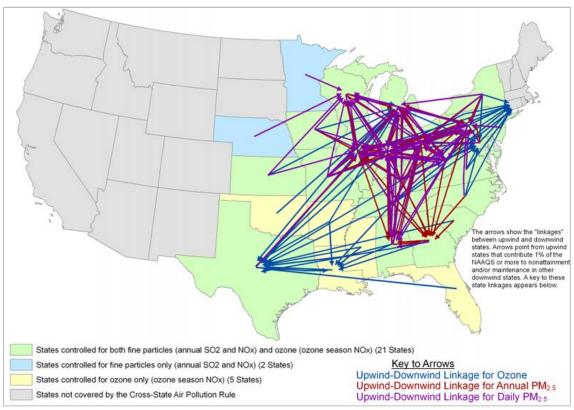
Back-Trajectory Analysis

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Back-Trajectory Analysis

This section provides back-trajectory data to illustrate the potential contribution of upwind/surrounding EGU emissions on SWPA.

Below is a map showing the possible upwind-downwind pollutant linkages between states, calculated as part of the EPA CSAPR analysis.



CSAPR-Controlled States Upwind-Downwind Linkages

The CSAPR analysis showed linkages between several states in the Mid-Atlantic, Midwest, and Southeast.

ACHD used the HYSPLIT model to examine days when sulfates were highest in 2012. For this analysis, the Lawrenceville site was used since it samples CSN speciation data at the highest frequency (1-in-3) of the SWPA sites (Liberty, Florence, and Greensburg are 1-in-6 day samplers).

HYSPLIT is available online at: http://ready.arl.noaa.gov/HYSPLIT.php

Lawrenceville top 10 sulfate and concurrent FRM concentrations for 2012 are given below in $\mu g/m^3$.

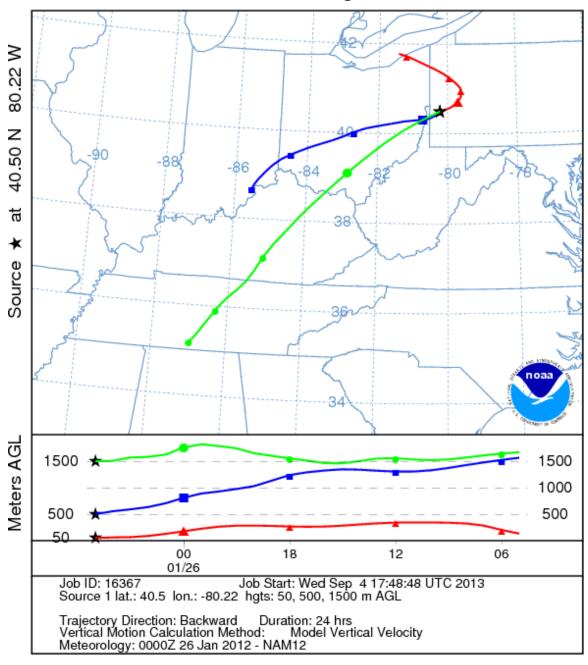
Date	Sulfate	FRM
1/25/12	4.89	16.8
5/27/12	4.30	18.5
6/20/12	4.34	18.2
6/29/12	5.70	22.9
7/23/12	6.08	18.2
8/4/12	4.42	18.0
8/22/12	4.37	11.7
8/25/12	5.22	17.3
8/28/12	4.31	11.8
12/29/12	4.97	15.0

These dates were run in HYSPLIT to examine the potential upwind/surrounding impacts on SWPA. 24-hour backward-trajectories using NAM meteorological data were run at 3 heights: 50, 500, 1500 m AGL.

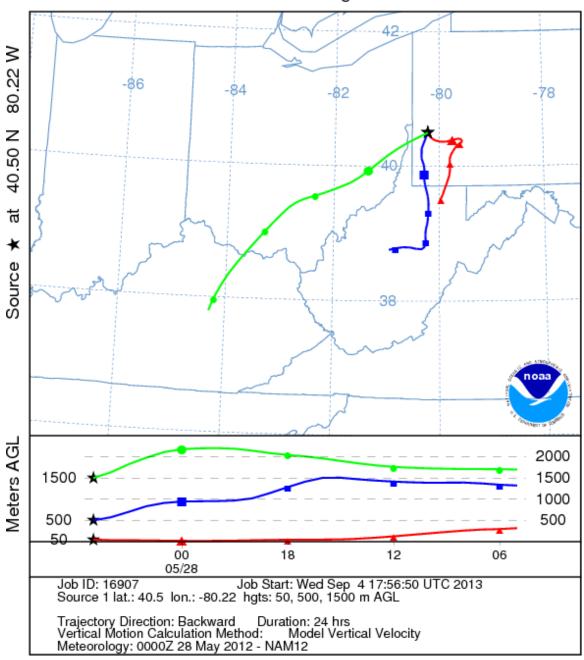
The back-trajectories show a widespread influence of pollutants from upwind/surrounding states on SWPA.

Note: ACHD monitored data is stored at Local Standard Time (LST), while HYPLIT is run in Coordinated Universal Time (UTC), 5 hours ahead. Midnight times LST on the HYPLIT trajectories are shown as 0500 UTC.

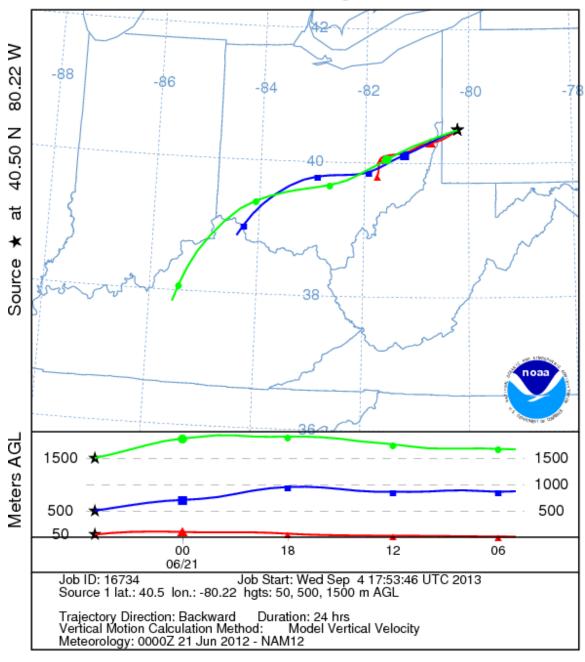
NOAA HYSPLIT MODEL Backward trajectories ending at 0500 UTC 26 Jan 12 NAM Meteorological Data



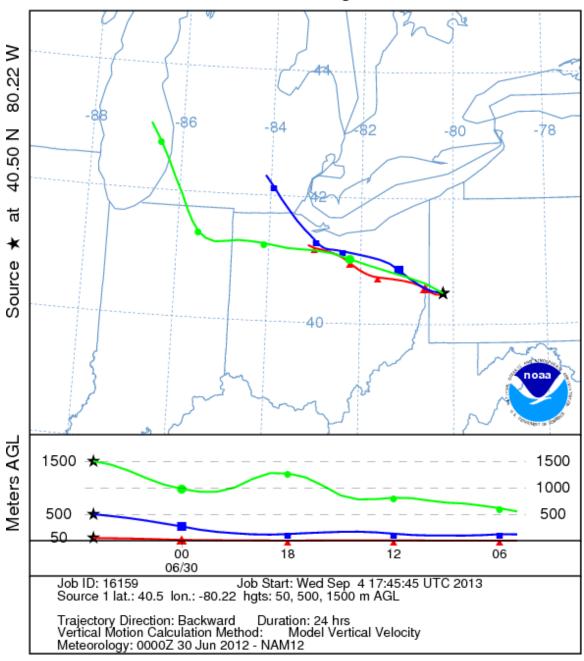
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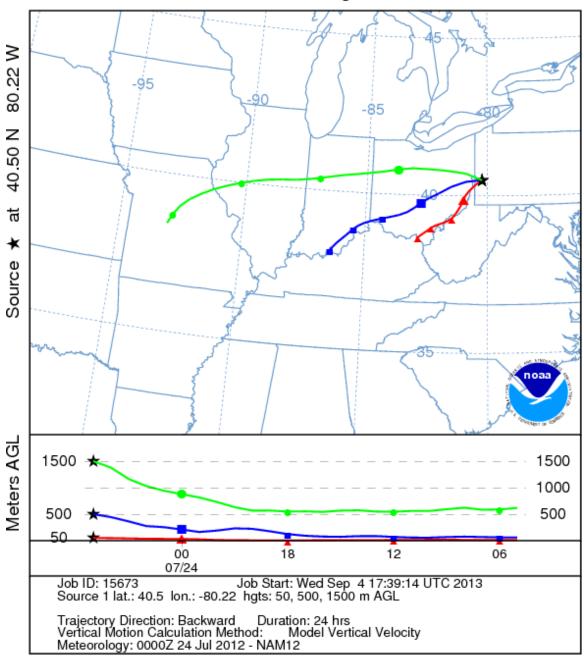
NOAA HYSPLIT MODEL Backward trajectories ending at 0500 UTC 21 Jun 12 NAM Meteorological Data



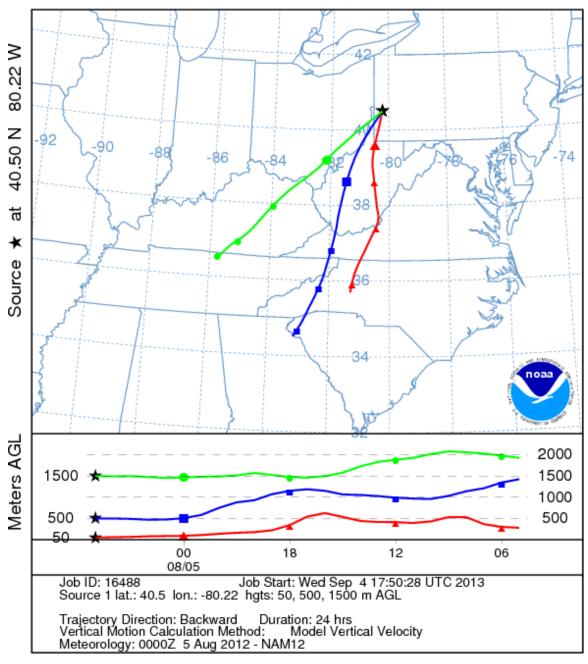
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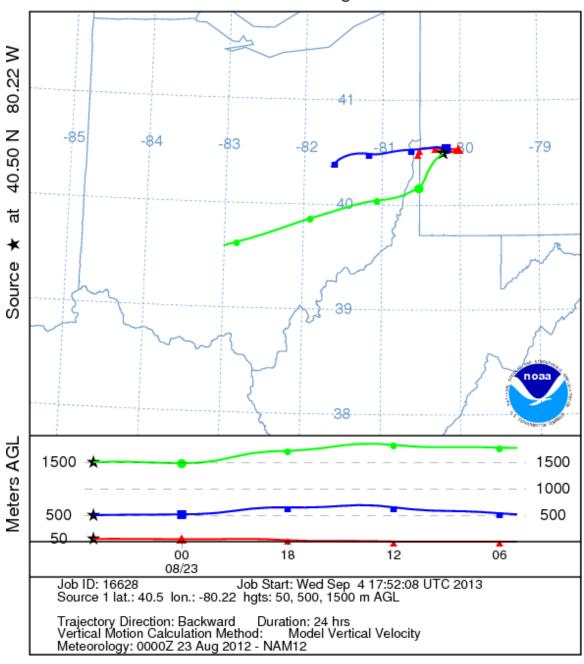
NOAA HYSPLIT MODEL Backward trajectories ending at 0500 UTC 24 Jul 12 NAM Meteorological Data



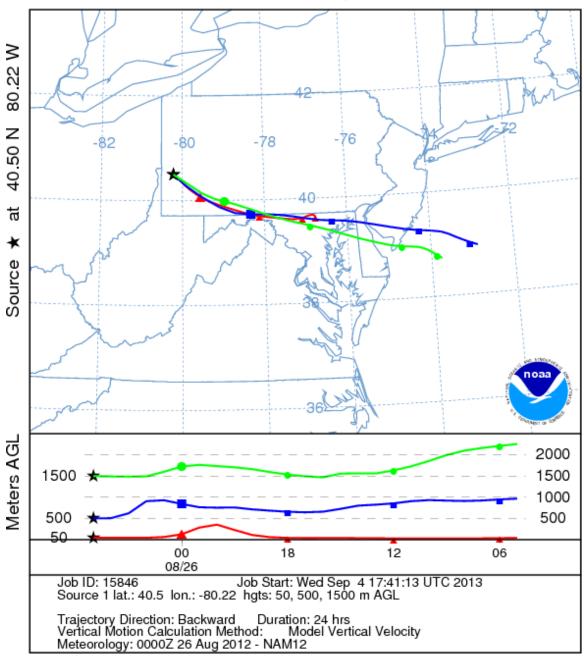
NOAA HYSPLIT MODEL Backward trajectories ending at 0500 UTC 05 Aug 12 NAM Meteorological Data



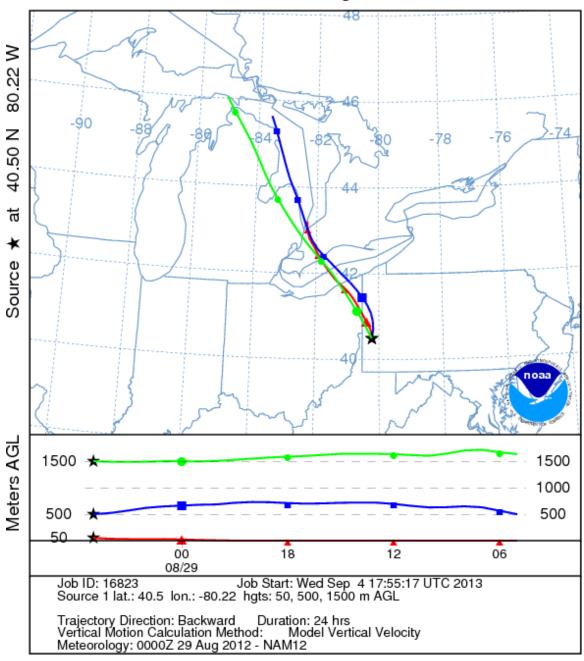
NOAA HYSPLIT MODEL Backward trajectories ending at 0500 UTC 23 Aug 12 NAM Meteorological Data



NOAA HYSPLIT MODEL Backward trajectories ending at 0500 UTC 26 Aug 12 NAM Meteorological Data



NOAA HYSPLIT MODEL Backward trajectories ending at 0500 UTC 29 Aug 12 NAM Meteorological Data



NOAA HYSPLIT MODEL Backward trajectories ending at 0500 UTC 30 Dec 12 NAM Meteorological Data

