APPENDIX I

2018 PROJECTED SULFUR DIOXIDE EMISSION REDUCTIONS BASED ON CURRENT AND FUTURE SULFUR DIOXIDE EMISSION LIMITS

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2018 PROJECTED SULFUR DIOXIDE EMISSION REDUCTIONS FOR SOURCES IN NONATTAINMENT AREAS

Modeled Source	Emission Unit	Current SO2 Emission Limits		2011 Allowable SO2 Emissions	Future SO2 Emission Limits		2018 Allowable SO2 Emissions	Projected SO2 Emission Reductions (tons/yr)
		(lbs/ MMBtu)	(lbs/hr)	(tons/yr)	(lbs/ MMBtu)	(lbs/hr)	(tons/yr)	
Hoosier Energy - Ratts	Boiler 1	2.00		10000.00	0.05	58	254.04	9491.92
	Boiler 2	2.00			0.05	58	254.04	
	Auxiliary Boiler			0.45	0.05	1	0.45	0.00
IPL - Petersburg	Unit 1	6.00		57816.00	0.15	330	1445.40	56370.60
	Unit 2	6.00		108904.00	0.15	621.6	2722.61	106181.39
	Unit 3	1.20		16986.00	0.37	2049.8	8978.12	8007.88
	Unit 4	1.20		17016.00	0.35	1942.5	8508.15	8507.85
	PB2	500 Hour Operating Limit			500 Hour Operating Limit			0.00
	PB3							
	PB4							
Belmont Advanced Wastewater Treatment Plant	Incinerator 1	2.00 lbs/ton	14.19	62.15	8.0 lbs/ton	12.5	54.75	193.86
	Incinerator 2	2.00 lbs/ton	14.19	62.15				
	Incinerator 3	2.00 lbs/ton	14.19	62.15				
	Incinerator 4	2.00 lbs/ton	14.19	62.15				
	Incinerator 5	Not Operating						0.00
	Incinerator 6							0.00
	Incinerator 7							0.00
	Incinerator 8							0.00
Citizens Thermal	Boiler 11	2.1		2954.76	0.2	73.6	322.37	1926.34
	Boiler 13	2.1			0.2	80.6	353.03	
	Boiler 14	2.1			0.2	80.6	353.03	
	Boiler 12	2.1		1.15	0.0006	0.2634	1.15	0.00
	Boiler 15	2.1		0.89	0.0006	0.204	0.89	0.00
	Boiler 16	2.1		0.89	0.0006	0.204	0.89	0.00
	Boiler 17	0.3		594.33	0.3	72.6	317.99	276.34
	Boiler 18	0.3		594.33	0.3	72.6	317.99	276.34

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		(lbs/ MMBtu)	(lbs/hr)	(tons/yr)	(lbs/ MMBtu)	(lbs/hr)	(tons/yr)	
IPL - Harding	Boiler 9	Not Operating						0.00
	Boiler 10							0.00
	Boiler 50	4.7	4780	20936.40	0.0006	0.6102	2.67	20933.73
	Boiler 60	4.7	4780	20936.40	0.0006	0.6102	2.67	20933.73
	Boiler 70	5.3	21851.9	95711.32	0.0006	2.4738	10.84	95700.49
	Gas Turbine 1			396.8	0.1	29.9	130.96	265.84
	Gas Turbine 2			396.8	0.1	29.9	130.96	265.84
	Gas Turbine 3	Not Operating						0.00
	Gas Turbine 4			45.25	0.1	87.5	45.25	0.00
	Gas Turbine 5				0.1	86.7		
	Gas Turbine 6			5.54	0.0006	0.996	5.5	0.04
	Emergency Generator	500 Hour Operating Limit			500 Hour Operating Limit			0.00
Quemetco	Main Stack S-100		73.2	320.62		52	227.76	1594.32
	WESP Stack		342.8	1501.46				
Rolls Royce	Boiler 0070-58	2.1	92.4	404.71	0.0015	0.07	0.31	9761.44
	Boiler 0070-59	2.1	92.4	404.71	0.0015	0.07	0.31	
	Boiler 0070-62	2.1	512.4	2244.31	0.0015	0.37	1.62	
	Boiler 0070-63	2.1	512.4	2244.31	0.0015	0.37	1.62	
	Boiler 0070-64	2.1	512.4	2244.31	0.1	2.44	10.69	
	Boiler 0070-65	2.1	512.4	2244.31	0.1	2.44	10.69	
	2 Gas Turbine Engines 0070-66	0.5	107	468.66	0.05	21.4	93.73	374.93
	12 Gas Turbine Engines 0070-67	0.5	163.20	714.82	0.05	32.64	142.96	571.85
	2 Gas Turbine Engines 0070-68a and 0070-68b	0.0006	39.00	0.42	0.0006	0.0468	0.20	0.22
	3 Gas Turbine Engines 0070-68c, 0070-68d, and 0070-68e (2 combustor units each)	0.5	81.60	357.41	0.05	16.32	71.48	285.93
	3 Gas Turbine Engines 0070-69	0.5	40.50	177.39	0.05	8.16	35.74	141.65
	Three Shack Heaters 0070-70	Burn Natural Gas			Burn Natural Gas			0.00
	Generating Turbine 0070-80	Burn Natural Gas or Landfill Gas			Burn Natural Gas or Landfill Gas			0.00
	Rental Generators			1.55	0.0015	0.023	0.10	1.45

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		(lbs/ MMBtu)	(lbs/hr)	(tons/yr)	(lbs/ MMBtu)	(lbs/hr)	(tons/yr)	
Vertellus	70K Boiler 70-2722W	1.25	114.75	12.20	0.2	18.4	80.59	0.00
	30K Boiler 30-2726S	1.25	49.1		0.25	9.8	42.92	
	28K Boiler 28-186N	1.25	46		0.27	9.9	43.36	
	Boiler CB-70K	0.5		39.9	0.0006	0.0547	0.239586	39.66
	BM Furnace BM2724W	1.25	26.3	115.19	0.05	1.1	4.82	110.38
	Box Furnace BX2707V	1.25	20	87.60	0.05	0.8	3.504	84.10
	DAB Furnace 732714	1.25	45	197.10	0.05	2.8	12.264	184.84
	Born Heater 722804	0.05	0.05	0.22	0.05	0.34	1.4892	0.00
	Born Heater Furnace BXS2706Q	0.05	0.05	0.22	0.05	0.3	1.314	0.00
	EP Furnace EP2729Q	1.25	3.8	16.64	0.05	0.15	0.657	15.99
	CB20 CB600-300 Boiler	47 MMCF	1.18	5.17	0.09	2.3	10.074	0.00
	50K CN5-400 Boiler	47 MMCF	2.87	12.57	0.09	5.5	24.09	0.00
	BD Furnace BD2714V	1.25	18.8	82.34	0.05	0.75	3.29	79.06
	Heater BS2740Q	1.25	7.5	32.85	0.05	0.3	1.31	31.54
	Heater BT2728S	1.25	2.2	9.64	0.05	0.3	1.31	8.32
	Furnace HW-925-001	1.25	2	8.76	1.25	12.25	53.66	0.00
	CS Kettle Born Heater	Burn Natural Gas			Burn Natural Gas			0.00
	CS Still Born Heater	Burn Natural Gas			Burn Natural Gas			0.00
	Born Hot Oil Furnace (Process Heater) Unit 2607T	Burn Natural Gas			Burn Natural Gas			0.00
IPL - Eagle Valley	Unit 1 Boiler			2573.80				14421.71
	Unit 2 Boiler							
	Unit 3 Bolier			2047.00				
	Unit 4 Bolier			2895.00				
	Unit 5 Bolier			2895.00				
	Unit 6 boiler			3973.00				
	PR-10 Generator			69.70				
	Combustion Turbine 1				0.0014	3.5588	15.587544	
	Combustion Turbine 2				0.0014	3.5588	15.587544	
	Aux. Boiler				0.0014	0.11102	0.4862676	
	Dew Point Heater				0.0014	0.02912	0.1275456	

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Duke Energy - Wabash River	Unit 6 boiler			51654	0.5	1,499.50	6567.81	45086.19
	Diesel Generator, 7A	500 Hour Operating Limit			500 Hour Operating Limit			0.00
								0.00
	Diesel Generator, 7B	500 Hour Operating Limit			500 Hour Operating Limit			0.00
								0.00
	Diesel Generator, 7C	500 Hour Operating Limit			500 Hour Operating Limit			0.00
								0.00
Combined Cycle Plant	Combustion Turbine			1463	0.195	333.76	1461.87	1.13
sgSolutions	Tail Gas Incinerator			944	--	230	1007.40	0.00
	Process Flare*	500 Hour Operating Limit			500 Hour Operating Limit			0.00
Sony DADC	Unit 001 Kewanee Boiler		0.36	87.6	0.05	0.523	2.29	69.51
	Unit 002 Kewanee Boiler		0.36		0.05	0.523	2.29	
	Unit 003 Burnham Boiler				0.05	0.493	2.16	
	Unit 004 Burnham Boiler				0.05	0.493	2.16	
	Unit 005 Superior Boiler Works Boiler				0.05	0.84	3.68	
	Unit 006 Superior Boiler Works Boiler				0.05	0.84	3.68	
	Unit 018 Boiler				0.05	0.418	1.83	
Taghleef Industries	Murray Iron Works Boiler	0.5	0.51	7.3				6.89
	Murray Iron Works Boiler	0.5	0.51					
	Clayton Standby Boiler	0.5	0.51		0.0015	0.05	0.22	
	Nebraska Boiler	0.5	0.51		0.0015	0.03	0.13	
	Nebraska Boiler-D				0.0006	0.0126	0.06	
Terre Haute Regional Hospital	Boiler 1	0.45	5.625	24.64	0.45	5.625	24.64	0.00
	Boiler 2	0.45	5.625	24.64	0.45	5.625	24.64	0.00
Terre Haute Union Hospital	Boiler 1	0.36	14.08	61.65	0.36	14.08	61.65	0.00
	Boiler 2	0.36	14.08	61.65	0.36	14.08	61.65	0.00
							TOTAL	402203.26