BEFORE THE PUBLIC UTILITIES COMMISSION OF OHIO

)

Columbus Southern Power Company and Ohio Power Company Notice of Filing Greenhouse Gas Report Case No. 12-1217-EL-ECP

NOTICE OF FILING

The Commission's March 16, 2011 Entry in Case No. 10-2985-EL-ACP granted Columbus Southern Power Company and Ohio Power Company¹ (collectively "AEP Ohio") a waiver of the requirement of Rule 4901:1-41-03, Ohio Administrative Code, that AEP Ohio become a participating member in The Climate Registry and report greenhouse gas ("GHG") emissions according to the Commission's GHG Rule, in light of the recent, mandatory federal GHG reporting requirements. The Entry directed AEP Ohio to docket copies of its federal GHG reports with the Commission.² Accordingly, attached hereto are copies of the emission reports from the federal EPA reporting system for AEP Ohio plants located in Ohio.

Respectfully submitted,

<u>/s/ Yazen Alami</u> Steven T. Nourse Yazen Alami American Electric Power Service Corp. 1 Riverside Plaza, 29th Floor Columbus, OH 43215 Tel: (614) 716-1915

¹ By entry issued on March 7, 2012, the Commission approved and confirmed the merger of Columbus Southern Power Company into Ohio Power Company, effective December 31, 2011. *In the Matter of the Application of Ohio Power Company and Columbus Southern Power Company for Authority to Merge and Related Approvals*, Case No. 10-2376-EL-UNC. Accordingly, references herein to Ohio Power Company or AEP Ohio, the surviving entity after the merger, include the predecessor interests of Columbus Southern Power Company.

² The Entry indicated that the Commission would open a new docket for the various Ohio utilities to file their respective federal GHG reports. AEP Ohio has not been able to identify the appropriate docket, and the Commission Staff indicated that opening this new docket would be acceptable for purposes of this submission.

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Attorneys for Columbus Southern Power Company and Ohio Power Company

Certification Statement:

The designated representative or alternate designated representative must sign (i.e., agree to) this certification statement. If you are an agent and you click on "SUBMIT", you are not agreeing to the certification statement, but are submitting the certification statement on behalf of the designated representative or alternate designated representative who is agreeing to the certification statement. An agent is only authorized to make the electronic submission on behalf of the designated representative, not to sign (i.e., agree to) the certification statement.

Facility Name: Picway Facility Identifier: 520007 Facility Reporting Year: 2011 Facility Location: Address: US 23 City: LOCKBOURNE State: OH Postal Code: 43137

Facility Site Details: CO2 Equivalent (excluding biogenic, mtons, Subparts C-HH): 89168.7 CO2 Equivalent (mtons, Subparts NN-PP): 0 Biogenic CO2 (mtons, Subparts C-HH): 357.1 Cogeneration Unit Emissions Indicator: N GHG Report Start Date: 2011-01-01 GHG Report End Date: 2011-12-31 Description of Changes to Calculation Methodology: No changes in 2011. Biodiesel was mixed with fuel oil for main boiler startup/stabilization. Description of Best Available Monitoring Methods Used: Part 75 Biogenic Emissions Indication: Primary NAICS Code: 221112 Second Primary NAICS Code:

Parent Company Details: Parent Company Name: AMERICAN ELECTRIC POWER Address: 1 Riverside Plaza, Columbus, OH 43215 Percent Ownership Interest: 100

Gas Name	Other Gas Name	Gas Quantity	Own Result?				
Biogenic Carbon dioxide		357.1 (Metric Tons)					
Methane		11.49 (Metric Tons)					
Nitrous Oxide		1.672 (Metric Tons)					
Carbon Dioxide		88409.1 (Metric Tons)					

Subpart D: Electricity Generation

Unit Details:

Unit Name : 9 Unit Type : Electricity Generator

Unit Description : Pulverized coal-fired, dry-bottom, wall-fired boiler.

Part 75 Methodology : CEMS Methodology Start Date: 2011-01-01 Methodology End Date: 2011-12-31 Acid Rain Program Indicator: Y

Emission Details:

Annual CO2 Emissions Including Biomass (metric tons): 88766.2 Annual CO2 Emissions Including Biomass (short tons): 97847.0 Annual CO2 Emissions from Biomass (metric tons): 357.1

<u>CEMS Details:</u> Operating Hours CO2 Concentration Substituted: 1 Operating Hours Stack Gas Flow Rate Substituted: 1 Operating Hours Stack Gas Moisture Substituted:

Electricity Fuel Details:

Fuel type : Bituminous CH4 Emissions CO2 Equivalent (metric tons): 241.3 N2O Emissions CO2 Equivalent (metric tons): 518.2

Certification Statement:

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Facility Name: Cardinal Facility Identifier: Facility Reporting Year: 2011 Facility Location: Address: 306 COUNTY ROAD 7 EAST City: BRILLIANT State: OH Postal Code: 43913

Facility Site Details: CO2 Equivalent (excluding biogenic, mtons, Subparts C-HH): 7396525.1 CO2 Equivalent (mtons, Subparts NN-PP): Biogenic CO2 (mtons, Subparts C-HH): 0 Cogeneration Unit Emissions Indicator: N GHG Report Start Date: 2011-01-01 GHG Report End Date: 2011-12-31 Description of Changes to Calculation Methodology: No changes in 2011. Description of Best Available Monitoring Methods Used: Part 75 Biogenic Emissions Indication: Primary NAICS Code: 221112 Second Primary NAICS Code:

Parent Company Details: Parent Company Name: AMERICAN ELECTRIC POWER Address: 1 Riverside Plaza, Columbus, OH 43215 Percent Ownership Interest: 32.8 Parent Company Name: BUCKEYE POWER CO Address: 6677 Busch Blvd., P.O. Box 26036, Columbus, OH 43226-0036 Percent Ownership Interest: 67.2

Subpart C: General Stationary Fuel Combustion

<u>Sas information becaus</u>							
Gas Name	Other Gas Name	Gas Quantity	Own Result?				
Biogenic Carbon dioxide		0 (Metric Tons)					
Methane		2.27 (Metric Tons)					
Nitrous Oxide		0.453 (Metric Tons)					
Carbon Dioxide		55921.4 (Metric Tons)					

<u>Unit Details:</u>

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GHG Summary Report

Unit Name : Aux Boiler Unit 1&2 Unit Type : OB (Boiler, other) Unit Description : <u>Individual Unit Details:</u> Maximum Rated Heat Input Capacity: 652.58 (mmBtu/hr)

Emission Details: Annual Sorbent based CO2 Emissions (metric tons): 0.0 Annual Biogenic CO2 Emissions (metric tons): 0.0 Annual Fossil fuel based CO2 Emissions (metric tons):

Tier Fuel Details:

Fuel : Distillate Fuel Oil No. 2
Tier Name : Tier 2 (Equation C-2a)
Tier Methodology Start Date : 2011-01-01
Tier Methodology End Date : 2011-12-31
Frequency of HHV determinations : Once per fuel lot

Tier 2 Monthly HHV Details :

January	February	March	April	May	June	July	August	September	October	November	December
N	N	N	N	N	N	N	N	N	N	N	N

Fuel Emission Details :

Total CO2	Total CH4	Total N2O	Total CH4	Total N2O
emissions	emissions	emissions	emissions CO2e	emissions CO2e
32110.5 (Metric Tons)	1.30 (Metric Tons)	0.260 (Metric Tons)	27.4 (Metric Tons)	80.8 (Metric Tons)

Unit Name : Aux Boiler Unit 3 Unit Type : OB (Boiler, other) Unit Description : <u>Individual Unit Details:</u> Maximum Rated Heat Input Capacity: 498 (mmBtu/hr)

Emission Details:

Annual Sorbent based CO2 Emissions (metric tons): 0.0 Annual Biogenic CO2 Emissions (metric tons): 0.0 Annual Fossil fuel based CO2 Emissions (metric tons):

<u> Tier Fuel Details:</u>

Fuel : Distillate Fuel Oil No. 2
Tier Name : Tier 2 (Equation C-2a)
Tier Methodology Start Date : 2011-01-01
Tier Methodology End Date : 2011-12-31
Frequency of HHV determinations : Once per fuel lot

Tier 2 Monthly HHV Details :

January	February	March	April	May	June	July	August	September	October	November	December
N	Ν	N	N	N	N	N	N	N	N	Ν	N

Fuel Emission Details :

Total CO2	Total CH4	Total N2O	Total CH4	Total N2O
emissions	emissions	emissions	emissions CO2e	emissions CO2e
22856.5 (Metric Tons)	0.93 (Metric Tons)	0.185 (Metric Tons)	19.5 (Metric Tons)	57.5 (Metric Tons)

Unit Name : GP-Coal Yard Station Heaters Unit Type : OCS (Other combustion source) Unit Description : Other Unit Name : Small Unit Aggregation Details: Highest Maximum Rated Heat Input Capacity: 2.56

Emission Details:

Annual Sorbent based CO2 Emissions (metric tons): 0.0 Annual Biogenic CO2 Emissions (metric tons): 0.0 Annual Fossil fuel based CO2 Emissions (metric tons): 954.4

Tier Fuel Details:

Fuel : Distillate Fuel Oil No. 2
Tier Name : Tier 1 (Equation C-1)
Tier Methodology Start Date : 2011-01-01
Tier Methodology End Date : 2011-12-31

Fuel Emission Details :

Total CO2	Total CH4	Total N2O	Total CH4	Total N2O
emissions	emissions	emissions	emissions CO2e	emissions CO2e
954.4 (Metric Tons)	0.04 (Metric Tons)	0.008 (Metric Tons)	0.8 (Metric Tons)	2.4 (Metric Tons)

Subpart D: Electricity Generation

Gas Information Details

Gas Name	Other Gas Name	Gas Quantity	Own Result?
Biogenic Carbon dioxide		0 (Metric Tons)	
Methane		842.2 (Metric Tons)	
Nitrous Oxide		122.502 (Metric Tons)	
Carbon Dioxide		7284753.8 (Metric Tons)	

Unit Details:

Unit Name: 1

Unit Type : Electricity Generator Unit Description : Part 75 Methodology : CEMS Methodology Start Date: 2011-01-01 Methodology End Date: 2011-12-31 Acid Rain Program Indicator: Y

<u>Emission Details:</u> Annual CO2 Emissions Including Biomass (metric tons): 2399700.1 Annual CO2 Emissions Including Biomass (short tons): 2645189.4 Annual CO2 Emissions from Biomass (metric tons): 0.0

<u>CEMS Details:</u> Operating Hours CO2 Concentration Substituted: 1 Operating Hours Stack Gas Flow Rate Substituted: 0 Operating Hours Stack Gas Moisture Substituted:

Electricity Fuel Details: Fuel type : Bituminous

CH4 Emissions CO2 Equivalent (metric tons): 5826.1 N2O Emissions CO2 Equivalent (metric tons): 12509.7

Unit Name : 3 Unit Type : Electricity Generator Unit Description : Part 75 Methodology : CEMS Methodology Start Date: 2011-01-01 Methodology End Date: 2011-12-31 Acid Rain Program Indicator: Y

Emission Details:

Annual CO2 Emissions Including Biomass (metric tons): 3034100.5 Annual CO2 Emissions Including Biomass (short tons): 3344489.0 Annual CO2 Emissions from Biomass (metric tons): 0.0

CEMS Details:

Operating Hours CO2 Concentration Substituted: 1 **Operating Hours Stack Gas Flow Rate Substituted**: 0 **Operating Hours Stack Gas Moisture Substituted**:

Electricity Fuel Details:

Fuel type : Mixed (Electric Power sector) CH4 Emissions CO2 Equivalent (metric tons): 7366.3 N2O Emissions CO2 Equivalent (metric tons): 15816.8

Unit Name: 2

Unit Type : Electricity Generator **Unit Description :**

Part 75 Methodology : CEMS Methodology Start Date: 2011-01-01 Methodology End Date: 2011-12-31 Acid Rain Program Indicator: Y

Emission Details:

Annual CO2 Emissions Including Biomass (metric tons): 1850953.2 Annual CO2 Emissions Including Biomass (short tons): 2040305.7 Annual CO2 Emissions from Biomass (metric tons): 0.0

CEMS Details:

Operating Hours CO2 Concentration Substituted: 13 **Operating Hours Stack Gas Flow Rate Substituted**: 0 **Operating Hours Stack Gas Moisture Substituted**:

Electricity Fuel Details:

Fuel type : Bituminous CH4 Emissions CO2 Equivalent (metric tons): 4493.8 N2O Emissions CO2 Equivalent (metric tons): 9649.1

Certification Statement:

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Facility Name: Conesville Facility Identifier: 520006 Facility Reporting Year: 2011 Facility Location: Address: STATE ROUTE 16 City: CONESVILLE State: OH Postal Code: 43811

Facility Site Details: CO2 Equivalent (excluding biogenic, mtons, Subparts C-HH): 7377008.5 CO2 Equivalent (mtons, Subparts NN-PP): 0 Biogenic CO2 (mtons, Subparts C-HH): 0 Cogeneration Unit Emissions Indicator: N GHG Report Start Date: 2011-01-01 GHG Report End Date: 2011-12-31 Description of Changes to Calculation Methodology: No changes in 2011. Description of Best Available Monitoring Methods Used: Part 75 Biogenic Emissions Indication: Primary NAICS Code: 221112 Second Primary NAICS Code:

Parent Company Details: Parent Company Name: THE DAYTON POWER & LIGHT CO Address: P.O. Box 1247, Dayton, OH 45401-1247 Percent Ownership Interest: 7.39 Parent Company Name: DUKE ENERGY CORP Address: 526 South Church Street, Charlotte, NC 28202-1802 Percent Ownership Interest: 17.88 Parent Company Name: AMERICAN ELECTRIC POWER Address: 1 Riverside Plaza, Columbus, OH 43215 Percent Ownership Interest: 74.73

Subpart C: General Stationary Fuel Combustion

Gas Information Details

Gas Name	Other Gas Name	Gas Quantity	Own Result?
Biogenic Carbon dioxide		0 (Metric Tons)	
Methane		0.01 (Metric Tons)	
Nitrous Oxide		0.003 (Metric Tons)	
Carbon Dioxide		305.7 (Metric Tons)	

Unit Details:

Unit Name : Coal Yard Used Oil Heater

Unit Type : CH (Comfort heater)

Unit Description : The Conesville Coal Yard utilizes a used oil burner for work area comfort heating. The heater supplies comfort heating by combusting used lubrication oils accumulated from miscellaneous plant equipment. The burner classifies as a Subpart C, Tier

1, stationary source in regards to the Green House Gas rule.

Individual Unit Details: Maximum Rated Heat Input Capacity: 0.5 (mmBtu/hr)

Emission Details:

Annual Sorbent based CO2 Emissions (metric tons): 0.0 Annual Biogenic CO2 Emissions (metric tons): 0.0 Annual Fossil fuel based CO2 Emissions (metric tons):

Tier Fuel Details:

Fuel : Lubricants Tier Name : Tier 1 (Equation C-1) Tier Methodology Start Date : 2011-01-01 Tier Methodology End Date : 2011-12-31

Fuel Emission Details :

Total CO2	Total CH4	Total N2O	Total CH4	Total N2O
emissions	emissions	emissions	emissions CO2e	emissions CO2e
14.9 (Metric Tons)	0.00 (Metric Tons)	0.000 (Metric Tons)	0.0 (Metric Tons)	0.0 (Metric Tons)

Unit Name : GP-Propane Heaters Unit Type : OCS (Other combustion source) Unit Description : Propane fueled space heaters. Other Unit Name : Small Unit Aggregation Details: Highest Maximum Rated Heat Input Capacity: 0.40

Emission Details: Annual Sorbent based CO2 Emissions (metric tons): 0.0 Annual Biogenic CO2 Emissions (metric tons): 0.0 Annual Fossil fuel based CO2 Emissions (metric tons): 290.8

Tier Fuel Details: Fuel : Propane Tier Name : Tier 1 (Equation C-1) Tier Methodology Start Date : 2011-01-01 Tier Methodology End Date : 2011-12-31

Fuel Emission Details :

Total CO2	Total CH4	Total N2O	Total CH4	Total N2O
emissions	emissions	emissions	emissions CO2e	emissions CO2e
290.8 (Metric Tons)	0.01 (Metric Tons)	0.003 (Metric Tons)	0.3 (Metric Tons)	0.9 (Metric Tons)

Subpart D: Electricity Generation

Gas Name	Other Gas Name	Gas Quantity	Own Result?				
Biogenic Carbon dioxide		0 (Metric Tons)					
Methane		846.36 (Metric Tons)					
Nitrous Oxide		123.107 (Metric Tons)					
Carbon Dioxide		7320764.9 (Metric Tons)					

Unit Details:

Unit Name : 6

Unit Type : Electricity Generator

Unit Description : Unit 5 and 6, (sources B007, & B008) are separate, yet identical Combustion Engineering pulverized coal fired dry bottom boilers, having nominal capacities of 4091 mmBtu/hr each, controlled with wet lime FGD SO2 scrubbers, and electrostatic precipitators.

Part 75 Methodology : CEMS Methodology Start Date: 2011-01-01 Methodology End Date: 2011-12-31 Acid Rain Program Indicator: Y

Emission Details:

Annual CO2 Emissions Including Biomass (metric tons): 2364256.4 Annual CO2 Emissions Including Biomass (short tons): 2606119.9 Annual CO2 Emissions from Biomass (metric tons): 0.0

CEMS Details:

Operating Hours CO2 Concentration Substituted: 0 **Operating Hours Stack Gas Flow Rate Substituted**: 0 **Operating Hours Stack Gas Moisture Substituted**:

Electricity Fuel Details:

Fuel type : Bituminous CH4 Emissions CO2 Equivalent (metric tons): 5740.0 N2O Emissions CO2 Equivalent (metric tons): 12324.9

Unit Name : 3 Unit Type : Electricity Generator Unit Description : Unit 3, (source B003) is a Riley model 3403 pulverized coal fired dry bottom boiler, having a nominal capacity of 1862 mmBtu/hr, controlled with an electrostatic precipitator.

Part 75 Methodology : CEMS Methodology Start Date: 2011-01-01 Methodology End Date: 2011-12-31 Acid Rain Program Indicator: Y

Emission Details: Annual CO2 Emissions Including Biomass (metric tons): 210494.0 Annual CO2 Emissions Including Biomass (short tons): 232027.5

Annual CO2 Emissions from Biomass (metric tons): 0.0

<u>CEMS Details:</u> Operating Hours CO2 Concentration Substituted: 0 Operating Hours Stack Gas Flow Rate Substituted: 0 Operating Hours Stack Gas Moisture Substituted:

Electricity Fuel Details:

Fuel type : Bituminous CH4 Emissions CO2 Equivalent (metric tons): 511.0 N2O Emissions CO2 Equivalent (metric tons): 1097.3

Unit Name : 4 Unit Type : Electricity Generator Unit Description : Unit 4, (source B004) is a Combustion Engineering model 7868 pulverized coal fired dry bottom boiler, having a nominal capacity of 7960 mmBtu/hr, controlled with a wet limestone FGD SO2 scrubber, selective catalytic reduction for NOx (SCR), and an electrostatic precipitator Part 75 Methodology : CEMS Methodology Start Date: 2011-01-01 Methodology End Date: 2011-12-31 Acid Rain Program Indicator: Y

Emission Details:

Annual CO2 Emissions Including Biomass (metric tons): 2697202.4 Annual CO2 Emissions Including Biomass (short tons): 2973126.3 Annual CO2 Emissions from Biomass (metric tons): 0.0

CEMS Details:

Operating Hours CO2 Concentration Substituted: 0 **Operating Hours Stack Gas Flow Rate Substituted**: 0 **Operating Hours Stack Gas Moisture Substituted**:

Electricity Fuel Details:

Fuel type : Bituminous CH4 Emissions CO2 Equivalent (metric tons): 6548.4 N2O Emissions CO2 Equivalent (metric tons): 14060.5

Unit Name : 5 Unit Type : Electricity Generator Unit Description : Unit 5 and 6, (sources B007, & B008) are separate, yet identical Combustion Engineering pulverized coal fired dry bottom boilers, having nominal capacities of 4091 mmBtu/hr each, controlled with wet lime FGD SO2 scrubbers, and electrostatic precipitators. Part 75 Methodology : CEMS Methodology Start Date: 2011-01-01 Methodology End Date: 2011-12-31 Acid Rain Program Indicator: Y

Emission Details:

Annual CO2 Emissions Including Biomass (metric tons): 2048812.1 Annual CO2 Emissions Including Biomass (short tons): 2258405.6 Annual CO2 Emissions from Biomass (metric tons): 0.0

CEMS Details:

Operating Hours CO2 Concentration Substituted: 0 **Operating Hours Stack Gas Flow Rate Substituted**: 0 **Operating Hours Stack Gas Moisture Substituted**:

Electricity Fuel Details:

Fuel type : Bituminous CH4 Emissions CO2 Equivalent (metric tons): 4974.2 N2O Emissions CO2 Equivalent (metric tons): 10680.5

Certification Statement:

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Facility Name: Darby Electric Generating Station Facility Identifier: Facility Reporting Year: 2011 Facility Location: Address: 12509 ADKINS ROAD City: MOUNT STERLING State: OH Postal Code: 43143

Facility Site Details: CO2 Equivalent (excluding biogenic, mtons, Subparts C-HH): 24224.3 CO2 Equivalent (mtons, Subparts NN-PP): Biogenic CO2 (mtons, Subparts C-HH): 0 Cogeneration Unit Emissions Indicator: N GHG Report Start Date: 2011-01-01 GHG Report End Date: 2011-12-31 Description of Changes to Calculation Methodology: No changes in 2011. Description of Best Available Monitoring Methods Used: Part 75 Biogenic Emissions Indication: Primary NAICS Code: 221112 Second Primary NAICS Code:

Parent Company Details: Parent Company Name: AMERICAN ELECTRIC POWER Address: 1 Riverside Plaza, Columbus, OH 43215 Percent Ownership Interest: 100

Gas NameOther Gas NameGas QuantityOwn Result?Biogenic Carbon dioxide0 (Metric Tons)Methane0 (Metric Tons)Nitrous Oxide0 (Metric Tons)Carbon Dioxide0 (Metric Tons)

Subpart C: General Stationary Fuel Combustion **Gas Information Details**

Unit Details:

Unit Name : Fuel Gas Heater Unit Type : PRH (Process Heater) Unit Description : <u>Individual Unit Details:</u> Maximum Rated Heat Input Capacity: 9.5 (mmBtu/hr)

Emission Details:

Annual Sorbent based CO2 Emissions (metric tons): 0.0 Annual Biogenic CO2 Emissions (metric tons): 0.0 Annual Fossil fuel based CO2 Emissions (metric tons):

Tier Fuel Details:

Fuel : Natural Gas (Weighted U.S. Average)
Tier Name : Tier 2 (Equation C-2a)
Tier Methodology Start Date : 2011-01-01
Tier Methodology End Date : 2011-12-31
Frequency of HHV determinations : Monthly

Tier 2 Monthly HHV Details :

January	February	March	April	May	June	July	August	September	October	November	December
N	N	N	N	N	N	N	N	N	N	N	N

Fuel Emission Details :

Total CO2	Total CH4	Total N2O	Total CH4	Total N2O
emissions	emissions	emissions	emissions CO2e	emissions CO2e
0.0 (Metric Tons)	0.00 (Metric Tons)	0.000 (Metric Tons)	0.0 (Metric Tons)	0.0 (Metric Tons)

Subpart D: Electricity Generation

Gas Information Details

Gas Name	Other Gas Name	Gas Quantity	Own Result?
Biogenic Carbon dioxide		0 (Metric Tons)	
Methane		0.46 (Metric Tons)	
Nitrous Oxide		0.045 (Metric Tons)	
Carbon Dioxide		24200.7 (Metric Tons)	

Unit Details:

Unit Name : CT3 Unit Type : Electricity Generator Unit Description : Part 75 Methodology : Appendix G, Equation G-4 Methodology Start Date: 2011-01-01 Methodology End Date: 2011-12-31 Acid Rain Program Indicator: Y

Emission Details: Annual CO2 Emissions Including Biomass (metric tons): 5387.6 Annual CO2 Emissions Including Biomass (short tons): 5938.8 Annual CO2 Emissions from Biomass (metric tons): 0.0

Appendix G Equation G4:

Operating Hours Fuel Flow Rate: 0

Operating Hours HHV Substitution: 0

Electricity Fuel Details:

Fuel type : Natural Gas (Weighted U.S. Average) CH4 Emissions CO2 Equivalent (metric tons): 2.1 N2O Emissions CO2 Equivalent (metric tons): 3.1

Unit Name : CT1 Unit Type : Electricity Generator Unit Description : Part 75 Methodology : Appendix G, Equation G-4 Methodology Start Date: 2011-01-01 Methodology End Date: 2011-12-31 Acid Rain Program Indicator: Y

Emission Details: Annual CO2 Emissions Including Biomass (metric tons): 4494.3 Annual CO2 Emissions Including Biomass (short tons): 4954.1 Annual CO2 Emissions from Biomass (metric tons): 0.0

Appendix G Equation G4: Operating Hours Fuel Flow Rate: 0 Operating Hours HHV Substitution: 0

Electricity Fuel Details: Fuel type : Natural Gas (Weighted U.S. Average) CH4 Emissions CO2 Equivalent (metric tons): 1.8 N2O Emissions CO2 Equivalent (metric tons): 2.6

Unit Name : CT6 Unit Type : Electricity Generator Unit Description : Part 75 Methodology : Appendix G, Equation G-4 Methodology Start Date: 2011-01-01 Methodology End Date: 2011-12-31 Acid Rain Program Indicator: Y

Emission Details: Annual CO2 Emissions Including Biomass (metric tons): 3429.7 Annual CO2 Emissions Including Biomass (short tons): 3780.6 Annual CO2 Emissions from Biomass (metric tons): 0.0

Appendix G Equation G4: Operating Hours Fuel Flow Rate: 0 Operating Hours HHV Substitution: 0 Fuel type : Natural Gas (Weighted U.S. Average) CH4 Emissions CO2 Equivalent (metric tons): 1.3 N2O Emissions CO2 Equivalent (metric tons): 2.0

Unit Name : CT4 Unit Type : Electricity Generator Unit Description : Part 75 Methodology : Appendix G, Equation G-4 Methodology Start Date: 2011-01-01 Methodology End Date: 2011-12-31 Acid Rain Program Indicator: Y

Emission Details:

Annual CO2 Emissions Including Biomass (metric tons): 4615.8 Annual CO2 Emissions Including Biomass (short tons): 5088.0 Annual CO2 Emissions from Biomass (metric tons): 0.0

Appendix G Equation G4: Operating Hours Fuel Flow Rate: 0 Operating Hours HHV Substitution: 0

Electricity Fuel Details:

Fuel type : Natural Gas (Weighted U.S. Average) CH4 Emissions CO2 Equivalent (metric tons): 1.8 N2O Emissions CO2 Equivalent (metric tons): 2.7

Unit Name : CT5 Unit Type : Electricity Generator Unit Description : Part 75 Methodology : Appendix G, Equation G-4 Methodology Start Date: 2011-01-01 Methodology End Date: 2011-12-31 Acid Rain Program Indicator: Y

Emission Details: Annual CO2 Emissions Including Biomass (metric tons): 1431.5 Annual CO2 Emissions Including Biomass (short tons): 1577.9 Annual CO2 Emissions from Biomass (metric tons): 0.0

Appendix G Equation G4: Operating Hours Fuel Flow Rate: 0 Operating Hours HHV Substitution: 0

Electricity Fuel Details: Fuel type : Natural Gas (Weighted U.S. Average) CH4 Emissions CO2 Equivalent (metric tons): 0.6 N20 Emissions CO2 Equivalent (metric tons): 0.8

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GHG Summary Report

Unit Name : CT2 Unit Type : Electricity Generator Unit Description : Part 75 Methodology : Appendix G, Equation G-4 Methodology Start Date: 2011-01-01 Methodology End Date: 2011-12-31 Acid Rain Program Indicator: Y

Emission Details: Annual CO2 Emissions Including Biomass (metric tons): 4841.8 Annual CO2 Emissions Including Biomass (short tons): 5337.1 Annual CO2 Emissions from Biomass (metric tons): 0.0

Appendix G Equation G4: Operating Hours Fuel Flow Rate: 0 Operating Hours HHV Substitution: 0

Electricity Fuel Details: Fuel type : Natural Gas (Weighted U.S. Average) CH4 Emissions CO2 Equivalent (metric tons): 1.9 N20 Emissions CO2 Equivalent (metric tons): 2.8

Certification Statement:

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Facility Name: Gen J M Gavin Facility Identifier: 520530 Facility Reporting Year: 2011 Facility Location: Address: OHIO ROUTE 7 City: CHESHIRE State: OH Postal Code: 45620

Facility Site Details: CO2 Equivalent (excluding biogenic, mtons, Subparts C-HH): 17650544 CO2 Equivalent (mtons, Subparts NN-PP): 0 Biogenic CO2 (mtons, Subparts C-HH): 0 Cogeneration Unit Emissions Indicator: N GHG Report Start Date: 2011-01-01 GHG Report End Date: 2011-12-31 Description of Changes to Calculation Methodology: No changes in 2011. Description of Best Available Monitoring Methods Used: Part 75 Biogenic Emissions Indication: Primary NAICS Code: 221112 Second Primary NAICS Code:

Parent Company Details: Parent Company Name: AMERICAN ELECTRIC POWER Address: 1 Riverside Plaza, Columbus, OH 43215 Percent Ownership Interest: 100

Gas Information DetailsGas NameOther Gas NameGas QuantityOwn Result?Biogenic Carbon dioxide0 (Metric Tons)Methane0.36 (Metric Tons)Nitrous Oxide0.075 (Metric Tons)Carbon Dioxide9122.7 (Metric Tons)

Subpart C: General Stationary Fuel Combustion

Unit Details:

Unit Name : GP-Coal Station Heaters 1-10

Unit Type : OCS (Other combustion source)

Unit Description : The Coal Yard utilizes station heaters which provide comfort heat and freeze protection during inclement weather conditions. These heaters are nominally rated at 2.5 mmBtu/hr and are fueled with heating oil which is delivered by an outside vendor

directly into the individual dedicated heater storage tanks. Gavin plant uses the vendor's delivery meter to quantify the fuel consumed. These combustion sources are classified as Subpart C, Tier 1, sources under the Green House Gas rule. **Other Unit Name :**

Other Unit Name :

Small Unit Aggregation Details: Highest Maximum Rated Heat Input Capacity: 2.5

Emission Details: Annual Sorbent based CO2 Emissions (metric tons): 0.0 Annual Biogenic CO2 Emissions (metric tons): 0.0 Annual Fossil fuel based CO2 Emissions (metric tons): 1042.1

Tier Fuel Details:

Fuel : Distillate Fuel Oil No. 2
Tier Name : Tier 1 (Equation C-1)
Tier Methodology Start Date : 2011-01-01
Tier Methodology End Date : 2011-12-31

Fuel Emission Details :

Total CO2	Total CH4	Total N2O	Total CH4	Total N2O
emissions	emissions	emissions	emissions CO2e	emissions CO2e
1042.1 (Metric Tons)	0.04 (Metric Tons)	0.009 (Metric Tons)	0.9 (Metric Tons)	2.6 (Metric Tons)

Unit Name : Aux Boiler 1

Unit Type : OB (Boiler, other)

Unit Description : Babcock and Wilcox model No. PFI-3133 distillate oil-fired (auxillary steam boiler (Unit #1 auxillary steam boiler) having a nominal capacity of 600 mmBtu/hr. **Individual Unit Details:**

Maximum Rated Heat Input Capacity: 600 (mmBtu/hr)

Emission Details:

Annual Sorbent based CO2 Emissions (metric tons): 0.0 Annual Biogenic CO2 Emissions (metric tons): 0.0 Annual Fossil fuel based CO2 Emissions (metric tons):

Tier Fuel Details:

Fuel : Distillate Fuel Oil No. 2 Tier Name : Tier 2 (Equation C-2a) Tier Methodology Start Date : 2011-01-01 Tier Methodology End Date : 2011-12-31 Frequency of HHV determinations : Once per fuel lot

Tier 2 Monthly HHV Details :

January	February	March	April	May	June	July	August	September	October	November	December
Ν	N	N	N	N	N	N	N	Ν	N	N	N

Fuel Emission Details :

Total CO2	Total CH4	Total N2O	Total CH4	Total N2O
emissions	emissions	emissions	emissions CO2e	emissions CO2e
5731.2 (Metric Tons)	0.23 (Metric Tons)	0.047 (Metric Tons)	4.9 (Metric Tons)	14.4 (Metric Tons)

Unit Name : GP-FGD Station Heaters 13-15

Unit Type : OCS (Other combustion source)

Unit Description : The FGD Yard utilizes station heaters which provide comfort heat and freeze protection during inclement weather conditions. These heaters are nominally rated at 0.40 mmBtu/hr and are fueled with Propane which is delivered by an outside vendor directly into the individual dedicated heater storage tanks. Gavin plant uses the vendorâ \in ^{IM}s delivery meter to quantify the fuel consumed. These combustion sources are classified as Subpart C, Tier 1, sources under the Green House Gas rule.

Other Unit Name :

Small Unit Aggregation Details: Highest Maximum Rated Heat Input Capacity: 0.40

Emission Details:

Annual Sorbent based CO2 Emissions (metric tons): 0.0 Annual Biogenic CO2 Emissions (metric tons): 0.0 Annual Fossil fuel based CO2 Emissions (metric tons): 93.6

Tier Fuel Details:

Fuel : Propane Gas Tier Name : Tier 1 (Equation C-1) Tier Methodology Start Date : 2011-01-01 Tier Methodology End Date : 2011-12-31

Fuel Emission Details :

Total CO2	Total CH4	Total N2O	Total CH4	Total N2O
emissions	emissions	emissions	emissions CO2e	emissions CO2e
93.6 (Metric Tons)	0.00 (Metric Tons)	0.001 (Metric Tons)	0.1 (Metric Tons)	0.3 (Metric Tons)

Unit Name : GP-FGD Station Heaters 11-12

Unit Type : OCS (Other combustion source)

Unit Description : The FGD Yard utilizes station heaters which provide comfort heat and freeze protection during inclement weather conditions. These heaters are nominally rated at 3.125 mmBtu/hr and are fueled with Fuel Oil which is delivered by an outside vendor directly into the individual dedicated heaters fuel storage tanks. Gavin plant uses the vendorâ€[™]s delivery meter to quantify the fuel deliverd as consumed. These combustion sources are classified as Subpart C, Tier 1, sources under the Green House Gas rule. **Other Unit Name :**

Small Unit Aggregation Details:

Highest Maximum Rated Heat Input Capacity: 3.125

Emission Details: Annual Sorbent based CO2 Emissions (metric tons): 0.0

Annual Biogenic CO2 Emissions (metric tons): 0.0 Annual Fossil fuel based CO2 Emissions (metric tons): 569.4

Tier Fuel Details:

Fuel : Distillate Fuel Oil No. 2 Tier Name : Tier 1 (Equation C-1) Tier Methodology Start Date : 2011-01-01 Tier Methodology End Date : 2011-12-31

Fuel Emission Details :

Total CO2	Total CH4	Total N2O	Total CH4	Total N2O
emissions	emissions	emissions	emissions CO2e	emissions CO2e
569.4 (Metric Tons)	0.02 (Metric Tons)	0.005 (Metric Tons)	0.5 (Metric Tons)	1.4 (Metric Tons)

Unit Name : Aux Boiler 2 Unit Type : OB (Boiler, other) Unit Description : Babcock and Wilcox model No. PFI-3133 distillate oil-fired (auxillary steam boiler (Unit #2 auxillary steam boiler) having a nominal capacity of 600 mmBtu/hr. Individual Unit Details:

Maximum Rated Heat Input Capacity: 600 (mmBtu/hr)

Emission Details: Annual Sorbent based CO2 Emissions (metric tons): 0.0 Annual Biogenic CO2 Emissions (metric tons): 0.0 Annual Fossil fuel based CO2 Emissions (metric tons):

Tier Fuel Details:

Fuel : Distillate Fuel Oil No. 2
Tier Name : Tier 2 (Equation C-2a)
Tier Methodology Start Date : 2011-01-01
Tier Methodology End Date : 2011-12-31
Frequency of HHV determinations : Once per fuel lot

Tier 2 Monthly HHV Details :

January	February	March	April	May	June	July	August	September	October	November	December
N	N	N	N	N	N	N	N	N	N	N	N

Fuel Emission Details :

Total CO2	Total CH4	Total N2O	Total CH4	Total N2O
emissions	emissions	emissions	emissions CO2e	emissions CO2e
1650.1 (Metric Tons)	0.07 (Metric Tons)	0.013 (Metric Tons)	1.4 (Metric Tons)	4.2 (Metric Tons)

Unit Name : GP-Landfill Shop Building - Heating

Unit Type : OCS (Other combustion source)

Unit Description : The Landfill Shop utilizes station heaters which provide comfort heat and freeze protection during inclement weather conditions. The four heaters are nominally

rated at 0.250 mmBtu/hr and are fueled with propane which is delivered by an outside vendor directly into the individual dedicated heaters. Gavin plant uses the vendorâ \in ^{ms} delivery meter to quantify the fuel consumed. These combustion sources are classified as Subpart C, Tier 1, sources under the Green House Gas rule.

Other Unit Name :

Small Unit Aggregation Details:

Highest Maximum Rated Heat Input Capacity: 0.250

Emission Details:

Annual Sorbent based CO2 Emissions (metric tons): 0.0 Annual Biogenic CO2 Emissions (metric tons): 0.0 Annual Fossil fuel based CO2 Emissions (metric tons): 36.3

Tier Fuel Details:

Fuel : Propane Gas Tier Name : Tier 1 (Equation C-1) Tier Methodology Start Date : 2011-01-01 Tier Methodology End Date : 2011-12-31

Fuel Emission Details :

Total CO2	Total CH4	Total N2O	Total CH4	Total N2O
emissions	emissions	emissions	emissions CO2e	emissions CO2e
36.3 (Metric Tons)	0.00 (Metric Tons)	0.000 (Metric Tons)	0.0 (Metric Tons)	0.1 (Metric Tons)

Subpart D: Electricity Generation

Gas Information Details

Gas Name	Other Gas Name	Gas Quantity	Own Result?
Biogenic Carbon dioxide		0 (Metric Tons)	
Methane		2024.07 (Metric Tons)	
Nitrous Oxide		294.411 (Metric Tons)	
Carbon Dioxide		17507617.6 (Metric Tons)	

Unit Details:

Unit Name : 2

Unit Type : Electricity Generator

Unit Description : The facility consists of two operating electric generating units. Ohio Power Company, dba American Electric Power (AEP), Gavin Plant Unit 1, (source B003) is a Babcock & Wilcox model UP - 102 pulverized coal fired dry bottom boiler, having a nominal capacity of 11,936 mmBtu/hr, controlled with wet lime FGD SO2 scrubber, selective catalytic reduction for NOx (SCR), and an electrostatic precipitator. Unit 2, (source B004) is also an identical Babcock & Wilcox model UP - 102 pulverized coal fired dry bottom boiler, having a nominal capacity of 11,936 mmBtu/hr, controlled with wet lime FGD SO2 scrubber, selective catalytic reduction for NOx (SCR), and an electrostatic precipitator. The steam generators are utilized to supply steam to turbine driven electrical generators at the plant.

Part 75 Methodology : CEMS

Methodology Start Date: 2011-01-01

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GHG Summary Report

Methodology End Date: 2011-12-31

Acid Rain Program Indicator: Y

Emission Details:

Annual CO2 Emissions Including Biomass (metric tons): 8734202.6 Annual CO2 Emissions Including Biomass (short tons): 9627711.5 Annual CO2 Emissions from Biomass (metric tons): 0.0

<u>CEMS Details:</u> Operating Hours CO2 Concentration Substituted: 2 Operating Hours Stack Gas Flow Rate Substituted: 42 Operating Hours Stack Gas Moisture Substituted:

Electricity Fuel Details:

Fuel type : Bituminous	
CH4 Emissions CO2 Equivalent (metric tons): 2	1205.2
N20 Emissions CO2 Equivalent (metric tons): 4	5531.5

Unit Name : 1

Unit Type : Electricity Generator

Unit Description : The facility consists of two operating electric generating units. Ohio Power Company, dba American Electric Power (AEP), Gavin Plant Unit 1, (source B003) is a Babcock & Wilcox model UP - 102 pulverized coal fired dry bottom boiler, having a nominal capacity of 11,936 mmBtu/hr, controlled with wet lime FGD SO2 scrubber, selective catalytic reduction for NOx (SCR), and an electrostatic precipitator. Unit 2, (source B004) is also an identical Babcock & Wilcox model UP - 102 pulverized coal fired dry bottom boiler, having a nominal capacity of 11,936 mmBtu/hr, controlled with wet lime FGD SO2 scrubber, selective catalytic reduction for NOx (SCR), and an electrostatic precipitator The steam generators are utilized to supply steam to turbine driven electrical generators at the plant. **Part 75 Methodology :** CEMS

Methodology Start Date: 2011-01-01 Methodology End Date: 2011-12-31 Acid Rain Program Indicator: Y

Emission Details:

Annual CO2 Emissions Including Biomass (metric tons): 8773415.0 Annual CO2 Emissions Including Biomass (short tons): 9670935.4 Annual CO2 Emissions from Biomass (metric tons): 0.0

CEMS Details:

Operating Hours CO2 Concentration Substituted: 0 **Operating Hours Stack Gas Flow Rate Substituted**: 0 **Operating Hours Stack Gas Moisture Substituted**:

Electricity Fuel Details:

Fuel type : Bituminous CH4 Emissions CO2 Equivalent (metric tons): 21300.4 N2O Emissions CO2 Equivalent (metric tons): 45735.9

Certification Statement:

The designated representative or alternate designated representative must sign (i.e., agree to) this certification statement. If you are an agent and you click on "SUBMIT", you are not agreeing to the certification statement, but are submitting the certification statement on behalf of the designated representative or alternate designated representative who is agreeing to the certification statement. An agent is only authorized to make the electronic submission on behalf of the designated representative, not to sign (i.e., agree to) the certification statement.

Facility Name: Greenville Electric Gen Station Facility Identifier: 520811 Facility Reporting Year: 2011 Facility Location: Address: 5119 SEBRING WARNER ROAD City: GREENVILLE State: OH Postal Code: 45331

Facility Site Details: CO2 Equivalent (excluding biogenic, mtons, Subparts C-HH): 24911.2 CO2 Equivalent (mtons, Subparts NN-PP): 0 Biogenic CO2 (mtons, Subparts C-HH): 0 Cogeneration Unit Emissions Indicator: N GHG Report Start Date: 2011-01-01 GHG Report End Date: 2011-12-31 Description of Changes to Calculation Methodology: No changes in 2011. Description of Best Available Monitoring Methods Used: Part 75 Biogenic Emissions Indication: Primary NAICS Code: 221112 Second Primary NAICS Code:

Parent Company Details: Parent Company Name: BUCKEYE POWER CO Address: 6677 Busch Blvd., P.O. Box 26036, Columbus, OH 43226-0036 Percent Ownership Interest: 100

Gas Information Deta	lis		
Gas Name	Other Gas Name	Gas Quantity	Own Result?
Biogenic Carbon dioxide		0 (Metric Tons)	
Methane		0.47 (Metric Tons)	
Nitrous Oxide		0.046 (Metric Tons)	
Carbon Dioxide		24887.1 (Metric Tons)	

Subpart D: Electricity Generation

Unit Details:

Unit Name : G2CT2 **Unit Type :** Electricity Generator **Unit Description :** This unit is a natural gas simple cycle combustion turbines that is

nominally rated at 25 MW.

Part 75 Methodology : Appendix G, Equation G-4 Methodology Start Date: 2011-01-01 Methodology End Date: 2011-12-31 Acid Rain Program Indicator: Y

Emission Details: Annual CO2 Emissions Including Biomass (metric tons): 3027.7 Annual CO2 Emissions Including Biomass (short tons): 3337.4 Annual CO2 Emissions from Biomass (metric tons): 0.0

Appendix G Equation G4: Operating Hours Fuel Flow Rate: 0 Operating Hours HHV Substitution: 0

Electricity Fuel Details: Fuel type : Natural Gas (Weighted U.S. Average) CH4 Emissions CO2 Equivalent (metric tons): 1.2 N20 Emissions CO2 Equivalent (metric tons): 1.7

Unit Name : G2CT1 Unit Type : Electricity Generator Unit Description : This unit is a natural gas simple cycle combustion turbines that is nominally rated at 25 MW. Part 75 Methodology : Appendix G, Equation G-4 Methodology Start Date: 2011-01-01 Methodology End Date: 2011-12-31 Acid Rain Program Indicator: Y

Emission Details: Annual CO2 Emissions Including Biomass (metric tons): 3149.8 Annual CO2 Emissions Including Biomass (short tons): 3472.0 Annual CO2 Emissions from Biomass (metric tons): 0.0

Appendix G Equation G4: Operating Hours Fuel Flow Rate: 0 Operating Hours HHV Substitution: 0

Electricity Fuel Details:

Fuel type : Natural Gas (Weighted U.S. Average) CH4 Emissions CO2 Equivalent (metric tons): 1.2 N2O Emissions CO2 Equivalent (metric tons): 1.8

Unit Name : G4CT1 **Unit Type :** Electricity Generator **Unit Description :** This unit is a natural gas simple cycle combustion turbines that is

nominally rated at 25 MW.

Part 75 Methodology : Appendix G, Equation G-4 Methodology Start Date: 2011-01-01 Methodology End Date: 2011-12-31 Acid Rain Program Indicator: Y

Emission Details: Annual CO2 Emissions Including Biomass (metric tons): 2496.0 Annual CO2 Emissions Including Biomass (short tons): 2751.3 Annual CO2 Emissions from Biomass (metric tons): 0.0

Appendix G Equation G4: Operating Hours Fuel Flow Rate: 0 Operating Hours HHV Substitution: 0

Electricity Fuel Details: Fuel type : Natural Gas (Weighted U.S. Average) CH4 Emissions CO2 Equivalent (metric tons): 1.0 N2O Emissions CO2 Equivalent (metric tons): 1.4

Unit Name : G1CT1 Unit Type : Electricity Generator Unit Description : This unit is a natural gas simple cycle combustion turbines that is nominally rated at 25 MW. Part 75 Methodology : Appendix G, Equation G-4 Methodology Start Date: 2011-01-01 Methodology End Date: 2011-12-31 Acid Rain Program Indicator: Y

Emission Details: Annual CO2 Emissions Including Biomass (metric tons): 3205.7 Annual CO2 Emissions Including Biomass (short tons): 3533.7 Annual CO2 Emissions from Biomass (metric tons): 0.0

Appendix G Equation G4: Operating Hours Fuel Flow Rate: 0 Operating Hours HHV Substitution: 0

Electricity Fuel Details:

Fuel type : Natural Gas (Weighted U.S. Average) CH4 Emissions CO2 Equivalent (metric tons): 1.3 N2O Emissions CO2 Equivalent (metric tons): 1.8

Unit Name : G4CT2

Unit Type : Electricity Generator

Unit Description : This unit is a natural gas simple cycle combustion turbines that is nominally rated at 25 MW.

Part 75 Methodology : Appendix G, Equation G-4 Methodology Start Date: 2011-01-01 Methodology End Date: 2011-12-31 Acid Rain Program Indicator: Y

Emission Details: Annual CO2 Emissions Including Biomass (metric tons): 3269.5 Annual CO2 Emissions Including Biomass (short tons): 3604.0 Annual CO2 Emissions from Biomass (metric tons): 0.0

Appendix G Equation G4: Operating Hours Fuel Flow Rate: 0 Operating Hours HHV Substitution: 0

Electricity Fuel Details: Fuel type : Natural Gas (Weighted U.S. Average) CH4 Emissions CO2 Equivalent (metric tons): 1.3 N2O Emissions CO2 Equivalent (metric tons): 1.9

Unit Name : G1CT2 Unit Type : Electricity Generator Unit Description : This unit is a natural gas simple cycle combustion turbines that is nominally rated at 25 MW. Part 75 Methodology : Appendix G, Equation G-4 Methodology Start Date: 2011-01-01 Methodology End Date: 2011-12-31 Acid Rain Program Indicator: Y

Emission Details: Annual CO2 Emissions Including Biomass (metric tons): 3304.3 Annual CO2 Emissions Including Biomass (short tons): 3642.3 Annual CO2 Emissions from Biomass (metric tons): 0.0

Appendix G Equation G4: Operating Hours Fuel Flow Rate: 0 Operating Hours HHV Substitution: 0

Electricity Fuel Details:

Fuel type : Natural Gas (Weighted U.S. Average) CH4 Emissions CO2 Equivalent (metric tons): 1.3 N2O Emissions CO2 Equivalent (metric tons): 1.9

Unit Name : G3CT2

Unit Type : Electricity Generator

Unit Description : This unit is a natural gas simple cycle combustion turbines that is nominally rated at 25 MW.

Part 75 Methodology : Appendix G, Equation G-4 Methodology Start Date: 2011-01-01 Methodology End Date: 2011-12-31 Acid Rain Program Indicator: Y

Emission Details: Annual CO2 Emissions Including Biomass (metric tons): 3205.1 Annual CO2 Emissions Including Biomass (short tons): 3533.0 Annual CO2 Emissions from Biomass (metric tons): 0.0

Appendix G Equation G4: Operating Hours Fuel Flow Rate: 0 Operating Hours HHV Substitution: 0

Electricity Fuel Details: Fuel type : Natural Gas (Weighted U.S. Average) CH4 Emissions CO2 Equivalent (metric tons): 1.3 N2O Emissions CO2 Equivalent (metric tons): 1.8

Unit Name : G3CT1 Unit Type : Electricity Generator Unit Description : This unit is a natural gas simple cycle combustion turbines that is nominally rated at 25 MW. Part 75 Methodology : Appendix G, Equation G-4 Methodology Start Date: 2011-01-01 Methodology End Date: 2011-12-31 Acid Rain Program Indicator: Y

Emission Details: Annual CO2 Emissions Including Biomass (metric tons): 3229.0 Annual CO2 Emissions Including Biomass (short tons): 3559.3 Annual CO2 Emissions from Biomass (metric tons): 0.0

Appendix G Equation G4: Operating Hours Fuel Flow Rate: 0 Operating Hours HHV Substitution: 0

Electricity Fuel Details:

Fuel type : Natural Gas (Weighted U.S. Average) CH4 Emissions CO2 Equivalent (metric tons): 1.3 N2O Emissions CO2 Equivalent (metric tons): 1.9

Certification Statement:

The designated representative or alternate designated representative must sign (i.e., agree to) this certification statement. If you are an agent and you click on "SUBMIT", you are not agreeing to the certification statement, but are submitting the certification statement on behalf of the designated representative or alternate designated representative who is agreeing to the certification statement. An agent is only authorized to make the electronic submission on behalf of the designated representative, not to sign (i.e., agree to) the certification statement.

Facility Name: Robert P Mone Facility Identifier: Facility Reporting Year: 2011 Facility Location: Address: 4406 MENTZER RD City: CONVOY State: OH Postal Code: 45832

Facility Site Details: CO2 Equivalent (excluding biogenic, mtons, Subparts C-HH): 30141.2 CO2 Equivalent (mtons, Subparts NN-PP): Biogenic CO2 (mtons, Subparts C-HH): 0 Cogeneration Unit Emissions Indicator: N GHG Report Start Date: 2011-01-01 GHG Report End Date: 2011-12-31 Description of Changes to Calculation Methodology: No changes in 2011. Description of Best Available Monitoring Methods Used: Part 75 Biogenic Emissions Indication: Primary NAICS Code: 221112 Second Primary NAICS Code:

Parent Company Details: Parent Company Name: BUCKEYE POWER CO Address: 6677 Busch Blvd., P.O. Box 26036, Columbus, OH 43226-0036 Percent Ownership Interest: 100

Gas information Deta	115		
Gas Name	Other Gas Name	Gas Quantity	Own Result?
Biogenic Carbon dioxide		0 (Metric Tons)	
Methane		0 (Metric Tons)	
Nitrous Oxide		0 (Metric Tons)	
Carbon Dioxide		36.1 (Metric Tons)	

Subpart C: General Stationary Fuel Combustion

Unit Details:

Unit Name : Fuel Gas Heater Unit Type : PRH (Process Heater) Unit Description : <u>Individual Unit Details:</u> Maximum Rated Heat Input Capacity: 12 (mmBtu/hr)

Emission Details:

Annual Sorbent based CO2 Emissions (metric tons): 0.0 Annual Biogenic CO2 Emissions (metric tons): 0.0 Annual Fossil fuel based CO2 Emissions (metric tons):

Tier Fuel Details:

Fuel : Natural Gas (Weighted U.S. Average) Tier Name : Tier 1 (Equation C-1) Tier Methodology Start Date : 2011-01-01 Tier Methodology End Date : 2011-12-31

Fuel Emission Details :

Total CO2	Total CH4	Total N2O	Total CH4	Total N2O
emissions	emissions	emissions	emissions CO2e	emissions CO2e
16.3 (Metric Tons)	0.00 (Metric Tons)	0.000 (Metric Tons)	0.0 (Metric Tons)	0.0 (Metric Tons)

Unit Name : GP-Catalytic Heaters (Gas Skid) Unit Type : OCS (Other combustion source) Unit Description : Other Unit Name : Small Unit Aggregation Details: Highest Maximum Rated Heat Input Capacity: 0.018

Emission Details:

Annual Sorbent based CO2 Emissions (metric tons): 0.0 Annual Biogenic CO2 Emissions (metric tons): 0.0 Annual Fossil fuel based CO2 Emissions (metric tons): 19.8

Tier Fuel Details:

Fuel : Natural Gas (Weighted U.S. Average) Tier Name : Tier 1 (Equation C-1) Tier Methodology Start Date : 2011-01-01 Tier Methodology End Date : 2011-12-31

Fuel Emission Details :

Total CO2	Total CH4	Total N2O	Total CH4	Total N2O
emissions	emissions	emissions	emissions CO2e	emissions CO2e
19.8 (Metric Tons)	0.00 (Metric Tons)	0.000 (Metric Tons)	0.0 (Metric Tons)	0.0 (Metric Tons)

Subpart D: Electricity Generation

Gas Information Details

Gas Name	Other Gas Name	Gas Quantity	Own Result?
Biogenic Carbon dioxide		0 (Metric Tons)	
Methane		0.57 (Metric Tons)	
Nitrous Oxide		0.056 (Metric Tons)	
Carbon Dioxide		30075.8 (Metric Tons)	

Unit Details:

Unit Name : 2 Unit Type : Electricity Generator Unit Description : Part 75 Methodology : Appendix G, Equation G-4 Methodology Start Date: 2011-01-01 Methodology End Date: 2011-12-31 Acid Rain Program Indicator: Y

Emission Details:

Annual CO2 Emissions Including Biomass (metric tons): 9928.8 Annual CO2 Emissions Including Biomass (short tons): 10944.6 Annual CO2 Emissions from Biomass (metric tons): 0.0

Appendix G Equation G4: Operating Hours Fuel Flow Rate: 0 Operating Hours HHV Substitution: 0

Electricity Fuel Details:

Fuel type : Natural Gas (Weighted U.S. Average) CH4 Emissions CO2 Equivalent (metric tons): 3.9 N2O Emissions CO2 Equivalent (metric tons): 5.7

Unit Name : 1 Unit Type : Electricity Generator Unit Description : Part 75 Methodology : Appendix G, Equation G-4 Methodology Start Date: 2011-01-01 Methodology End Date: 2011-12-31 Acid Rain Program Indicator: Y

Emission Details: Annual CO2 Emissions Including Biomass (metric tons): 10659.6 Annual CO2 Emissions Including Biomass (short tons): 11750.1 Annual CO2 Emissions from Biomass (metric tons): 0.0

Appendix G Equation G4: Operating Hours Fuel Flow Rate: 0 Operating Hours HHV Substitution: 0

Electricity Fuel Details:

Fuel type : Natural Gas (Weighted U.S. Average) CH4 Emissions CO2 Equivalent (metric tons): 4.2 N2O Emissions CO2 Equivalent (metric tons): 6.1

Unit Name : 3

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GHG Summary Report

Unit Type : Electricity Generator

Unit Description : Part 75 Methodology : Appendix G, Equation G-4 Methodology Start Date: 2011-01-01 Methodology End Date: 2011-12-31 Acid Rain Program Indicator: Y

Emission Details: Annual CO2 Emissions Including Biomass (metric tons): 9487.4 Annual CO2 Emissions Including Biomass (short tons): 10458.0 Annual CO2 Emissions from Biomass (metric tons): 0.0

Appendix G Equation G4: Operating Hours Fuel Flow Rate: 0 Operating Hours HHV Substitution: 0

Electricity Fuel Details: Fuel type : Natural Gas (Weighted U.S. Average) CH4 Emissions CO2 Equivalent (metric tons): 3.7 N20 Emissions CO2 Equivalent (metric tons): 5.5

Certification Statement:

The designated representative or alternate designated representative must sign (i.e., agree to) this certification statement. If you are an agent and you click on "SUBMIT", you are not agreeing to the certification statement, but are submitting the certification statement on behalf of the designated representative or alternate designated representative who is agreeing to the certification statement. An agent is only authorized to make the electronic submission on behalf of the designated representative, not to sign (i.e., agree to) the certification statement.

Facility Name: Muskingum River Facility Identifier: 520018 Facility Reporting Year: 2011 Facility Location: Address: COUNTY ROAD 32 City: BEVERLY State: OH Postal Code: 45715

Facility Site Details: CO2 Equivalent (excluding biogenic, mtons, Subparts C-HH): 5364149.6 CO2 Equivalent (mtons, Subparts NN-PP): 0 Biogenic CO2 (mtons, Subparts C-HH): 3675.3 Cogeneration Unit Emissions Indicator: N GHG Report Start Date: 2011-01-01 GHG Report End Date: 2011-12-31 Description of Changes to Calculation Methodology: No changes in 2011. Biodiesel was mixed with fuel oil for main boiler startup/stabilization on Units 1-4. Description of Best Available Monitoring Methods Used: Part 75 Biogenic Emissions Indication: Primary NAICS Code: 221112 Second Primary NAICS Code:

Parent Company Details: Parent Company Name: AMERICAN ELECTRIC POWER Address: 1 Riverside Plaza, Columbus, OH 43215 Percent Ownership Interest: 100

Gas Information DetailsGas NameOther Gas NameGas QuantityOwn Result?Biogenic Carbon dioxide0 (Metric Tons)Methane1.67 (Metric Tons)Nitrous Oxide0.33 (Metric Tons)Carbon Dioxide41154.7 (Metric Tons)

Subpart C: General Stationary Fuel Combustion

04.00.00

<u>Unit Details:</u> Unit Name : Aux Boiler Unit Type : OB (Boiler, other) Unit Description : The auxiliary boiler is a Babcock and Wilcox model PF1-3048 distillate

oil-fired boiler having a nominal capacity of 498 mmBtu/hr and does not utilize any post combustion emission control systems.

Individual Unit Details: Maximum Rated Heat Input Capacity: 496 (mmBtu/hr)

Emission Details: Annual Sorbent based CO2 Emissions (metric tons): 0.0 Annual Biogenic CO2 Emissions (metric tons): 0.0 Annual Fossil fuel based CO2 Emissions (metric tons):

Tier Fuel Details: Fuel : Distillate Fuel Oil No. 2 Tier Name : Tier 2 (Equation C-2a) Tier Methodology Start Date : 2011-01-01 Tier Methodology End Date : 2011-12-31 Frequency of HHV determinations : Upon addition of oil to the storage tank

Tier 2 Monthly HHV Details :

January	February	March	April	May	June	July	August	September	October	November	December
N	Ν	N	N	N	N	N	N	Ν	N	N	N

Fuel Emission Details :

Total CO2 emissions	Total CH4 emissions	Total N2O emissions	Total CH4 emissions CO2e	Total N2O emissions CO2e	
41154.7 (Metric	1.67 (Metric	0.330 (Metric	35 1 (Metric Tons)	102 3 (Metric Tons)	
Tons)	Tons)	Tons)			

Subpart D: Electricity Generation

Gas Information Details

Gas Name	Other Gas Name	Gas Quantity	Own Result?
Biogenic Carbon dioxide		3675.3 (Metric Tons)	
Methane		611.15 (Metric Tons)	
Nitrous Oxide		88.893 (Metric Tons)	
Carbon Dioxide		5282466.5 (Metric Tons)	

Unit Details:

Unit Name : 5 Unit Type : Electricity Generator Unit Description : Pulverized coal-fired, dry-bottom boiler Part 75 Methodology : CEMS Methodology Start Date: 2011-01-01 Methodology End Date: 2011-12-31 Acid Rain Program Indicator: Y

Emission Details: Annual CO2 Emissions Including Biomass (metric tons): 2472823.0

Annual CO2 Emissions from Biomass (metric tons): 0.0

<u>CEMS Details:</u> Operating Hours CO2 Concentration Substituted: 140 Operating Hours Stack Gas Flow Rate Substituted: 1 Operating Hours Stack Gas Moisture Substituted:

Electricity Fuel Details:

Fuel type : Bituminous CH4 Emissions CO2 Equivalent (metric tons): 6003.6 N2O Emissions CO2 Equivalent (metric tons): 12890.9

Unit Name : 4 Unit Type : Electricity Generator Unit Description : Coal-fired, cyclone boiler Part 75 Methodology : CEMS Methodology Start Date: 2011-01-01 Methodology End Date: 2011-12-31 Acid Rain Program Indicator: Y

Emission Details:

Annual CO2 Emissions Including Biomass (metric tons): 808454.5 Annual CO2 Emissions Including Biomass (short tons): 891159.4 Annual CO2 Emissions from Biomass (metric tons): 391.1

<u>CEMS Details:</u> Operating Hours CO2 Concentration Substituted: 8 Operating Hours Stack Gas Flow Rate Substituted: 7 Operating Hours Stack Gas Moisture Substituted:

Electricity Fuel Details:

Fuel type : Bituminous CH4 Emissions CO2 Equivalent (metric tons): 1962.8 N2O Emissions CO2 Equivalent (metric tons): 4214.5

Unit Name : 1 Unit Type : Electricity Generator Unit Description : Pulverized coal-fired, wet bottom boiler Part 75 Methodology : CEMS Methodology Start Date: 2011-01-01 Methodology End Date: 2011-12-31 Acid Rain Program Indicator: Y

Emission Details: Annual CO2 Emissions Including Biomass (metric tons): 604855.7

Annual CO2 Emissions from Biomass (metric tons): 1226.7

<u>CEMS Details:</u> Operating Hours CO2 Concentration Substituted: 8 Operating Hours Stack Gas Flow Rate Substituted: 7 Operating Hours Stack Gas Moisture Substituted:

Electricity Fuel Details:

Fuel type : Bituminous CH4 Emissions CO2 Equivalent (metric tons): 1468.5 N2O Emissions CO2 Equivalent (metric tons): 3153.1

Unit Name : 2 Unit Type : Electricity Generator Unit Description : Pulverized coal-fired, wet bottom boiler Part 75 Methodology : CEMS Methodology Start Date: 2011-01-01 Methodology End Date: 2011-12-31 Acid Rain Program Indicator: Y

Emission Details:

Annual CO2 Emissions Including Biomass (metric tons): 579234.0 Annual CO2 Emissions Including Biomass (short tons): 638489.7 Annual CO2 Emissions from Biomass (metric tons): 1074.9

<u>CEMS Details:</u> Operating Hours CO2 Concentration Substituted: 8 Operating Hours Stack Gas Flow Rate Substituted: 7 Operating Hours Stack Gas Moisture Substituted:

Electricity Fuel Details:

Fuel type : Bituminous CH4 Emissions CO2 Equivalent (metric tons): 1406.3 N2O Emissions CO2 Equivalent (metric tons): 3019.6

Unit Name : 3 Unit Type : Electricity Generator Unit Description : Coal-fired, cyclone boiler Part 75 Methodology : CEMS Methodology Start Date: 2011-01-01 Methodology End Date: 2011-12-31 Acid Rain Program Indicator: Y

Emission Details:

Annual CO2 Emissions Including Biomass (metric tons): 820774.6 Annual CO2 Emissions Including Biomass (short tons): 904739.9

Annual CO2 Emissions from Biomass (metric tons): 982.6

<u>CEMS Details:</u> Operating Hours CO2 Concentration Substituted: 8 Operating Hours Stack Gas Flow Rate Substituted: 7 Operating Hours Stack Gas Moisture Substituted:

Electricity Fuel Details:

Fuel type : Bituminous CH4 Emissions CO2 Equivalent (metric tons): 1992.7 N2O Emissions CO2 Equivalent (metric tons): 4278.7

Certification Statement:

The designated representative or alternate designated representative must sign (i.e., agree to) this certification statement. If you are an agent and you click on "SUBMIT", you are not agreeing to the certification statement, but are submitting the certification statement on behalf of the designated representative or alternate designated representative who is agreeing to the certification statement. An agent is only authorized to make the electronic submission on behalf of the designated representative, not to sign (i.e., agree to) the certification statement.

Facility Name: Waterford Plant Facility Identifier: Facility Reporting Year: 2011 Facility Location: Address: 201 RIGHTEOUS RIDGE ROAD City: WATERFORD State: OH Postal Code: 45786

Facility Site Details: CO2 Equivalent (excluding biogenic, mtons, Subparts C-HH): 959011.6 CO2 Equivalent (mtons, Subparts NN-PP): Biogenic CO2 (mtons, Subparts C-HH): 0 Cogeneration Unit Emissions Indicator: N GHG Report Start Date: 2011-01-01 GHG Report End Date: 2011-12-31 Description of Changes to Calculation Methodology: No changes in 2011. Description of Best Available Monitoring Methods Used: Part 75 Biogenic Emissions Indication: Primary NAICS Code: 221112 Second Primary NAICS Code:

Parent Company Details: Parent Company Name: AMERICAN ELECTRIC POWER Address: 1 Riverside Plaza, Columbus, OH 43215 Percent Ownership Interest: 100

Gas Information DetailsGas NameOther Gas NameGas QuantityOwn Result?Biogenic Carbon dioxide0 (Metric Tons)Methane0.01 (Metric Tons)Nitrous Oxide0.001 (Metric Tons)Carbon Dioxide543.3 (Metric Tons)

Subpart C: General Stationary Fuel Combustion

Unit Details:

Unit Name : Auxiliary Boiler Unit Type : OB (Boiler, other) Unit Description : <u>Individual Unit Details:</u> Maximum Rated Heat Input Capacity: 85.2 (mmBtu/hr)

Emission Details:

Annual Sorbent based CO2 Emissions (metric tons): 0.0 Annual Biogenic CO2 Emissions (metric tons): 0.0 Annual Fossil fuel based CO2 Emissions (metric tons):

Tier Fuel Details:

Fuel : Natural Gas (Weighted U.S. Average)
Tier Name : Tier 2 (Equation C-2a)
Tier Methodology Start Date : 2011-01-01
Tier Methodology End Date : 2011-12-31
Frequency of HHV determinations : Monthly

Tier 2 Monthly HHV Details :

January	February	March	April	May	June	July	August	September	October	November	December
N	N	N	N	N	N	N	N	N	N	N	Ν

Fuel Emission Details :

Total CO2 emissions	Total CH4 emissions	Total N2O emissions	Total CH4 emissions CO2e	Total N2O emissions CO2e
188.2 (Metric Tons)	0.00 (Metric Tons)	0.000 (Metric Tons)	0.0 (Metric Tons)	0.1 (Metric Tons)

Unit Name : GP-Auxiliary Equipment Unit Type : OCS (Other combustion source) Unit Description : Other Unit Name : Small Unit Aggregation Details: Highest Maximum Rated Heat Input Capacity: 9.3

Emission Details:

Annual Sorbent based CO2 Emissions (metric tons): 0.0 Annual Biogenic CO2 Emissions (metric tons): 0.0 Annual Fossil fuel based CO2 Emissions (metric tons): 355.1

Tier Fuel Details:

Fuel : Natural Gas (Weighted U.S. Average)
Tier Name : Tier 2 (Equation C-2a)
Tier Methodology Start Date : 2011-01-01
Tier Methodology End Date : 2011-12-31
Frequency of HHV determinations : Monthly

Tier 2 Monthly HHV Details :

January	February	March	April	May	June	July	August	September	October	November	December
Ν	N	Ν	N	N	N	N	Ν	N	Ν	N	N

Fuel Emission Details :

Total CO2 emissions	Total CH4 emissions	Total N2O emissions	Total CH4 emissions CO2e	Total N2O emissions CO2e		
355.1 (Metric Tons)	0.01 (Metric Tons)	0.001 (Metric Tons)	0.1 (Metric Tons)	0.2 (Metric Tons)		

Subpart D: Electricity Generation

Gas Information Details

Gas Name	Other Gas Name	Gas Quantity	Own Result?
Biogenic Carbon dioxide		0 (Metric Tons)	
Methane		17.76 (Metric Tons)	
Nitrous Oxide		1.776 (Metric Tons)	
Carbon Dioxide		957544.3 (Metric Tons)	

Unit Details:

Unit Name : 2 Unit Type : Electricity Generator Unit Description : Part 75 Methodology : Appendix G, Equation G-4 Methodology Start Date: 2011-01-01 Methodology End Date: 2011-12-31 Acid Rain Program Indicator: Y

Emission Details:

Annual CO2 Emissions Including Biomass (metric tons): 315866.8 Annual CO2 Emissions Including Biomass (short tons): 348180.0 Annual CO2 Emissions from Biomass (metric tons): 0.0

Appendix G Equation G4:

Operating Hours Fuel Flow Rate: 0 **Operating Hours HHV Substitution**: 0

Electricity Fuel Details:

Fuel type : Natural Gas (Weighted U.S. Average) CH4 Emissions CO2 Equivalent (metric tons): 123.0 N2O Emissions CO2 Equivalent (metric tons): 181.6

Unit Name : 1 Unit Type : Electricity Generator Unit Description : Part 75 Methodology : Appendix G, Equation G-4 Methodology Start Date: 2011-01-01 Methodology End Date: 2011-12-31 Acid Rain Program Indicator: Y

Emission Details:

Annual CO2 Emissions Including Biomass (metric tons): 302125.0 Annual CO2 Emissions Including Biomass (short tons): 333032.4 Annual CO2 Emissions from Biomass (metric tons): 0.0

Appendix G Equation G4: Operating Hours Fuel Flow Rate: 0 Operating Hours HHV Substitution: 0

Electricity Fuel Details:

Fuel type : Natural Gas (Weighted U.S. Average) CH4 Emissions CO2 Equivalent (metric tons): 117.7 N2O Emissions CO2 Equivalent (metric tons): 173.7

Unit Name : 3 Unit Type : Electricity Generator Unit Description : Part 75 Methodology : Appendix G, Equation G-4 Methodology Start Date: 2011-01-01 Methodology End Date: 2011-12-31 Acid Rain Program Indicator: Y

Emission Details: Annual CO2 Emissions Including Biomass (metric tons): 339552.5 Annual CO2 Emissions Including Biomass (short tons): 374288.7 Annual CO2 Emissions from Biomass (metric tons): 0.0

Appendix G Equation G4: Operating Hours Fuel Flow Rate: 0 Operating Hours HHV Substitution: 0

Electricity Fuel Details:

Fuel type : Natural Gas (Weighted U.S. Average) CH4 Emissions CO2 Equivalent (metric tons): 132.3 N2O Emissions CO2 Equivalent (metric tons): 195.2 This foregoing document was electronically filed with the Public Utilities

Commission of Ohio Docketing Information System on

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in

Case No(s). 12-1217-EL-ECP

Summary: Notice Columbus Southern Power Company and Ohio Power Company Notice of Filing Greenhouse Gas Report electronically filed by Mr. Yazen Alami on behalf of Ohio Power Company