#### **BEFORE**

#### THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter o	f the Notic	e of Filing of	`)	
Greenhouse Gas	Report by	Duke Energy	) (	Case No. 14-0562-EL-UNC
Ohio, Inc.		THE HART	)	
			)	
			)	

#### NOTICE OF FILING

On March 16, 2011, the Public Utilities Commission of Ohio (Commission) issued an Entry in Case No. 10-3078-EL-WVR granting FirstEnergy, AEP Ohio and Duke Energy Ohio, Inc., a waiver of the requirement set forth in O.A.C. 4901:1-41-03 that Ohio electric distribution utilities become participating members in the climate registry and report greenhouse gas (GHG) emissions. In reaching its decision the Commission referenced the mandatory federal GHG EPA reporting requirements and directed the electric distribution utilities to docket these federal GHG reports with the Commission. Accordingly, attached hereto are the 2013 emission reports from the federal EPA reporting system for Duke Energy Ohio, Inc. plants located in Ohio.

Respectfully submitted,

Amy B. \$piller

Deputy General Counsel

Elizabeth H. Watts (Counsel of Record)

Associate General Counsel

James R. Wells

Associate General Counsel

Duke Energy Business Services LLC

<sup>&</sup>lt;sup>1</sup> The Entry indicated that the Commission would open a new docket for the various Ohio utilities to file their respective federal GHG reports. Duke Energy Ohio, Inc. has not been able to identify the appropriate docket, and Commission Staff indicated that opening this new docket would be acceptable for purposes of this submission.

Counsel for Duke Energy Ohio, Inc. Email: <a href="mailto:amy.spiller@duke-energy.com">amy.spiller@duke-energy.com</a> Elizabeth.watts@duke-energy.com James.wells@duke-energy.com

Cincinnati Office: 139 East Fourth Street PO Box 960 Cincinnati, Ohio 45201 (513) 287-4359

Columbus Office: 155 East Broad Street 21<sup>st</sup> Floor Columbus, OH 43215 (614) 222-1331

Charlotte Office: 550 South Tryon Charlotte, NC 28202 (980) 373-9646

# **GHG Summary Report**

#### 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: Walter C Beckjord Generating Station

Facility Identifier: 519999
Facility Reporting Year: 2013

Facility Location:

Address: 757 US RT 52 City: NEW RICHMOND

State: OH

Postal Code: 45200

#### Facility Site Details:

CO2 equivalent emissions from facility subparts C-II, SS, and TT (metric tons): 2415392.7

CO2 equivalent emissions from supplier subparts LL-QQ (metric tons): 0

Biogenic CO2 emissions from facility subparts C-II, SS, and TT (metric tons): 0

Cogeneration Unit Emissions Indicator: N

GHG Report Start Date: 2013-01-01 GHG Report End Date: 2013-12-31

Description of Changes to Calculation Methodology:

Part 75 Biogenic Emissions Indication:

Plant Code Indicator: Y

Primary NAICS Code: 221112 Second Primary NAICS Code:

#### **Parent Company Details:**

Parent Company Name: THE DAYTON POWER & LIGHT CO

Address: 1065 Woodman Drive, Dayton, OH 45432

Percent Ownership Interest: 16.1

Parent Company Name: DUKE ENERGY CORP

Address: 526 South Church St, Charlotte, NC 28202-1803

Percent Ownership Interest: 79.9

Parent Company Name: AMERICAN ELECTRIC POWER Address: One Riverside Plaza, Columbus, OH 43215-2372

Percent Ownership Interest: 4

# 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	V-12-s	0.31 (Metric Tons)	
Nitrous Oxide		0.063 (Metric Tons)	
Carbon Dioxide		8678 (Metric Tons)	

# **Unit Details:**

Unit Name: CT1

**Unit Type:** OCS (Other combustion source)

**Unit Description: Other Unit Name:** 

#### **Emission Details:**

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

Annual CO2 emission measured by CEMS or Other Part75 Methodology: 1798.0

Tier Methodology Start Date: 2013-01-01 Tier Methodology End Date: 2013-12-31 Part75 Heat Input Method: Appendix D

Part 75 CO2 Methodology: Appendix D and G calculation method--- § 98.33(a)(5)(i)

#### Appendix D and G calculation method:

Source operating hours in the reporting year that fuel flow rate was missing: 0 Source operating hours in the reporting year that high heating value was missing: 0

#### **Tier Fuel Details:**

Fuel: Distillate Fuel Oil No. 2

#### **Fuel Emission Details:**

Fuel Type: Distillate Fuel Oil No. 2 Annual heat input: 21306 (mmBtu)

CH4 Emissions CO2 Equivalent: 1.6 (Metric Tons) N2O Emissions CO2 Equivalent: 3.8 (Metric Tons)

Unit Name: CT3

**Unit Type:** OCS (Other combustion source)

**Unit Description: Other Unit Name:** 

#### **Emission Details:**

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

Annual CO2 emission measured by CEMS or Other Part75 Methodology: 708.0

Tier Methodology Start Date: 2013-01-01 Tier Methodology End Date: 2013-12-31 Part75 Heat Input Method: Appendix D

Part 75 CO2 Methodology: Appendix D and G calculation method--- § 98.33(a)(5)(i)

# Appendix D and G calculation method:

Source operating hours in the reporting year that fuel flow rate was missing: 11 Source operating hours in the reporting year that high heating value was missing: 0

#### **Tier Fuel Details:**

Fuel: Distillate Fuel Oil No. 2

# **Fuel Emission Details:**

Fuel Type: Distillate Fuel Oil No. 2 Annual heat input: 8732 (mmBtu)

CH4 Emissions CO2 Equivalent: 0.7 (Metric Tons)
N2O Emissions CO2 Equivalent: 1.6 (Metric Tons)

Unit Name: CT4

Unit Type: OCS (Other combustion source)

**Unit Description: Other Unit Name:** 

#### **Emission Details:**

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

Annual CO2 emission measured by CEMS or Other Part75 Methodology: 1120.0

Tier Methodology Start Date: 2013-01-01 Tier Methodology End Date: 2013-12-31 Part75 Heat Input Method: Appendix D

Part 75 CO2 Methodology: Appendix D and G calculation method--- § 98.33(a)(5)(i)

# Appendix D and G calculation method:

Source operating hours in the reporting year that fuel flow rate was missing: 11 Source operating hours in the reporting year that high heating value was missing: 0

# **Tier Fuel Details:**

Fuel: Distillate Fuel Oil No. 2

#### **Fuel Emission Details:**

Fuel Type: Distillate Fuel Oil No. 2 Annual heat input: 14046 (mmBtu)

CH4 Emissions CO2 Equivalent: 1.1 (Metric Tons)
N2O Emissions CO2 Equivalent: 2.5 (Metric Tons)

Unit Name: GP-1

Unit Type: OCS (Other combustion source)

Unit Description: All in-house & tractor shed heaters

Other Unit Name:

## **Small Unit Aggregation Details:**

Highest Maximum Rated Heat Input Capacity: 1.7

#### **Emission Details:**

Annual CO2 mass emissions from sorbent: 0.0 (Metric Tons)

Annual Biogenic CO2 Emissions: 0.0 (metric tons)

Annual Fossil fuel based CO2 Emissions: 165.0 (metric tons)

#### **Tier Fuel Details:**

Fuel: Distillate Fuel Oil No. 2

Tier Name: Tier 2 (Equation C-2a)

**Tier Methodology Start Date: 2013-01-01 Tier Methodology End Date: 2013-12-31** 

Frequency of HHV determinations: Once per fuel lot

#### Tier 2 Monthly HHV Details:

January	February	Marc	Apri	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 emissions	Total CH4 emissions	Total N2O emissions	Total CH4 emissions CO2e	Total N2O emissions CO2e
165.0 (Metric	0.00 (Metric	0.000 (Metric	0.0 (Metric Tons)	0.0 (Metric Tons)
Tons)	Tons)	Tons)		

Unit Name: CT2

**Unit Type:** OCS (Other combustion source)

**Unit Description:** 

**Other Unit Name:** 

#### **Emission Details:**

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

Annual CO2 emission measured by CEMS or Other Part75 Methodology: 4887.0

Tier Methodology Start Date: 2013-01-01 Tier Methodology End Date: 2013-12-31 Part75 Heat Input Method: Appendix D

Part 75 CO2 Methodology: Appendix D and G calculation method--- § 98.33(a)(5)(i)

# Appendix D and G calculation method:

Source operating hours in the reporting year that fuel flow rate was missing: 0 Source operating hours in the reporting year that high heating value was missing: 0

#### **Tier Fuel Details:**

Fuel: Distillate Fuel Oil No. 2

#### **Fuel Emission Details:**

Fuel Type: Distillate Fuel Oil No. 2 Annual heat input: 60953 (mmBtu)

CH4 Emissions CO2 Equivalent: 4.6 (Metric Tons)
N2O Emissions CO2 Equivalent: 10.9 (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	282 (Metric Tons)	
Nitrous Oxide	41.019 (Metric Tons)	
Carbon Dioxide	2387414.5 (Metric Tons)	and the state of t

#### **Unit Details:**

Unit Name: 6

Unit Type: Electricity Generator

**Unit Description:** 

**Plant Code:** (numeric, maximum of 6 digits)

Part 75 Methodology: CEMS

Methodology Start Date: 2013-01-01 Methodology End Date: 2013-12-31

Acid Rain Program Indicator: Y

# **Emission Details:**

Annual CO2 Emissions Including Biomass (metric tons): 1378788.8 Annual CO2 Emissions Including Biomass (short tons): 1519838.9

Annual CO2 Emissions from Biomass (metric tons): 0.0

# **CEMS Details:**

Operating Hours CO2 Concentration Substituted: 51 Operating Hours Stack Gas Flow Rate Substituted: 29 Operating Hours Stack Gas Moisture Substituted:

# **Electricity Fuel Details:**

Fuel Type: Bituminous

Annual heat input: 14800000 (mmBtu)

CH4 Emissions CO2 Equivalent: 4070.0 (Metric Tons) N2O Emissions CO2 Equivalent: 7056.6 (Metric Tons)

Unit Name: 1

Unit Type: Electricity Generator

#### **Unit Description:**

Plant Code: (numeric, maximum of 6 digits)

Part 75 Methodology: CEMS

Methodology Start Date: 2013-01-01 Methodology End Date: 2013-12-31 Acid Rain Program Indicator: Y

# **Emission Details:**

Annual CO2 Emissions Including Biomass (metric tons): 0.0 Annual CO2 Emissions Including Biomass (short tons): 0.0 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: 0

#### **Electricity Fuel Details:**

Fuel Type: Bituminous

Annual heat input: 0 (mmBtu)

CH4 Emissions CO2 Equivalent: 0.0 (Metric Tons)
N2O Emissions CO2 Equivalent: 0.0 (Metric Tons)

Unit Name: 2

**Unit Type:** Electricity Generator

# **Unit Description:**

Plant Code: (numeric, maximum of 6 digits)

Part 75 Methodology: CEMS

Methodology Start Date: 2013-01-01 Methodology End Date: 2013-12-31 Acid Rain Program Indicator: Y

#### **Emission Details:**

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

Annual heat input: 0 (mmBtu)

CH4 Emissions CO2 Equivalent: 0.0 (Metric Tons)
N2O Emissions CO2 Equivalent: 0.0 (Metric Tons)

Unit Name: 3

Unit Type: Electricity Generator

# **Unit Description:**

Plant Code: (numeric, maximum of 6 digits)

Part 75 Methodology: CEMS

Methodology Start Date: 2013-01-01 Methodology End Date: 2013-12-31

Acid Rain Program Indicator: Y

#### **Emission Details:**

Annual CO2 Emissions Including Biomass (metric tons): 0.0
Annual CO2 Emissions Including Biomass (short tons): 0.0
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: 0

# **Electricity Fuel Details:**

Fuel Type: Bituminous

Annual heat input: 0 (mmBtu)

CH4 Emissions CO2 Equivalent: 0.0 (Metric Tons)
N2O Emissions CO2 Equivalent: 0.0 (Metric Tons)

Unit Name: 4

Unit Type: Electricity Generator

#### **Unit Description:**

**Plant Code:** (numeric, maximum of 6 digits)

Part 75 Methodology: CEMS

Methodology Start Date: 2013-01-01 Methodology End Date: 2013-12-31 Acid Rain Program Indicator: Y

#### **Emission Details:**

Annual CO2 Emissions Including Biomass (metric tons): 193361.2 Annual CO2 Emissions Including Biomass (short tons): 213142.0

Annual CO2 Emissions from Biomass (metric tons): 0.0

# **CEMS Details:**

Operating Hours CO2 Concentration Substituted: 26
Operating Hours Stack Gas Flow Rate Substituted: 8
Operating Hours Stack Gas Moisture Substituted:

# **Electricity Fuel Details:**

Fuel Type: Bituminous

Annual heat input: 2077411 (mmBtu)

CH4 Emissions CO2 Equivalent: 571.3 (Metric Tons)
N2O Emissions CO2 Equivalent: 990.5 (Metric Tons)

Unit Name: MS51

Unit Type: Electricity Generator

Unit Description: Unit 5 emissions through stack 1

Plant Code: (numeric, maximum of 6 digits)

Part 75 Methodology: CEMS

Methodology Start Date: 2013-01-01 Methodology End Date: 2013-12-31 Acid Rain Program Indicator: Y

#### **Emission Details:**

Annual CO2 Emissions Including Biomass (metric tons): 390275.8 Annual CO2 Emissions Including Biomass (short tons): 430201.0

Annual CO2 Emissions from Biomass (metric tons): 0.0

#### **CEMS Details:**

Operating Hours CO2 Concentration Substituted: 44
Operating Hours Stack Gas Flow Rate Substituted: 9
Operating Hours Stack Gas Moisture Substituted:

#### **Electricity Fuel Details:**

Fuel Type: Bituminous

Annual heat input: 4192991 (mmBtu)

CH4 Emissions CO2 Equivalent: 1153.1 (Metric Tons)

N2O Emissions CO2 Equivalent: 1999.2 (Metric Tons)

Unit Name: MS52

Unit Type: Electricity Generator

Unit Description: Unit 5 emissions through stack 2.

**Plant Code:** (numeric, maximum of 6 digits)

Part 75 Methodology: CEMS

Methodology Start Date: 2013-01-01 Methodology End Date: 2013-12-31 Acid Rain Program Indicator: Y

#### **Emission Details:**

Annual CO2 Emissions Including Biomass (metric tons): 424988.7
Annual CO2 Emissions Including Biomass (short tons): 468465.0

Annual CO2 Emissions from Biomass (metric tons): 0.0

#### **CEMS Details:**

Operating Hours CO2 Concentration Substituted: 38 Operating Hours Stack Gas Flow Rate Substituted: 17 Operating Hours Stack Gas Moisture Substituted:

# **Electricity Fuel Details:**

Fuel Type: Bituminous

Annual heat input: 4565961 (mmBtu)

CH4 Emissions CO2 Equivalent: 1255.6 (Metric Tons)
N2O Emissions CO2 Equivalent: 2177.1 (Metric Tons)

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Facility Name: Duke Energy Hanging Rock, II LLC

Facility Identifier: 521139
Facility Reporting Year: 2013

Facility Location:

Address: 1395 COUNTY RD 1A

City: IRONTON State: OH

Postal Code: 45638

# **Facility Site Details:**

CO2 equivalent emissions from facility subparts C-II, SS, and TT (metric tons): 2763929.3

CO2 equivalent emissions from supplier subparts LL-QQ (metric tons): 0

Biogenic CO2 emissions from facility subparts C-II, SS, and TT (metric tons): 0

Cogeneration Unit Emissions Indicator: N

GHG Report Start Date: 2013-01-01 GHG Report End Date: 2013-12-31

Description of Changes to Calculation Methodology:

Part 75 Biogenic Emissions Indication:

Plant Code Indicator: Y

Primary NAICS Code: 221112 Second Primary NAICS Code:

# **Parent Company Details:**

Parent Company Name: DUKE ENERGY CORP

Address: 526 South Church St., Charlotte, NC 28202-1803

Percent Ownership Interest: 100

Subpart C: General Stationary Fuel Combustion

#### **Gas Information Details:**

Gas Name	Other Gas Name	Gas Quantity	Own Results?
Biogenic Carbon	dioxide	0 (Metric Tons)	
Methane		0 (Metric Tons)	_ 125
Nitrous Oxide		0 (Metric Tons)	
Carbon Dioxide		249 (Metric Tons)	

# **Unit Details:**

Unit Name: GP-1 Aux Blrs

**Unit Type:** OCS (Other combustion source)

Unit Description: Combination on Aux Blrs 1 & 2

#### **Other Unit Name:**

#### **Small Unit Aggregation Details:**

Highest Maximum Rated Heat Input Capacity: 30.6

# **Emission Details:**

**Annual CO2 mass emissions from sorbent:** 0.0 (Metric Tons)

Annual Biogenic CO2 Emissions: 0.0 (metric tons)

Annual Fossil fuel based CO2 Emissions: 249.0 (metric tons)

# Tier Fuel Details:

Fuel: Natural Gas (Weighted U.S. Average)

Tier Name: Tier 1 (Equation C-1)

**Tier Methodology Start Date: 2013-01-01 Tier Methodology End Date: 2013-12-31** 

#### **Fuel Emission Details:**

Total CO2 emissions	Total CH4 emissions	Total N2O emissions	Total CH4 emissions CO2e	Total N2O emissions CO2e
249.0 (Metric	0.00 (Metric	0.000 (Metric	0.0 (Metric Tons)	0.0 (Metric Tons)
Tons)	Tons)	Tons)	Thomas of the state of the stat	1000

#### Subpart D: Electricity Generation

# **Gas Information Details**

Gas Name	Other Gas Name	Gas Quantity	Own Results?
Biogenic Carbon	dioxide	0 (Metric Tons)	
Methane		51.2 (Metric Tons)	
Nitrous Oxide		5.12 (Metric Tons)	
Carbon Dioxide		2760874.5 (Metric Tons)	

#### **Unit Details:**

Unit Name: CTG1

Unit Type: Electricity Generator

**Unit Description:** 

Plant Code: (numeric, maximum of 6 digits)
Part 75 Methodology: Appendix G, Equation G-4

Methodology Start Date: 2013-01-01 Methodology End Date: 2013-12-31 Acid Rain Program Indicator: Y

#### **Emission Details:**

Annual CO2 Emissions Including Biomass (metric tons): 677312.9 Annual CO2 Emissions Including Biomass (short tons): 746602.0

# Annual CO2 Emissions from Biomass (metric tons): 0.0

#### **Appendix G Equation G4:**

**Operating Hours Fuel Flow Rate: 17 Operating Hours HHV Substitution: 0** 

# Electricity Fuel Details:

Fuel Type: Natural Gas (Weighted U.S. Average)

Annual heat input: 12500000 (mmBtu)

CH4 Emissions CO2 Equivalent: 312.5 (Metric Tons) N2O Emissions CO2 Equivalent: 372.5 (Metric Tons)

**Unit Name: CTG2** 

Unit Type: Electricity Generator

**Unit Description:** 

Plant Code: (numeric, maximum of 6 digits)
Part 75 Methodology: Appendix G, Equation G-4
Methodology Start Date: 2013-01-01

Methodology Start Date: 2013-01-01 Methodology End Date: 2013-12-31 Acid Rain Program Indicator: Y

# **Emission Details:**

Annual CO2 Emissions Including Biomass (metric tons): 686182.5 Annual CO2 Emissions Including Biomass (short tons): 756379.0

Annual CO2 Emissions from Biomass (metric tons): 0.0

#### **Appendix G Equation G4:**

Operating Hours Fuel Flow Rate: 147 Operating Hours HHV Substitution: 0

## **Electricity Fuel Details:**

Fuel Type: Natural Gas (Weighted U.S. Average)

Annual heat input: 12700000 (mmBtu)

CH4 Emissions CO2 Equivalent: 317.5 (Metric Tons) N2O Emissions CO2 Equivalent: 378.5 (Metric Tons)

Unit Name: CTG3

Unit Type: Electricity Generator

**Unit Description:** 

Plant Code: (numeric, maximum of 6 digits)
Part 75 Methodology: Appendix G, Equation G-4

Methodology Start Date: 2013-01-01 Methodology End Date: 2013-12-31 Acid Rain Program Indicator: Y

#### **Emission Details:**

**Annual CO2 Emissions Including Biomass (metric tons):** 704552.3 **Annual CO2 Emissions Including Biomass (short tons):** 776628.0

**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)

Annual heat input: 13100000 (mmBtu)

CH4 Emissions CO2 Equivalent: 327.5 (Metric Tons)
N2O Emissions CO2 Equivalent: 390.4 (Metric Tons)

Unit Name: CTG4

Unit Type: Electricity Generator

**Unit Description:** 

Plant Code: (numeric, maximum of 6 digits)
Part 75 Methodology: Appendix G, Equation G-4

Methodology Start Date: 2013-01-01 Methodology End Date: 2013-12-31 Acid Rain Program Indicator: Y

# **Emission Details:**

Annual CO2 Emissions Including Biomass (metric tons): 692826.8 Annual CO2 Emissions Including Biomass (short tons): 763703.0

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)

Annual heat input: 12900000 (mmBtu)

CH4 Emissions CO2 Equivalent: 322.5 (Metric Tons) N2O Emissions CO2 Equivalent: 384.4 (Metric Tons)

# **GHG Summary Report**

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Facility Name: Miami Fort Generating Station

Facility Identifier: 520000 Facility Reporting Year: 2013

**Facility Location:** 

Address: 11021 Brower Road

City: NORTH BEND

State: OH

Postal Code: 45052

#### **Facility Site Details:**

CO2 equivalent emissions from facility subparts C-II, SS, and TT (metric tons): 7903857.5

CO2 equivalent emissions from supplier subparts LL-QQ (metric tons): 0

Biogenic CO2 emissions from facility subparts C-II, SS, and TT (metric tons): 0

Cogeneration Unit Emissions Indicator: N

GHG Report Start Date: 2013-01-01 GHG Report End Date: 2013-12-31

Description of Changes to Calculation Methodology:

**Part 75 Biogenic Emissions Indication:** 

Plant Code Indicator: Y

Primary NAICS Code: 221112 Second Primary NAICS Code:

#### **Parent Company Details:**

Parent Company Name: THE DAYTON POWER & LIGHT CO

Address: 1065 Woodsman Drive, Dayton, OH 45432

Percent Ownership Interest: 29.9

Parent Company Name: DUKE ENERGY CORP

Address: 526 South Church St, Charlotte, NC 28202-1803

Percent Ownership Interest: 70.1

# Subpart C: General Stationary Fuel Combustion

# **Gas Information Details**

Gas Name	Other Gas Name	Gas Quantity	Own Results?
Biogenic Carbon	dioxide	0 (Metric Tons)	
Methane		0.01 (Metric Tons)	
Nitrous Oxide		0.001 (Metric Tons)	
Carbon Dioxide		149 (Metric Tons)	

#### **Unit Details:**

Unit Name: GP-1 (CTs)

Unit Type: OCS (Other combustion source)

Unit Description: 4 Oil Fired CTs

# **Other Unit Name:**

#### **Small Unit Aggregation Details:**

**Highest Maximum Rated Heat Input Capacity: 236** 

#### **Emission Details:**

**Annual CO2 mass emissions from sorbent:** 0.0 (Metric Tons)

Annual Biogenic CO2 Emissions: 0.0 (metric tons)

Annual Fossil fuel based CO2 Emissions: 149.0 (metric tons)

#### Tier Fuel Details:

Fuel: Distillate Fuel Oil No. 2
Tier Name: Tier 1 (Equation C-1)

**Tier Methodology Start Date:** 2013-01-01 **Tier Methodology End Date:** 2013-12-31

#### **Fuel Emission Details:**

Total CO2 emissions	Total CH4 emissions	Total N2O emissions	Total CH4 emissions CO2e	Total N2O emissions CO2e
149.0 (Metric	0.01 (Metric	0.001 (Metric	0.2 (Metric Tons)	0.3 (Metric Tons)
Tons)	Tons)	Tons)		

#### Subpart D: Electricity Generation

#### **Gas Information Details**

Gas Name	Other Gas Name	Gas Quantity	Own Results?
Biogenic Carbon	dioxide	0 (Metric Tons)	
Methane		926.2 (Metric Tons)	
Nitrous Oxide		134.72 (Metric Tons)	
Carbon Dioxide		7840406.4 (Metric Tons)	

#### **Unit Details:**

Unit Name: 6

Unit Type: Electricity Generator

**Unit Description:** 

Plant Code: (numeric, maximum of 6 digits)

Part 75 Methodology: CEMS

Methodology Start Date: 2013-01-01 Methodology End Date: 2013-12-31 Acid Rain Program Indicator: Y

#### **Emission Details:**

Annual CO2 Emissions Including Biomass (metric tons): 1037144.2 Annual CO2 Emissions Including Biomass (short tons): 1143244.0

Annual CO2 Emissions from Biomass (metric tons): 0.0

# **CEMS Details:**

Operating Hours CO2 Concentration Substituted: 23 Operating Hours Stack Gas Flow Rate Substituted: 30 Operating Hours Stack Gas Moisture Substituted: 0

# Electricity Fuel Details:

Fuel Type: Bituminous

Annual heat input: 11100000 (mmBtu)

CH4 Emissions CO2 Equivalent: 3052.5 (Metric Tons) N2O Emissions CO2 Equivalent: 5292.5 (Metric Tons)

Unit Name: 7

Unit Type: Electricity Generator

**Unit Description:** 

Plant Code: (numeric, maximum of 6 digits)

Part 75 Methodology: CEMS

Methodology Start Date: 2013-01-01

Methodology End Date: 2013-12-31 Acid Rain Program Indicator: Y

#### **Emission Details:**

Annual CO2 Emissions Including Biomass (metric tons): 3594127.7 Annual CO2 Emissions Including Biomass (short tons): 3961807.0

Annual CO2 Emissions from Biomass (metric tons): 0.0

#### **CEMS Details:**

Operating Hours CO2 Concentration Substituted: 39 Operating Hours Stack Gas Flow Rate Substituted: 25 Operating Hours Stack Gas Moisture Substituted:

# **Electricity Fuel Details:**

Fuel Type: Bituminous

Annual heat input: 38600000 (mmBtu)

CH4 Emissions CO2 Equivalent: 10615.0 (Metric Tons)
N2O Emissions CO2 Equivalent: 18404.5 (Metric Tons)

Unit Name: 8

Unit Type: Electricity Generator

**Unit Description:** 

Plant Code: (numeric, maximum of 6 digits)

Part 75 Methodology: CEMS

Methodology Start Date: 2013-01-01 Methodology End Date: 2013-12-31 Acid Rain Program Indicator: Y

#### **Emission Details:**

**Annual CO2** Emissions Including Biomass (metric tons): 3209134.5 **Annual CO2** Emissions Including Biomass (short tons): 3537429.0

Annual CO2 Emissions from Biomass (metric tons): 0.0

# **CEMS Details:**

Operating Hours CO2 Concentration Substituted: 32 Operating Hours Stack Gas Flow Rate Substituted: 1 Operating Hours Stack Gas Moisture Substituted: 0

#### **Electricity Fuel Details:**

Fuel Type: Bituminous

Annual heat input: 34500000 (mmBtu)

CH4 Emissions CO2 Equivalent: 9487.5 (Metric Tons) N2O Emissions CO2 Equivalent: 16449.6 (Metric Tons)

#### **GHG Summary Report**

#### **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: Duke Energy Washington, II LLC

Facility Identifier: 521161 Facility Reporting Year: 2013

Facility Location:

Address: 859 ST RT 83

City: BEVERLY

State: OH

Postal Code: 45715

#### **Facility Site Details:**

CO2 equivalent emissions from facility subparts C-II, SS, and TT (metric tons): 1591485.2

CO2 equivalent emissions from supplier subparts LL-QQ (metric tons): 0

Biogenic CO2 emissions from facility subparts C-II, SS, and TT (metric tons): 0

Cogeneration Unit Emissions Indicator: N

GHG Report Start Date: 2013-01-01 GHG Report End Date: 2013-12-31

Description of Changes to Calculation Methodology:

Part 75 Biogenic Emissions Indication:

Plant Code Indicator: Y

Primary NAICS Code: 221112 Second Primary NAICS Code:

# **Parent Company Details:**

Parent Company Name: DUKE ENERGY CORP

Address: 526 South Church St., Charlotte, NC 28202-1803

Percent Ownership Interest: 100

# Subpart C: General Stationary Fuel Combustion

#### **Gas Information Details:**

Gas Name	Other Gas Name	Gas Quantity	Own Results?
Biogenic Carbon	dioxide	0 (Metric Tons)	
Methane		0 (Metric Tons)	
Nitrous Oxide		0 (Metric Tons)	
Carbon Dioxide		50 (Metric Tons)	

# **Unit Details:**

Unit Name: Aux. Blr.

Unit Type: OB (Boiler, other)

**Unit Description:** 

#### **Individual Unit Details:**

Maximum Rated Heat Input Capacity: 30.6 (mmBtu/hr)

# **Emission Details:**

**Annual CO2 mass emissions from sorbent:** 0.0 (Metric Tons)

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

# **GHG Summary Report**

# **Tier Fuel Details:**

Fuel: Natural Gas (Weighted U.S. Average)

Tier Name: Tier 1 (Equation C-1)

**Tier Methodology Start Date:** 2013-01-01 **Tier Methodology End Date:** 2013-12-31

# **Fuel Emission Details:**

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

#### Subpart D: Electricity Generation

Gas Name	Other Gas Name	Gas Quantity	Own Results?
Biogenic Carbon	dioxide	0 (Metric Tons)	
Methane		29.5 (Metric Tons)	
Nitrous Oxide		2.95 (Metric Tons)	
Carbon Dioxide		1589818.6 (Metric Tons)	

#### **Unit Details:**

Unit Name: CT1

Unit Type: Electricity Generator

**Unit Description:** 

Plant Code: (numeric, maximum of 6 digits)
Part 75 Methodology: Appendix G, Equation G-4

Methodology Start Date: 2013-01-01 Methodology End Date: 2013-12-31 Acid Rain Program Indicator: Y

#### **Emission Details:**

**Annual CO2** Emissions Including Biomass (metric tons): 802067.5 **Annual CO2** Emissions Including Biomass (short tons): 884119.0

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)

Annual heat input: 14900000 (mmBtu)

CH4 Emissions CO2 Equivalent: 372.5 (Metric Tons) N2O Emissions CO2 Equivalent: 444.0 (Metric Tons)

**Unit Name: CT2** 

Unit Type: Electricity Generator

**Unit Description:** 

Plant Code: (numeric, maximum of 6 digits)
Part 75 Methodology: Appendix G, Equation G-4

Methodology Start Date: 2013-01-01 Methodology End Date: 2013-12-31

# **GHG Summary Report**

# **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: W H Zimmer Generating Station

Facility Identifier: 520249 Facility Reporting Year: 2013

Facility Location:

Address: 1781 US ROUTE 52

City: MOSCOW State: OH

Postal Code: 45200

## **Facility Site Details:**

CO2 equivalent emissions from facility subparts C-II, SS, and TT (metric tons): 8474948.8

CO2 equivalent emissions from supplier subparts LL-QQ (metric tons): 0

Biogenic CO2 emissions from facility subparts C-II, SS, and TT (metric tons): 0

**Cogeneration Unit Emissions Indicator: N** 

GHG Report Start Date: 2013-01-01 GHG Report End Date: 2013-12-31

**Description of Changes to Calculation Methodology:** 

**Part 75 Biogenic Emissions Indication:** 

Plant Code Indicator: Y

Primary NAICS Code: 221112 Second Primary NAICS Code:

# **Parent Company Details:**

Parent Company Name: AMERICAN ELECTRIC POWER Address: One Riverside Plaze, Columbus, OH 43215-2372

Percent Ownership Interest: 25.4

Parent Company Name: DUKE ENERGY CORP

Address: 526 South Church St, Charlotte, NC 28202-1803

Percent Ownership Interest: 46.5

Parent Company Name: THE DAYTON POWER & LIGHT CO

Address: 1065 Woodsman Drive, Dayton, OH 45432

Percent Ownership Interest: 28.1

# Subpart C: General Stationary Fuel Combustion

#### **Gas Information Details**

Gas Name	Other Gas Name	er Gas Name Gas Quantity	
Biogenic Carbon	dioxide	0 (Metric Tons)	
Methane		2.15 (Metric Tons)	
Nitrous Oxide		0.417 (Metric Tons)	
Carbon Dioxide		57086.4 (Metric Tons)	

# **Unit Details:**

Unit Name: CP-Aux Blrs

Unit Type: OCS (Other combustion source)
Unit Description: Auxiliary Boilers A&B

#### **Other Unit Name:**

# **Common Pipe Details:**

# **GHG Summary Report**

**Maximum Rated Heat Input Capacity: 603** 

# **Emission Details:**

Annual Biogenic CO2 Emissions: 0.0 (metric tons)

Annual Fossil fuel based CO2 Emissions: 56993.0 (metric tons)

# **Tier Fuel Details:**

Fuel: Natural Gas (Weighted U.S. Average)

**Tier Name:** Tier 1 (Equation C-1)

Tier Methodology Start Date: 2013-07-01 Tier Methodology End Date: 2013-12-31

#### **Fuel Emission Details:**

Total CO2 emissions	Total CH4 emissions	Total N2O emissions	Total CH4 emissions CO2e	Total N2O emissions CO2e
7399.9	0.14 (Metric	0.014 (Metric	3.5 (Metric Tons)	4.2 (Metric Tons)
(Metric	Tons)	Tons)		
Tons)				

Fuel: Distillate Fuel Oil No. 2 Tier Name: Tier 2 (Equation C-2a) **Tier Methodology Start Date: 2013-01-01 Tier Methodology End Date: 2013-06-30** 

Frequency of HHV determinations: Once per fuel lot

# **Tier 2 Monthly HHV Details:**

Jan	Feb	March	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
N	N	N	N	N	N	N	N	N	N	N	N

#### **Fuel Emission Details:**

Total CO2 emissions	Total CH4 emissions	Total N2O emissions	Total CH4 emissions CO2e	Total N2O emissions CO2e
49593.5	2.01 (Metric	0.402 (Metric	50.3 (Metric Tons)	119.8 (Metric Tons)
(Metric	Tons)	Tons)		
Tons)				

**Unit Name:** GP- Oil-fired Heaters

**Unit Type:** OCS (Other combustion source)

**Unit Description:** Two heaters

**Other Unit Name:** 

# **Small Unit Aggregation Details:**

**Highest Maximum Rated Heat Input Capacity: 4.1** 

#### **Emission Details:**

**Annual CO2 mass emissions from sorbent:** 0.0 (Metric Tons)

Annual Biogenic CO2 Emissions: 0.0 (metric tons)

Annual Fossil fuel based CO2 Emissions: 93.0 (metric tons)

#### Tier Fuel Details:

Fuel: Distillate Fuel Oil No. 2 Tier Name: Tier 2 (Equation C-2a)

**Tier Methodology Start Date:** 2013-01-01 **Tier Methodology End Date:** 2013-12-31

Frequency of HHV determinations: Once per fuel lot

# **Tier 2 Monthly HHV Details:**

Jan	Feb	March	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
N	N	N	N	N	N	N	N	N	N	N	N

# **Fuel Emission Details:**

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

# **GHG Summary Report**

Subpart D: Electricity Generation

# **Gas Information Details**

Gas Name	Other Gas Name	Gas Name Gas Quantity		
Biogenic Carbon	dioxide	0 (Metric Tons)		
Methane		986.7 (Metric Tons)		
Nitrous Oxide		143.52 (Metric Tons)	<u> </u>	
Carbon Dioxide		8350247.9 (Metric Tons)		

# **Unit Details:**

Unit Name: 1

Unit Type: Electricity Generator

**Unit Description:** 

Plant Code: (numeric, maximum of 6 digits)

Part 75 Methodology: CEMS

Methodology Start Date: 2013-01-01 Methodology End Date: 2013-12-31 Acid Rain Program Indicator: Y

# **Emission Details:**

**Annual CO2 Emissions Including Biomass (metric tons):** 8350247.9 **Annual CO2 Emissions Including Biomass (short tons):** 9204478.3

Annual CO2 Emissions from Biomass (metric tons): 0.0

# **CEMS Details:**

Operating Hours CO2 Concentration Substituted: 7 Operating Hours Stack Gas Flow Rate Substituted: 20 Operating Hours Stack Gas Moisture Substituted:

# **Electricity Fuel Details:**

Fuel type: Bituminous

Annual heat input: 89700000 (mmBtu)

CH4 Emissions CO2 Equivalent: 24667.5 (Metric Tons) N2O Emissions CO2 Equivalent: 42769.0 (Metric Tons

This foregoing document was electronically filed with the Public Utilities

**Commission of Ohio Docketing Information System on** 

4/14/2014 2:07:28 PM

in

Case No(s). 14-0562-EL-UNC

Summary: Notice Notice of Filing of Greenhouse Gas Report by Duke Energy Ohio, Inc. electronically filed by Ms. Lisa A DeMarcus on behalf of Ms. Amy Spiller and Mr. James Wells and Ms. Elizabeth Watts and Duke Energy