

FirstEnergy Generation, LLC's )  
 Notice of Filing Greenhouse Gas Reports ) Case No. 13-0916-EL-UNC  
 )

**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:** Ashtabula

**Facility Identifier:** 520002

**Facility Reporting Year:** 2012

**Facility Location:**

Address: 2210 South Ridge Road West

City: Ashtabula

State: OH

Postal Code: 44004

**Facility Site Details:**

**CO2 Equivalent (excluding biogenic, mtons, Subparts C-II and RR-UU):** 392233

**CO2 Equivalent (mtons, Subparts LL-QQ):** 0

**Biogenic CO2 (mtons, Subparts C-II and RR-UU):** 0

**Cogeneration Unit Emissions Indicator:** N

**GHG Report Start Date:** 2012-01-01

**GHG Report End Date:** 2012-12-31

**Description of Changes to Calculation Methodology:**

**Part 75 Biogenic Emissions Indication:**

**Primary NAICS Code:** 221112

**Second Primary NAICS Code:**

**Parent Company Details:**

**Parent Company Name:** FirstEnergy Generation, LLC

**Address:** 76 South Main Street, Akron, OH 44308

**Percent Ownership Interest:** 100

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## Subpart C: General Stationary Fuel Combustion

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**Gas Information Details**

Gas Name	Other Gas Name	Gas Quantity	Own Result?
Carbon Dioxide		69445.7 (Metric Tons)	
Biogenic Carbon dioxide		0 (Metric Tons)	
Methane		1.31 (Metric Tons)	
Nitrous Oxide		0.131 (Metric Tons)	

**Unit Details:**

**Unit Name :** 1

**Unit Type :** OB (Boiler, other)

**Unit Description :** Aux Boiler 1

**Individual Unit Details:**

**Maximum Rated Heat Input Capacity:** 198 (mmBtu/hr)

**Emission Details:****Annual Biogenic CO2 Emissions:** 0 (metric tons)**Annual Fossil fuel based CO2 Emissions:** 69445.7 (metric tons)**Tier Fuel Details:****Fuel :** Natural Gas (Weighted U.S. Average)**Tier Name :** Tier 1 (Equation C-1)**Tier Methodology Start Date :** 2012-01-01**Tier Methodology End Date :** 2012-12-31**Fuel Emission Details :**

Total CO2 emissions	Total CH4 emissions	Total N2O emissions	Total CH4 emissions CO2e	Total N2O emissions CO2e
69445.7 (Metric Tons)	1.31 (Metric Tons)	0.131 (Metric Tons)	27.5 (Metric Tons)	40.6 (Metric Tons)

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## Subpart D: Electricity Generation

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**Gas Information Details**

Gas Name	Other Gas Name	Gas Quantity	Own Result?
Carbon Dioxide		320975 (Metric Tons)	
Methane		3.37 (Metric Tons)	
Nitrous Oxide		5.398 (Metric Tons)	

**Unit Details:****Unit Name :** 7**Unit Type :** Electricity Generator**Unit Description :** 7**Part 75 Methodology :** CEMS**Methodology Start Date:** 2012-01-01**Methodology End Date:** 2012-12-31**Acid Rain Program Indicator:** Y**Emission Details:****Annual CO2 Emissions Including Biomass** (metric tons): 320975**Annual CO2 Emissions Including Biomass** (short tons): 353810.7**Annual CO2 Emissions from Biomass** (metric tons): 0**CEMS Details:****Operating Hours CO2 Concentration Substituted:** 52**Operating Hours Stack Gas Flow Rate Substituted:** 6**Operating Hours Stack Gas Moisture Substituted:** 0**Electricity Fuel Details:****Fuel type:** Mixed (Electric Power sector)**Annual heat input:** 3373490 (mmBtu)**Annual CH4 emissions from combustion of the specified fuel:** 3.37 (Metric Tons)

<b>Annual N<sub>2</sub>O emissions from combustion of the specified fuel:</b> 5.398 (Metric Tons) <b>CH<sub>4</sub> Emissions CO<sub>2</sub> Equivalent:</b> 70.8 (Metric Tons) <b>N<sub>2</sub>O Emissions CO<sub>2</sub> Equivalent:</b> 1673.4 (Metric Tons)
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**Facility Name:** Bay Shore

**Facility Identifier:** 520021

**Facility Reporting Year:** 2012

**Facility Location:**

Address: 4701 Bay Shore Road

City: Oregon

State: OH

Postal Code: 43616

**Facility Site Details:**

**CO2 Equivalent (excluding biogenic, mtons, Subparts C-II and RR-UU):** 1799146.7

**CO2 Equivalent (mtons, Subparts LL-QQ):** 0

**Biogenic CO2 (mtons, Subparts C-II and RR-UU):** 0

**Cogeneration Unit Emissions Indicator:** N

**GHG Report Start Date:** 2012-01-01

**GHG Report End Date:** 2012-12-31

**Description of Changes to Calculation Methodology:**

**Part 75 Biogenic Emissions Indication:**

**Primary NAICS Code:** 221112

**Second Primary NAICS Code:**

**Parent Company Details:**

**Parent Company Name:** FirstEnergy Generation, LLC

**Address:** 76 South Main Street, Akron, OH 44308

**Percent Ownership Interest:** 100

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## Subpart C: General Stationary Fuel Combustion

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**Gas Information Details**

Gas Name	Other Gas Name	Gas Quantity	Own Result?
Carbon Dioxide		2417.3 (Metric Tons)	
Biogenic Carbon dioxide		0 (Metric Tons)	
Methane		0.09 (Metric Tons)	
Nitrous Oxide		0.02 (Metric Tons)	

**Unit Details:**

**Unit Name :** CT-1

**Unit Type :** SCCT (CT (Turbine, simple cycle combustion))

**Unit Description :** CT-1

**Individual Unit Details:**

**Maximum Rated Heat Input Capacity:** 284 (mmBtu/hr)

**Emission Details:****Annual Biogenic CO2 Emissions:** 0 (metric tons)**Annual Fossil fuel based CO2 Emissions:** 95.8 (metric tons)**Tier Fuel Details:****Fuel :** Distillate Fuel Oil No. 2**Tier Name :** Tier 2 (Equation C-2a)**Tier Methodology Start Date :** 2012-01-01**Tier Methodology End Date :** 2012-12-31**Frequency of HHV determinations :** Once per fuel lot**Tier 2 Monthly HHV Details :**

January	February	March	April	May	June	July	August	September	October	November
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
95.8 (Metric Tons)	0 (Metric Tons)	0.001 (Metric Tons)	0.1 (Metric Tons)	0.2 (Metric Tons)

**Unit Name :** LDM**Unit Type :** PRH (Process Heater)**Unit Description :** LDM**Individual Unit Details:****Maximum Rated Heat Input Capacity:** 12 (mmBtu/hr)**Emission Details:****Annual Biogenic CO2 Emissions:** 0 (metric tons)**Annual Fossil fuel based CO2 Emissions:** 2321.5 (metric tons)**Tier Fuel Details:****Fuel :** Distillate Fuel Oil No. 2**Tier Name :** Tier 2 (Equation C-2a)**Tier Methodology Start Date :** 2012-01-01**Tier Methodology End Date :** 2012-12-31**Frequency of HHV determinations :** Once per fuel lot**Tier 2 Monthly HHV Details :**

January	February	March	April	May	June	July	August	September	October	November
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
2321.5 (Metric Tons)	0.09 (Metric Tons)	0.019 (Metric Tons)	2 (Metric Tons)	5.8 (Metric Tons)

## Subpart D: Electricity Generation

### Gas Information Details

Gas Name	Other Gas Name	Gas Quantity	Own Result?
Carbon Dioxide		1790727 (Metric Tons)	
Methane		46.33 (Metric Tons)	
Nitrous Oxide		16.198 (Metric Tons)	

### Unit Details:

**Unit Name :** 1

**Unit Type :** Electricity Generator

**Unit Description :** 1

**Part 75 Methodology :** CEMS

**Methodology Start Date:** 2012-01-01

**Methodology End Date:** 2012-12-31

**Acid Rain Program Indicator:** Y

### Emission Details:

**Annual CO2 Emissions Including Biomass** (metric tons): 1319673.7

**Annual CO2 Emissions Including Biomass** (short tons): 1454676.3

**Annual CO2 Emissions from Biomass** (metric tons): 0

### CEMS Details:

**Operating Hours CO2 Concentration Substituted:** 16

**Operating Hours Stack Gas Flow Rate Substituted:** 3

**Operating Hours Stack Gas Moisture Substituted:** 0

### Electricity Fuel Details:

**Fuel type:** Petroleum Coke

**Annual heat input:** 13794941 (mmBtu)

**Annual CH<sub>4</sub> emissions from combustion of the specified fuel:** 41.38  
(Metric Tons)

**Annual N<sub>2</sub>O emissions from combustion of the specified fuel:** 8.277  
(Metric Tons)

**CH<sub>4</sub> Emissions CO<sub>2</sub> Equivalent:** 869 (Metric Tons)

**N<sub>2</sub>O Emissions CO<sub>2</sub> Equivalent:** 2565.9 (Metric Tons)

**Fuel type:** Subbituminous

**Annual heat input:** 0 (mmBtu)

**Annual CH<sub>4</sub> emissions from combustion of the specified fuel:** 0 (Metric  
Tons)

**Annual N<sub>2</sub>O emissions from combustion of the specified fuel:** 0 (Metric  
Tons)

**CH<sub>4</sub> Emissions CO<sub>2</sub> Equivalent:** 0 (Metric Tons)

**N<sub>2</sub>O Emissions CO<sub>2</sub> Equivalent:** 0 (Metric Tons)

**Unit Name :** CS5

**Unit Type :** Electricity Generator

**Unit Description :** CS5

**Part 75 Methodology :** CEMS

**Methodology Start Date:** 2012-01-01

**Methodology End Date:** 2012-12-31

**Acid Rain Program Indicator:** Y

**Emission Details:**

**Annual CO2 Emissions Including Biomass** (metric tons): 471053.3

**Annual CO2 Emissions Including Biomass** (short tons): 519242

**Annual CO2 Emissions from Biomass** (metric tons): 0

**CEMS Details:**

**Operating Hours CO2 Concentration Substituted:** 11

**Operating Hours Stack Gas Flow Rate Substituted:** 0

**Operating Hours Stack Gas Moisture Substituted:** 0

**Electricity Fuel Details:**

**Fuel type:** Mixed (Electric Power sector)

**Annual heat input:** 4950825 (mmBtu)

**Annual CH<sub>4</sub> emissions from combustion of the specified fuel:** 4.95 (Metric Tons)

**Annual N<sub>2</sub>O emissions from combustion of the specified fuel:** 7.921 (Metric Tons)

**CH<sub>4</sub> Emissions CO<sub>2</sub> Equivalent:** 104 (Metric Tons)

**N<sub>2</sub>O Emissions CO<sub>2</sub> Equivalent:** 2455.5 (Metric Tons)



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**Facility Name:** R E Burger

**Facility Identifier:** 520015

**Facility Reporting Year:** 2012

**Facility Location:**

Address: 57246 Ferry Landing Road

City: Shadyside

State: OH

Postal Code: 43947

**Facility Site Details:**

**CO2 Equivalent (excluding biogenic, mtons, Subparts C-II and RR-UU):** 131

**CO2 Equivalent (mtons, Subparts LL-QQ):** 0

**Biogenic CO2 (mtons, Subparts C-II and RR-UU):** 0

**Cogeneration Unit Emissions Indicator:** N

**GHG Report Start Date:** 2012-01-01

**GHG Report End Date:** 2012-12-31

**Description of Changes to Calculation Methodology:**

**Part 75 Biogenic Emissions Indication:**

**Primary NAICS Code:** 221112

**Second Primary NAICS Code:**

**Parent Company Details:**

**Parent Company Name:** FirstEnergy Generation, LLC

**Address:** 76 South Main Street, Akron, OH 44308

**Percent Ownership Interest:** 100

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## Subpart C: General Stationary Fuel Combustion

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**Gas Information Details**

Gas Name	Other Gas Name	Gas Quantity	Own Result?
Carbon Dioxide		130.7 (Metric Tons)	
Biogenic Carbon dioxide		0 (Metric Tons)	
Methane		0 (Metric Tons)	
Nitrous Oxide		0.001 (Metric Tons)	

**Unit Details:**

**Unit Name :** emda

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

**Unit Description :** EMD-A

**Other Unit Name :**

**Individual Unit Details:**

**Maximum Rated Heat Input Capacity:** 26 (mmBtu/hr)

**Emission Details:****Annual Biogenic CO2 Emissions:** 0 (metric tons)**Annual Fossil fuel based CO2 Emissions:** 18.4 (metric tons)**Tier Fuel Details:****Fuel :** Distillate Fuel Oil No. 2**Tier Name :** Tier 2 (Equation C-2a)**Tier Methodology Start Date :** 2012-01-01**Tier Methodology End Date :** 2012-12-31**Frequency of HHV determinations :** Once per fuel lot**Tier 2 Monthly HHV Details :**

January	February	March	April	May	June	July	August	September	October	November
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
18.4 (Metric Tons)	0 (Metric Tons)	0 (Metric Tons)	0 (Metric Tons)	0 (Metric Tons)

**Unit Name :** emdb**Unit Type :** OCS (Other combustion source)**Unit Description :** EMD-B1**Other Unit Name :****Individual Unit Details:****Maximum Rated Heat Input Capacity:** 26 (mmBtu/hr)**Emission Details:****Annual Biogenic CO2 Emissions:** 0 (metric tons)**Annual Fossil fuel based CO2 Emissions:** 18.7 (metric tons)**Tier Fuel Details:****Fuel :** Distillate Fuel Oil No. 2**Tier Name :** Tier 2 (Equation C-2a)**Tier Methodology Start Date :** 2012-01-01**Tier Methodology End Date :** 2012-12-31**Frequency of HHV determinations :** Once per fuel lot**Tier 2 Monthly HHV Details :**

January	February	March	April	May	June	July	August	September	October	November
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
18.7 (Metric Tons)	0 (Metric Tons)	0 (Metric Tons)	0 (Metric Tons)	0 (Metric Tons)

**Unit Name :** emdb2

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

**Unit Description :** EMD-B2

**Other Unit Name :**

**Individual Unit Details:**

**Maximum Rated Heat Input Capacity:** 26 (mmBtu/hr)

**Emission Details:**

**Annual Biogenic CO2 Emissions:** 0 (metric tons)

**Annual Fossil fuel based CO2 Emissions:** 18.7 (metric tons)

**Tier Fuel Details:**

**Fuel :** Distillate Fuel Oil No. 2

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

**Tier Methodology Start Date :** 2012-01-01

**Tier Methodology End Date :** 2012-12-31

**Frequency of HHV determinations :** Once per fuel lot

**Tier 2 Monthly HHV Details :**

January	February	March	April	May	June	July	August	September	October	November
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
18.7 (Metric Tons)	0 (Metric Tons)	0 (Metric Tons)	0 (Metric Tons)	0 (Metric Tons)

**Unit Name :** ymb

**Unit Type :** OB (Boiler, other)

**Unit Description :** aux boiler YMB

**Individual Unit Details:**

**Maximum Rated Heat Input Capacity:** 2 (mmBtu/hr)

**Emission Details:**

**Annual Biogenic CO2 Emissions:** 0 (metric tons)

**Annual Fossil fuel based CO2 Emissions:** 74.9 (metric tons)

**Tier Fuel Details:**

**Fuel :** Kerosene

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

**Tier Methodology Start Date :** 2012-01-01

**Tier Methodology End Date :** 2012-12-31

**Fuel Emission Details :**

Total CO2 emissions	Total CH4 emissions	Total N2O emissions	Total CH4 emissions CO2e	Total N2O emissions CO2e
74.9 (Metric Tons)	0 (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?
Carbon Dioxide		0 (Metric Tons)	
Methane		0 (Metric Tons)	
Nitrous Oxide		0 (Metric Tons)	

### Unit Details:

**Unit Name :** CS0001

**Unit Type :** Electricity Generator

**Unit Description :** CS0001

**Part 75 Methodology :** CEMS

**Methodology Start Date:** 2012-01-01

**Methodology End Date:** 2012-12-31

**Acid Rain Program Indicator:** Y

### Emission Details:

**Annual CO2 Emissions Including Biomass** (metric tons): 0

**Annual CO2 Emissions Including Biomass** (short tons): 0

**Annual CO2 Emissions from Biomass** (metric tons): 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:** Subbituminous

**Annual heat input:** 0 (mmBtu)

**Annual CH<sub>4</sub> emissions from combustion of the specified fuel:** 0 (Metric Tons)

**Annual N<sub>2</sub>O emissions from combustion of the specified fuel:** 0 (Metric Tons)

**CH<sub>4</sub> Emissions CO<sub>2</sub> Equivalent:** 0 (Metric Tons)

**N<sub>2</sub>O Emissions CO<sub>2</sub> Equivalent:** 0 (Metric Tons)

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**Facility Name:** Eastlake

**Facility Identifier:** 520004

**Facility Reporting Year:** 2012

**Facility Location:**

Address: 10 Erie Road

City: Eastlake

State: OH

Postal Code: 44095

**Facility Site Details:**

**CO2 Equivalent (excluding biogenic, mtons, Subparts C-II and RR-UU):** 4195681.1

**CO2 Equivalent (mtons, Subparts LL-QQ):** 0

**Biogenic CO2 (mtons, Subparts C-II and RR-UU):** 0

**Cogeneration Unit Emissions Indicator:** N

**GHG Report Start Date:** 2012-01-01

**GHG Report End Date:** 2012-12-31

**Description of Changes to Calculation Methodology:**

**Part 75 Biogenic Emissions Indication:**

**Primary NAICS Code:** 221112

**Second Primary NAICS Code:**

**Parent Company Details:**

**Parent Company Name:** FirstEnergy Generation, LLC

**Address:** 76 South Main Street, Akron, OH 44308

**Percent Ownership Interest:** 100

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## Subpart C: General Stationary Fuel Combustion

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**Gas Information Details**

Gas Name	Other Gas Name	Gas Quantity	Own Result?
Carbon Dioxide		811.4 (Metric Tons)	
Biogenic Carbon dioxide		0 (Metric Tons)	
Methane		0.03 (Metric Tons)	
Nitrous Oxide		0.007 (Metric Tons)	

**Unit Details:**

**Unit Name :** 6

**Unit Type :** SCCT (CT (Turbine, simple cycle combustion))

**Unit Description :** 6

**Individual Unit Details:**

**Maximum Rated Heat Input Capacity:** 469 (mmBtu/hr)

**Emission Details:****Annual Biogenic CO2 Emissions:** 0 (metric tons)**Annual Fossil fuel based CO2 Emissions:** 811.4 (metric tons)**Tier Fuel Details:****Fuel :** Distillate Fuel Oil No. 2**Tier Name :** Tier 2 (Equation C-2a)**Tier Methodology Start Date :** 2012-01-01**Tier Methodology End Date :** 2012-12-31**Frequency of HHV determinations :** Once per fuel lot**Tier 2 Monthly HHV Details :**

January	February	March	April	May	June	July	August	September	October	November
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
811.4 (Metric Tons)	0.03 (Metric Tons)	0.007 (Metric Tons)	0.7 (Metric Tons)	2 (Metric Tons)

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## Subpart D: Electricity Generation

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**Gas Information Details**

Gas Name	Other Gas Name	Gas Quantity	Own Result?
Carbon Dioxide		4172196.7 (Metric Tons)	
Methane		43.84 (Metric Tons)	
Nitrous Oxide		70.16 (Metric Tons)	

**Unit Details:****Unit Name :** 1**Unit Type :** Electricity Generator**Unit Description :** 1**Part 75 Methodology :** CEMS**Methodology Start Date:** 2012-01-01**Methodology End Date:** 2012-12-31**Acid Rain Program Indicator:** Y**Emission Details:****Annual CO2 Emissions Including Biomass** (metric tons): 469857.6**Annual CO2 Emissions Including Biomass** (short tons): 517924**Annual CO2 Emissions from Biomass** (metric tons): 0**CEMS Details:****Operating Hours CO2 Concentration Substituted:** 113**Operating Hours Stack Gas Flow Rate Substituted:** 4**Operating Hours Stack Gas Moisture Substituted:** 0

**Electricity Fuel Details:**

<b>Fuel type:</b> Mixed (Electric Power sector) <b>Annual heat input:</b> 4938261 (mmBtu) <b>Annual CH<sub>4</sub> emissions from combustion of the specified fuel:</b> 4.94 (Metric Tons) <b>Annual N<sub>2</sub>O emissions from combustion of the specified fuel:</b> 7.901 (Metric Tons) <b>CH<sub>4</sub> Emissions CO<sub>2</sub> Equivalent:</b> 103.7 (Metric Tons) <b>N<sub>2</sub>O Emissions CO<sub>2</sub> Equivalent:</b> 2449.3 (Metric Tons)
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**Unit Name :** 2**Unit Type :** Electricity Generator**Unit Description :** 2**Part 75 Methodology :** CEMS**Methodology Start Date:** 2012-01-01**Methodology End Date:** 2012-12-31**Acid Rain Program Indicator:** Y**Emission Details:****Annual CO<sub>2</sub> Emissions Including Biomass** (metric tons): 394019.5**Annual CO<sub>2</sub> Emissions Including Biomass** (short tons): 434327.7**Annual CO<sub>2</sub> Emissions from Biomass** (metric tons): 0**CEMS Details:****Operating Hours CO<sub>2</sub> Concentration Substituted:** 124**Operating Hours Stack Gas Flow Rate Substituted:** 19**Operating Hours Stack Gas Moisture Substituted:** 0**Electricity Fuel Details:**

<b>Fuel type:</b> Mixed (Electric Power sector) <b>Annual heat input:</b> 4141191 (mmBtu) <b>Annual CH<sub>4</sub> emissions from combustion of the specified fuel:</b> 4.14 (Metric Tons) <b>Annual N<sub>2</sub>O emissions from combustion of the specified fuel:</b> 6.626 (Metric Tons) <b>CH<sub>4</sub> Emissions CO<sub>2</sub> Equivalent:</b> 86.9 (Metric Tons) <b>N<sub>2</sub>O Emissions CO<sub>2</sub> Equivalent:</b> 2054.1 (Metric Tons)
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**Unit Name :** 3**Unit Type :** Electricity Generator**Unit Description :** 3**Part 75 Methodology :** CEMS**Methodology Start Date:** 2012-01-01**Methodology End Date:** 2012-12-31**Acid Rain Program Indicator:** Y**Emission Details:****Annual CO<sub>2</sub> Emissions Including Biomass** (metric tons): 422886.6**Annual CO<sub>2</sub> Emissions Including Biomass** (short tons): 466147.9**Annual CO<sub>2</sub> Emissions from Biomass** (metric tons): 0**CEMS Details:**

**Operating Hours CO2 Concentration Substituted:** 171  
**Operating Hours Stack Gas Flow Rate Substituted:** 15  
**Operating Hours Stack Gas Moisture Substituted:** 0

**Electricity Fuel Details:**

<b>Fuel type:</b> Mixed (Electric Power sector) <b>Annual heat input:</b> 4444571 (mmBtu) <b>Annual CH<sub>4</sub> emissions from combustion of the specified fuel:</b> 4.44 (Metric Tons) <b>Annual N<sub>2</sub>O emissions from combustion of the specified fuel:</b> 7.111 (Metric Tons) <b>CH<sub>4</sub> Emissions CO<sub>2</sub> Equivalent:</b> 93.2 (Metric Tons) <b>N<sub>2</sub>O Emissions CO<sub>2</sub> Equivalent:</b> 2204.4 (Metric Tons)
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**Unit Name :** 4  
**Unit Type :** Electricity Generator  
**Unit Description :** 4  
**Part 75 Methodology :** CEMS  
**Methodology Start Date:** 2012-01-01  
**Methodology End Date:** 2012-12-31  
**Acid Rain Program Indicator:** Y

**Emission Details:**

**Annual CO2 Emissions Including Biomass** (metric tons): 606396.7  
**Annual CO2 Emissions Including Biomass** (short tons): 668431.1  
**Annual CO2 Emissions from Biomass** (metric tons): 0

**CEMS Details:**

**Operating Hours CO2 Concentration Substituted:** 134  
**Operating Hours Stack Gas Flow Rate Substituted:** 13  
**Operating Hours Stack Gas Moisture Substituted:** 0

**Electricity Fuel Details:**

<b>Fuel type:</b> Mixed (Electric Power sector) <b>Annual heat input:</b> 6373292 (mmBtu) <b>Annual CH<sub>4</sub> emissions from combustion of the specified fuel:</b> 6.37 (Metric Tons) <b>Annual N<sub>2</sub>O emissions from combustion of the specified fuel:</b> 10.197 (Metric Tons) <b>CH<sub>4</sub> Emissions CO<sub>2</sub> Equivalent:</b> 133.8 (Metric Tons) <b>N<sub>2</sub>O Emissions CO<sub>2</sub> Equivalent:</b> 3161.1 (Metric Tons)
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**Unit Name :** 5  
**Unit Type :** Electricity Generator  
**Unit Description :** 5  
**Part 75 Methodology :** CEMS  
**Methodology Start Date:** 2012-01-01  
**Methodology End Date:** 2012-12-31  
**Acid Rain Program Indicator:** Y

**Emission Details:**

**Annual CO2 Emissions Including Biomass** (metric tons): 2279036.3  
**Annual CO2 Emissions Including Biomass** (short tons): 2512181.7



**Annual CO2 Emissions from Biomass** (metric tons): 0

**CEMS Details:**

**Operating Hours CO2 Concentration Substituted:** 80

**Operating Hours Stack Gas Flow Rate Substituted:** 5

**Operating Hours Stack Gas Moisture Substituted:** 0

**Electricity Fuel Details:**

**Fuel type:** Mixed (Electric Power sector)

**Annual heat input:** 23952910 (mmBtu)

**Annual CH<sub>4</sub> emissions from combustion of the specified fuel:** 23.95  
(Metric Tons)

**Annual N<sub>2</sub>O emissions from combustion of the specified fuel:** 38.325  
(Metric Tons)

**CH<sub>4</sub> Emissions CO<sub>2</sub> Equivalent:** 503 (Metric Tons)

**N<sub>2</sub>O Emissions CO<sub>2</sub> Equivalent:** 11880.8 (Metric Tons)

**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:** Lake Shore

**Facility Identifier:** 520005

**Facility Reporting Year:** 2012

**Facility Location:**

Address: 205 Willis Street

City: Cleveland

State: OH

Postal Code: 44103

**Facility Site Details:**

**CO2 Equivalent (excluding biogenic, mtons, Subparts C-II and RR-UU):** 218318.3

**CO2 Equivalent (mtons, Subparts LL-QQ):** 0

**Biogenic CO2 (mtons, Subparts C-II and RR-UU):** 0

**Cogeneration Unit Emissions Indicator:** N

**GHG Report Start Date:** 2012-01-01

**GHG Report End Date:** 2012-12-31

**Description of Changes to Calculation Methodology:**

**Part 75 Biogenic Emissions Indication:**

**Primary NAICS Code:** 221112

**Second Primary NAICS Code:**

**Parent Company Details:**

**Parent Company Name:** FirstEnergy Generation, LLC

**Address:** 76 South Main Street, Akron, OH 44308

**Percent Ownership Interest:** 100

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## Subpart C: General Stationary Fuel Combustion

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**Gas Information Details**

Gas Name	Other Gas Name	Gas Quantity	Own Result?
Carbon Dioxide		327.1 (Metric Tons)	
Biogenic Carbon dioxide		0 (Metric Tons)	
Methane		0.01 (Metric Tons)	
Nitrous Oxide		0.002 (Metric Tons)	

**Unit Details:**

**Unit Name :** D1

**Unit Type :** OB (Boiler, other)

**Unit Description :** D1

**Individual Unit Details:**

**Maximum Rated Heat Input Capacity:** 19 (mmBtu/hr)

**Emission Details:****Annual Biogenic CO2 Emissions:** 0 (metric tons)**Annual Fossil fuel based CO2 Emissions:** 19.3 (metric tons)**Tier Fuel Details:****Fuel :** Distillate Fuel Oil No. 2**Tier Name :** Tier 2 (Equation C-2a)**Tier Methodology Start Date :** 2012-01-01**Tier Methodology End Date :** 2012-12-31**Frequency of HHV determinations :** Once per fuel lot**Tier 2 Monthly HHV Details :**

January	February	March	April	May	June	July	August	September	October	November
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
19.3 (Metric Tons)	0 (Metric Tons)	0 (Metric Tons)	0 (Metric Tons)	0 (Metric Tons)

**Unit Name :** D2**Unit Type :** OB (Boiler, other)**Unit Description :** D2**Individual Unit Details:****Maximum Rated Heat Input Capacity:** 19 (mmBtu/hr)**Emission Details:****Annual Biogenic CO2 Emissions:** 0 (metric tons)**Annual Fossil fuel based CO2 Emissions:** 19.3 (metric tons)**Tier Fuel Details:****Fuel :** Distillate Fuel Oil No. 2**Tier Name :** Tier 2 (Equation C-2a)**Tier Methodology Start Date :** 2012-01-01**Tier Methodology End Date :** 2012-12-31**Frequency of HHV determinations :** Once per fuel lot**Tier 2 Monthly HHV Details :**

January	February	March	April	May	June	July	August	September	October	November
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
19.3 (Metric Tons)	0 (Metric Tons)	0 (Metric Tons)	0 (Metric Tons)	0 (Metric Tons)

**Unit Name :** aux1

**Unit Type :** OB (Boiler, other)

**Unit Description :** aux boiler 1

**Individual Unit Details:**

**Maximum Rated Heat Input Capacity:** 75 (mmBtu/hr)

**Emission Details:**

**Annual Biogenic CO2 Emissions:** 0 (metric tons)

**Annual Fossil fuel based CO2 Emissions:** 288.5 (metric tons)

**Tier Fuel Details:**

**Fuel :** Distillate Fuel Oil No. 2

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

**Tier Methodology Start Date :** 2012-01-01

**Tier Methodology End Date :** 2012-12-31

**Frequency of HHV determinations :** Once per fuel lot

**Tier 2 Monthly HHV Details :**

January	February	March	April	May	June	July	August	September	October	November
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
288.5 (Metric Tons)	0.01 (Metric Tons)	0.002 (Metric Tons)	0.3 (Metric Tons)	0.7 (Metric Tons)

## Subpart D: Electricity Generation

**Gas Information Details**

Gas Name	Other Gas Name	Gas Quantity	Own Result?
Carbon Dioxide		216812.2 (Metric Tons)	
Methane		2.28 (Metric Tons)	
Nitrous Oxide		3.646 (Metric Tons)	

**Unit Details:**

**Unit Name :** 18

**Unit Type :** Electricity Generator

**Unit Description :** 18

**Part 75 Methodology :** CEMS

**Methodology Start Date:** 2012-01-01

**Methodology End Date:** 2012-12-31

**Acid Rain Program Indicator:** Y

**Emission Details:**

**Annual CO2 Emissions Including Biomass** (metric tons): 216812.2

**Annual CO2 Emissions Including Biomass** (short tons): 238992.1

**Annual CO2 Emissions from Biomass** (metric tons): 0

**CEMS Details:****Operating Hours CO2 Concentration Substituted:** 13**Operating Hours Stack Gas Flow Rate Substituted:** 5**Operating Hours Stack Gas Moisture Substituted:** 0**Electricity Fuel Details:****Fuel type:** Mixed (Electric Power sector)**Annual heat input:** 2278738 (mmBtu)**Annual CH<sub>4</sub> emissions from combustion of the specified fuel:** 2.28 (Metric Tons)**Annual N<sub>2</sub>O emissions from combustion of the specified fuel:** 3.646 (Metric Tons)**CH<sub>4</sub> Emissions CO<sub>2</sub> Equivalent:** 47.9 (Metric Tons)**N<sub>2</sub>O Emissions CO<sub>2</sub> Equivalent:** 1130.3 (Metric Tons)

**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 Sammis

**Facility Identifier:** 520016

**Facility Reporting Year:** 2012

**Facility Location:**

Address: State Route 7

City: Stratton

State: OH

Postal Code: 43961

**Facility Site Details:**

**CO2 Equivalent (excluding biogenic, mtons, Subparts C-II and RR-UU):** 8546671.4

**CO2 Equivalent (mtons, Subparts LL-QQ):** 0

**Biogenic CO2 (mtons, Subparts C-II and RR-UU):** 0

**Cogeneration Unit Emissions Indicator:** N

**GHG Report Start Date:** 2012-01-01

**GHG Report End Date:** 2012-12-31

**Description of Changes to Calculation Methodology:**

**Part 75 Biogenic Emissions Indication:**

**Primary NAICS Code:** 221112

**Second Primary NAICS Code:**

**Parent Company Details:**

**Parent Company Name:** FirstEnergy Generation, LLC

**Address:** 76 South Main Street, Akron, OH 44308

**Percent Ownership Interest:** 100

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## Subpart C: General Stationary Fuel Combustion

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**Gas Information Details**

Gas Name	Other Gas Name	Gas Quantity	Own Result?
Carbon Dioxide		253.6 (Metric Tons)	
Biogenic Carbon dioxide		0 (Metric Tons)	
Methane		0 (Metric Tons)	
Nitrous Oxide		0 (Metric Tons)	

**Unit Details:**

**Unit Name :** EMDA

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

**Unit Description :** EMD-A

**Other Unit Name :**

**Individual Unit Details:**

**Maximum Rated Heat Input Capacity:** 26 (mmBtu/hr)

**Emission Details:****Annual Biogenic CO2 Emissions:** 0 (metric tons)**Annual Fossil fuel based CO2 Emissions:** 55 (metric tons)**Tier Fuel Details:****Fuel :** Distillate Fuel Oil No. 2**Tier Name :** Tier 2 (Equation C-2a)**Tier Methodology Start Date :** 2012-01-01**Tier Methodology End Date :** 2012-12-31**Frequency of HHV determinations :** Once per fuel lot**Tier 2 Monthly HHV Details :**

January	February	March	April	May	June	July	August	September	October	November
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
55 (Metric Tons)	0 (Metric Tons)	0 (Metric Tons)	0.1 (Metric Tons)	0.1 (Metric Tons)

**Unit Name :** EMDB1**Unit Type :** OCS (Other combustion source)**Unit Description :** EMD\_B1**Other Unit Name :****Individual Unit Details:****Maximum Rated Heat Input Capacity:** 26 (mmBtu/hr)**Emission Details:****Annual Biogenic CO2 Emissions:** 0 (metric tons)**Annual Fossil fuel based CO2 Emissions:** 53.1 (metric tons)**Tier Fuel Details:****Fuel :** Distillate Fuel Oil No. 2**Tier Name :** Tier 2 (Equation C-2a)**Tier Methodology Start Date :** 2012-01-01**Tier Methodology End Date :** 2012-12-31**Frequency of HHV determinations :** Once per fuel lot**Tier 2 Monthly HHV Details :**

January	February	March	April	May	June	July	August	September	October	November
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
53.1 (Metric Tons)	0 (Metric Tons)	0 (Metric Tons)	0.1 (Metric Tons)	0.1 (Metric Tons)

**Unit Name :** EMDB2

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

**Unit Description :** EMD-B2

**Other Unit Name :**

**Individual Unit Details:**

**Maximum Rated Heat Input Capacity:** 26 (mmBtu/hr)

**Emission Details:**

**Annual Biogenic CO2 Emissions:** 0 (metric tons)

**Annual Fossil fuel based CO2 Emissions:** 52.6 (metric tons)

**Tier Fuel Details:**

**Fuel :** Distillate Fuel Oil No. 2

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

**Tier Methodology Start Date :** 2012-01-01

**Tier Methodology End Date :** 2012-12-31

**Frequency of HHV determinations :** Once per fuel lot

**Tier 2 Monthly HHV Details :**

January	February	March	April	May	June	July	August	September	October	November
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
52.6 (Metric Tons)	0 (Metric Tons)	0 (Metric Tons)	0 (Metric Tons)	0.1 (Metric Tons)

**Unit Name :** EMDB3

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

**Unit Description :** EMD-B3

**Other Unit Name :**

**Individual Unit Details:**

**Maximum Rated Heat Input Capacity:** 26 (mmBtu/hr)

**Emission Details:**

**Annual Biogenic CO2 Emissions:** 0 (metric tons)

**Annual Fossil fuel based CO2 Emissions:** 51.9 (metric tons)

**Tier Fuel Details:**

**Fuel :** Distillate Fuel Oil No. 2

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

**Tier Methodology Start Date :** 2012-01-01

**Tier Methodology End Date :** 2012-12-31

**Frequency of HHV determinations :** Once per fuel lot

**Tier 2 Monthly HHV Details :**

January	February	March	April	May	June	July	August	September	October	November
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
51.9 (Metric Tons)	0 (Metric Tons)	0 (Metric Tons)	0 (Metric Tons)	0.1 (Metric Tons)

**Unit Name :** EMDB4

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

**Unit Description :** EMD-B4

**Other Unit Name :**

**Individual Unit Details:**

**Maximum Rated Heat Input Capacity:** 26 (mmBtu/hr)

**Emission Details:**

**Annual Biogenic CO2 Emissions:** 0 (metric tons)

**Annual Fossil fuel based CO2 Emissions:** 41 (metric tons)

**Tier Fuel Details:**

**Fuel :** Distillate Fuel Oil No. 2

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

**Tier Methodology Start Date :** 2012-01-01

**Tier Methodology End Date :** 2012-12-31

**Frequency of HHV determinations :** Once per fuel lot

**Tier 2 Monthly HHV Details :**

January	February	March	April	May	June	July	August	September	October	November
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
41 (Metric Tons)	0 (Metric Tons)	0 (Metric Tons)	0 (Metric Tons)	0.1 (Metric Tons)

## Subpart D: Electricity Generation

**Gas Information Details**

Gas Name	Other Gas Name	Gas Quantity	Own Result?
Carbon Dioxide		8500229.9 (Metric Tons)	
Methane		89.34 (Metric Tons)	
Nitrous Oxide		142.941 (Metric Tons)	

**Unit Details:**

**Unit Name :** CSA

**Unit Type :** Electricity Generator

**Unit Description :** CSA

**Part 75 Methodology :** CEMS

**Methodology Start Date:** 2012-01-01

**Methodology End Date:** 2012-12-31

**Acid Rain Program Indicator:** Y

**Emission Details:**

**Annual CO2 Emissions Including Biomass** (metric tons): 3226648.7

**Annual CO2 Emissions Including Biomass** (short tons): 3556734.9

**Annual CO2 Emissions from Biomass** (metric tons): 0

**CEMS Details:**

**Operating Hours CO2 Concentration Substituted:** 44

**Operating Hours Stack Gas Flow Rate Substituted:** 4

**Operating Hours Stack Gas Moisture Substituted:** 0

**Electricity Fuel Details:**

**Fuel type:** Mixed (Electric Power sector)

**Annual heat input:** 33912404 (mmBtu)

**Annual CH<sub>4</sub> emissions from combustion of the specified fuel:** 33.91  
(Metric Tons)

**Annual N<sub>2</sub>O emissions from combustion of the specified fuel:** 54.26  
(Metric Tons)

**CH<sub>4</sub> Emissions CO<sub>2</sub> Equivalent:** 712.1 (Metric Tons)

**N<sub>2</sub>O Emissions CO<sub>2</sub> Equivalent:** 16820.6 (Metric Tons)

**Unit Name :** CSB

**Unit Type :** Electricity Generator

**Unit Description :** CSB

**Part 75 Methodology :** CEMS

**Methodology Start Date:** 2012-01-01

**Methodology End Date:** 2012-12-31

**Acid Rain Program Indicator:** Y

**Emission Details:**

**Annual CO2 Emissions Including Biomass** (metric tons): 2949189

**Annual CO2 Emissions Including Biomass** (short tons): 3250891

**Annual CO2 Emissions from Biomass** (metric tons): 0

**CEMS Details:**

**Operating Hours CO2 Concentration Substituted:** 33

**Operating Hours Stack Gas Flow Rate Substituted:** 2

**Operating Hours Stack Gas Moisture Substituted:** 0

**Electricity Fuel Details:**

**Fuel type:** Mixed (Electric Power sector)

**Annual heat input:** 30996319 (mmBtu)

**Annual CH<sub>4</sub> emissions from combustion of the specified fuel:** 31 (Metric  
Tons)

**Annual N<sub>2</sub>O emissions from combustion of the specified fuel:** 49.594  
(Metric Tons)

**CH<sub>4</sub> Emissions CO<sub>2</sub> Equivalent:** 651 (Metric Tons)

**N<sub>2</sub>O Emissions CO<sub>2</sub> Equivalent:** 15374.1 (Metric Tons)

**Unit Name :** CSC

**Unit Type :** Electricity Generator

**Unit Description :** CSC  
**Part 75 Methodology :** CEMS  
**Methodology Start Date:** 2012-01-01  
**Methodology End Date:** 2012-12-31  
**Acid Rain Program Indicator:** Y

**Emission Details:**

**Annual CO2 Emissions Including Biomass** (metric tons): 2324392.2  
**Annual CO2 Emissions Including Biomass** (short tons): 2562177.5  
**Annual CO2 Emissions from Biomass** (metric tons): 0

**CEMS Details:**

**Operating Hours CO2 Concentration Substituted:** 56  
**Operating Hours Stack Gas Flow Rate Substituted:** 0  
**Operating Hours Stack Gas Moisture Substituted:** 0

**Electricity Fuel Details:**

<b>Fuel type:</b> Mixed (Electric Power sector) <b>Annual heat input:</b> 24429674 (mmBtu) <b>Annual CH<sub>4</sub> emissions from combustion of the specified fuel:</b> 24.43 (Metric Tons) <b>Annual N<sub>2</sub>O emissions from combustion of the specified fuel:</b> 39.087 (Metric Tons) <b>CH<sub>4</sub> Emissions CO<sub>2</sub> Equivalent:</b> 513 (Metric Tons) <b>N<sub>2</sub>O Emissions CO<sub>2</sub> Equivalent:</b> 12117 (Metric Tons)
--

**Unit Name :** CS0001  
**Unit Type :** Electricity Generator  
**Unit Description :** CS0001  
**Part 75 Methodology :** CEMS  
**Methodology Start Date:** 2012-01-01  
**Methodology End Date:** 2012-12-31  
**Acid Rain Program Indicator:** Y

**Emission Details:**

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

<b>Fuel type:</b> Mixed (Electric Power sector) <b>Annual heat input:</b> 0 (mmBtu) <b>Annual CH<sub>4</sub> emissions from combustion of the specified fuel:</b> 0 (Metric Tons) <b>Annual N<sub>2</sub>O emissions from combustion of the specified fuel:</b> 0 (Metric Tons) <b>CH<sub>4</sub> Emissions CO<sub>2</sub> Equivalent:</b> 0 (Metric Tons) <b>N<sub>2</sub>O Emissions CO<sub>2</sub> Equivalent:</b> 0 (Metric Tons)
--

**Unit Name :** CS0002  
**Unit Type :** Electricity Generator  
**Unit Description :** CS0002  
**Part 75 Methodology :** CEMS  
**Methodology Start Date:** 2012-01-01  
**Methodology End Date:** 2012-12-31  
**Acid Rain Program Indicator:** Y

**Emission Details:**

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

<b>Fuel type:</b> Mixed (Electric Power sector) <b>Annual heat input:</b> 0 (mmBtu) <b>Annual CH<sub>4</sub> emissions from combustion of the specified fuel:</b> 0 (Metric Tons) <b>Annual N<sub>2</sub>O emissions from combustion of the specified fuel:</b> 0 (Metric Tons) <b>CH<sub>4</sub> Emissions CO<sub>2</sub> Equivalent:</b> 0 (Metric Tons) <b>N<sub>2</sub>O Emissions CO<sub>2</sub> Equivalent:</b> 0 (Metric Tons)
--

**Unit Name :** Unit 7  
**Unit Type :** Electricity Generator  
**Unit Description :** Unit 7  
**Part 75 Methodology :** CEMS  
**Methodology Start Date:** 2012-01-01  
**Methodology End Date:** 2012-12-31  
**Acid Rain Program Indicator:** Y

**Emission Details:**

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

<b>Fuel type:</b> Mixed (Electric Power sector) <b>Annual heat input:</b> 0 (mmBtu) <b>Annual CH<sub>4</sub> emissions from combustion of the specified fuel:</b> 0 (Metric Tons) <b>Annual N<sub>2</sub>O emissions from combustion of the specified fuel:</b> 0 (Metric Tons)
--

<b>CH<sub>4</sub> Emissions CO<sub>2</sub> Equivalent:</b>	0 (Metric Tons)
<b>N<sub>2</sub>O Emissions CO<sub>2</sub> Equivalent:</b>	0 (Metric Tons)

**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:** West Lorain

**Facility Identifier:** 521058

**Facility Reporting Year:** 2012

**Facility Location:**

Address: 7101 West Erie Ave

City: Lorain

State: OH

Postal Code: 44053

**Facility Site Details:**

**CO2 Equivalent (excluding biogenic, mtons, Subparts C-II and RR-UU):** 141592.2

**CO2 Equivalent (mtons, Subparts LL-QQ):** 0

**Biogenic CO2 (mtons, Subparts C-II and RR-UU):** 0

**Cogeneration Unit Emissions Indicator:** N

**GHG Report Start Date:** 2012-01-01

**GHG Report End Date:** 2012-12-31

**Description of Changes to Calculation Methodology:**

**Part 75 Biogenic Emissions Indication:**

**Primary NAICS Code:** 221112

**Second Primary NAICS Code:**

**Parent Company Details:**

**Parent Company Name:** FirstEnergy Generation, LLC

**Address:** 76 South Main Street, Akron, OH 44308

**Percent Ownership Interest:** 100

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## Subpart C: General Stationary Fuel Combustion

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**Gas Information Details**

Gas Name	Other Gas Name	Gas Quantity	Own Result?
Carbon Dioxide		1999.4 (Metric Tons)	
Biogenic Carbon dioxide		0 (Metric Tons)	
Methane		0.08 (Metric Tons)	
Nitrous Oxide		0.017 (Metric Tons)	

**Unit Details:**

**Unit Name :** GPpreheaters

**Unit Type :** PRH (Process Heater)

**Unit Description :** preheaters

**Small Unit Aggregation Details:**

**Highest Maximum Rated Heat Input Capacity:** 5

**Emission Details:****Annual Biogenic CO2 Emissions:** 0 (metric tons)**Annual Fossil fuel based CO2 Emissions:** 0 (metric tons)**Tier Fuel Details:****Fuel :** Natural Gas (Weighted U.S. Average)**Tier Name :** Tier 2 (Equation C-2a)**Tier Methodology Start Date :** 2012-01-01**Tier Methodology End Date :** 2012-12-31**Frequency of HHV determinations :** Monthly**Tier 2 Monthly HHV Details :**

January	February	March	April	May	June	July	August	September	October	November
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
0 (Metric Tons)	0 (Metric Tons)	0 (Metric Tons)	0 (Metric Tons)	0 (Metric Tons)

**Unit Name :** CT1a**Unit Type :** SCCT (CT (Turbine, simple cycle combustion))**Unit Description :** CT-1A**Individual Unit Details:****Maximum Rated Heat Input Capacity:** 811 (mmBtu/hr)**Emission Details:****Annual Biogenic CO2 Emissions:** 0 (metric tons)**Annual Fossil fuel based CO2 Emissions:** 945.2 (metric tons)**Tier Fuel Details:****Fuel :** Distillate Fuel Oil No. 2**Tier Name :** Tier 2 (Equation C-2a)**Tier Methodology Start Date :** 2012-01-01**Tier Methodology End Date :** 2012-12-31**Frequency of HHV determinations :** Once per fuel lot**Tier 2 Monthly HHV Details :**

January	February	March	April	May	June	July	August	September	October	November
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
945.2 (Metric Tons)	0.04 (Metric Tons)	0.008 (Metric Tons)	0.8 (Metric Tons)	2.4 (Metric Tons)

**Unit Name :** CT1B

**Unit Type :** SCCT (CT (Turbine, simple cycle combustion))

**Unit Description :** CT-1B

**Individual Unit Details:**

**Maximum Rated Heat Input Capacity:** 811 (mmBtu/hr)

**Emission Details:**

**Annual Biogenic CO2 Emissions:** 0 (metric tons)

**Annual Fossil fuel based CO2 Emissions:** 1054.2 (metric tons)

**Tier Fuel Details:**

**Fuel :** Distillate Fuel Oil No. 2

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

**Tier Methodology Start Date :** 2012-01-01

**Tier Methodology End Date :** 2012-12-31

**Frequency of HHV determinations :** Once per fuel lot

**Tier 2 Monthly HHV Details :**

January	February	March	April	May	June	July	August	September	October	November
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
1054.2 (Metric Tons)	0.04 (Metric Tons)	0.009 (Metric Tons)	0.9 (Metric Tons)	2.7 (Metric Tons)

## Subpart D: Electricity Generation

**Gas Information Details**

Gas Name	Other Gas Name	Gas Quantity	Own Result?
Carbon Dioxide		139451.2 (Metric Tons)	
Methane		2.59 (Metric Tons)	
Nitrous Oxide		0.259 (Metric Tons)	

**Unit Details:**

**Unit Name :** 2

**Unit Type :** Electricity Generator

**Unit Description :** 2

**Part 75 Methodology :** Appendix G, Equation G-4

**Methodology Start Date:** 2012-01-01

**Methodology End Date:** 2012-12-31

**Acid Rain Program Indicator:** Y

**Emission Details:**

**Annual CO2 Emissions Including Biomass** (metric tons): 28042.8

**Annual CO2 Emissions Including Biomass** (short tons): 30911.6

**Annual CO2 Emissions from Biomass** (metric tons): 0



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

<b>Fuel type:</b> Natural Gas (Weighted U.S. Average) <b>Annual heat input:</b> 520065 (mmBtu) <b>Annual CH<sub>4</sub> emissions from combustion of the specified fuel:</b> 0.52 (Metric Tons) <b>Annual N<sub>2</sub>O emissions from combustion of the specified fuel:</b> 0.052 (Metric Tons) <b>CH<sub>4</sub> Emissions CO<sub>2</sub> Equivalent:</b> 10.9 (Metric Tons) <b>N<sub>2</sub>O Emissions CO<sub>2</sub> Equivalent:</b> 16.1 (Metric Tons)
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<b>Fuel type:</b> Distillate Fuel Oil No. 2 <b>Annual heat input:</b> 0 (mmBtu) <b>Annual CH<sub>4</sub> emissions from combustion of the specified fuel:</b> 0 (Metric Tons) <b>Annual N<sub>2</sub>O emissions from combustion of the specified fuel:</b> 0 (Metric Tons) <b>CH<sub>4</sub> Emissions CO<sub>2</sub> Equivalent:</b> 0 (Metric Tons) <b>N<sub>2</sub>O Emissions CO<sub>2</sub> Equivalent:</b> 0 (Metric Tons)
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**Unit Name :** 3**Unit Type :** Electricity Generator**Unit Description :** 3**Part 75 Methodology :** Appendix G, Equation G-4**Methodology Start Date:** 2012-01-01**Methodology End Date:** 2012-12-31**Acid Rain Program Indicator:** Y**Emission Details:****Annual CO<sub>2</sub> Emissions Including Biomass** (metric tons): 26718.3**Annual CO<sub>2</sub> Emissions Including Biomass** (short tons): 29451.6**Annual CO<sub>2</sub> Emissions from Biomass** (metric tons): 0**Appendix G Equation G4:****Operating Hours Fuel Flow Rate:** 0**Operating Hours HHV Substitution:** 0**Electricity Fuel Details:**

<b>Fuel type:</b> Distillate Fuel Oil No. 2 <b>Annual heat input:</b> 0 (mmBtu) <b>Annual CH<sub>4</sub> emissions from combustion of the specified fuel:</b> 0 (Metric Tons) <b>Annual N<sub>2</sub>O emissions from combustion of the specified fuel:</b> 0 (Metric Tons) <b>CH<sub>4</sub> Emissions CO<sub>2</sub> Equivalent:</b> 0 (Metric Tons) <b>N<sub>2</sub>O Emissions CO<sub>2</sub> Equivalent:</b> 0 (Metric Tons)
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<b>Fuel type:</b> Natural Gas (Weighted U.S. Average) <b>Annual heat input:</b> 495595 (mmBtu) <b>Annual CH<sub>4</sub> emissions from combustion of the specified fuel:</b> 0.5 (Metric
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Tons) <b>Annual N<sub>2</sub>O emissions from combustion of the specified fuel:</b> 0.05 (Metric Tons) <b>CH<sub>4</sub> Emissions CO<sub>2</sub> Equivalent:</b> 10.5 (Metric Tons) <b>N<sub>2</sub>O Emissions CO<sub>2</sub> Equivalent:</b> 15.5 (Metric Tons)
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**Unit Name :** 4

**Unit Type :** Electricity Generator

**Unit Description :** 4

**Part 75 Methodology :** Appendix G, Equation G-4

**Methodology Start Date:** 2012-01-01

**Methodology End Date:** 2012-12-31

**Acid Rain Program Indicator:** Y

**Emission Details:**

**Annual CO<sub>2</sub> Emissions Including Biomass** (metric tons): 28269.3

**Annual CO<sub>2</sub> Emissions Including Biomass** (short tons): 31161.2

**Annual CO<sub>2</sub> Emissions from Biomass** (metric tons): 0

**Appendix G Equation G4:**

**Operating Hours Fuel Flow Rate:** 0

**Operating Hours HHV Substitution:** 0

**Electricity Fuel Details:**

<b>Fuel type:</b> Distillate Fuel Oil No. 2 <b>Annual heat input:</b> 0 (mmBtu) <b>Annual CH<sub>4</sub> emissions from combustion of the specified fuel:</b> 0 (Metric Tons) <b>Annual N<sub>2</sub>O emissions from combustion of the specified fuel:</b> 0 (Metric Tons) <b>CH<sub>4</sub> Emissions CO<sub>2</sub> Equivalent:</b> 0 (Metric Tons) <b>N<sub>2</sub>O Emissions CO<sub>2</sub> Equivalent:</b> 0 (Metric Tons)
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<b>Fuel type:</b> Natural Gas (Weighted U.S. Average) <b>Annual heat input:</b> 524331 (mmBtu) <b>Annual CH<sub>4</sub> emissions from combustion of the specified fuel:</b> 0.52 (Metric Tons) <b>Annual N<sub>2</sub>O emissions from combustion of the specified fuel:</b> 0.052 (Metric Tons) <b>CH<sub>4</sub> Emissions CO<sub>2</sub> Equivalent:</b> 10.9 (Metric Tons) <b>N<sub>2</sub>O Emissions CO<sub>2</sub> Equivalent:</b> 16.1 (Metric Tons)
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**Unit Name :** 5

**Unit Type :** Electricity Generator

**Unit Description :** 5

**Part 75 Methodology :** Appendix G, Equation G-4

**Methodology Start Date:** 2012-01-01

**Methodology End Date:** 2012-12-31

**Acid Rain Program Indicator:** Y

**Emission Details:**

**Annual CO<sub>2</sub> Emissions Including Biomass** (metric tons): 27896.2

**Annual CO<sub>2</sub> Emissions Including Biomass** (short tons): 30750

**Annual CO2 Emissions from Biomass (metric tons): 0**

**Appendix G Equation G4:**

**Operating Hours Fuel Flow Rate: 0**

**Operating Hours HHV Substitution: 0**

**Electricity Fuel Details:**

<b>Fuel type:</b> Distillate Fuel Oil No. 2 <b>Annual heat input:</b> 0 (mmBtu) <b>Annual CH<sub>4</sub> emissions from combustion of the specified fuel:</b> 0 (Metric Tons) <b>Annual N<sub>2</sub>O emissions from combustion of the specified fuel:</b> 0 (Metric Tons) <b>CH<sub>4</sub> Emissions CO<sub>2</sub> Equivalent:</b> 0 (Metric Tons) <b>N<sub>2</sub>O Emissions CO<sub>2</sub> Equivalent:</b> 0 (Metric Tons)
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<b>Fuel type:</b> Natural Gas (Weighted U.S. Average) <b>Annual heat input:</b> 517419 (mmBtu) <b>Annual CH<sub>4</sub> emissions from combustion of the specified fuel:</b> 0.52 (Metric Tons) <b>Annual N<sub>2</sub>O emissions from combustion of the specified fuel:</b> 0.052 (Metric Tons) <b>CH<sub>4</sub> Emissions CO<sub>2</sub> Equivalent:</b> 10.9 (Metric Tons) <b>N<sub>2</sub>O Emissions CO<sub>2</sub> Equivalent:</b> 16.1 (Metric Tons)
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**Unit Name : 6**

**Unit Type : Electricity Generator**

**Unit Description : 6**

**Part 75 Methodology : Appendix G, Equation G-4**

**Methodology Start Date: 2012-01-01**

**Methodology End Date: 2012-12-31**

**Acid Rain Program Indicator: Y**

**Emission Details:**

**Annual CO2 Emissions Including Biomass (metric tons): 28524.6**

**Annual CO2 Emissions Including Biomass (short tons): 31442.7**

**Annual CO2 Emissions from Biomass (metric tons): 0**

**Appendix G Equation G4:**

**Operating Hours Fuel Flow Rate: 0**

**Operating Hours HHV Substitution: 0**

**Electricity Fuel Details:**

<b>Fuel type:</b> Distillate Fuel Oil No. 2 <b>Annual heat input:</b> 0 (mmBtu) <b>Annual CH<sub>4</sub> emissions from combustion of the specified fuel:</b> 0 (Metric Tons) <b>Annual N<sub>2</sub>O emissions from combustion of the specified fuel:</b> 0 (Metric Tons) <b>CH<sub>4</sub> Emissions CO<sub>2</sub> Equivalent:</b> 0 (Metric Tons) <b>N<sub>2</sub>O Emissions CO<sub>2</sub> Equivalent:</b> 0 (Metric Tons)
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<b>Fuel type:</b> Natural Gas (Weighted U.S. Average) <b>Annual heat input:</b> 529095 (mmBtu)
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<b>Annual CH<sub>4</sub> emissions from combustion of the specified fuel:</b>		0.53 (Metric Tons)
<b>Annual N<sub>2</sub>O emissions from combustion of the specified fuel:</b>		0.053 (Metric Tons)
<b>CH<sub>4</sub> Emissions CO<sub>2</sub> Equivalent:</b>	11.1 (Metric Tons)	
<b>N<sub>2</sub>O Emissions CO<sub>2</sub> Equivalent:</b>	16.4 (Metric Tons)	

**This foregoing document was electronically filed with the Public Utilities**

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**in**

**Case No(s). 13-0916-EL-UNC**

Summary: Notice of Filing Greenhouse Gas Reports electronically filed by Ms. Laura C. McBride on behalf of FirstEnergy Generation, LLC