

DEPARTMENT OF ENVIRONMENTAL QUALITY

AIR QUALITY DIVISION

**FCE Summary Report**

<b>Facility :</b> DTE Electric Company - Greenwood Energy Center	<b>SRN :</b> B6145
<b>Location :</b> 7000 KILGORE ROAD	<b>District :</b> Warren
	<b>County :</b> SAINT CLAIR
<b>City :</b> AVOCA <b>State:</b> MI <b>Zip Code :</b> 48006	<b>Compliance Status :</b> Compliance
<b>Source Class :</b> MAJOR	<b>Staff :</b> Robert Joseph
<b>FCE Begin Date :</b> 9/21/2022	<b>FCE Completion Date :</b> 8/19/2024
<b>Comments :</b> Scheduled inspection of DTE Power Plant	

**List of Partial Compliance Evaluations :**

Activity Date	Activity Type	Compliance Status	Comments
07/03/2024	ROP Annual Cert	Compliance	Annual ROP Certification January 1, 2023 - December 31, 2023 for Energy Center. No deviations reported.
07/03/2024	ROP SEMI 2 CERT	Compliance	Semi- Annual ROP Certification July 1, 2023 - December 31, 2023 for Peaking Station. No deviations reported.
07/03/2024	ROP Annual Cert	Compliance	Annual ROP Certification January 1, 2023 - December 31, 2023 for Peaking Station. No deviations reported.
07/03/2024	ROP SEMI 2 CERT	Compliance	Semi- Annual ROP Certification July 1, 2023 - December 31, 2023 for Energy Center. No deviations reported.

Activity Date	Activity Type	Compliance Status	Comments
07/03/2024	Excess Emissions (CEM)	Compliance	<p>Quarterly excess emission monitoring system performance report (Condition VII.4), excess opacity emissions report (Condition VII.6), and monthly average sulfur dioxide (SO2) emission rate (Condition VII.7) or EU-BOILER1 for Jan. 1, 2024 - March 31, 2024.</p> <p>Total Source Operating Time: 679 hours</p> <p>Monthly Average SO2: 0 lb/MMBtu  SO2: Excess Emissions = 0, CEMS Downtime = 0.  NOx: Excess Emissions = 0, CEMS Downtime = 0.</p> <p>Total Source Operating Time: 680.1 hours  Opacity: 0%, CEMS Downtime = 0.50 hours due to calibration (0.1%)</p>
07/03/2024	On-site Inspection	Compliance	Schedule inspection of DTE Power Plant
05/13/2024	Annual Emissions Report (or MAERS)	Compliance	MiEnviro Annual Air Emissions Report submitted (Energy Center)
05/13/2024	Annual Emissions Report (or MAERS)	Compliance	MiEnviro Annual Air Emissions Report submitted (Peaking Station - Turbines)

Activity Date	Activity Type	Compliance Status	Comments
03/12/2024	NSR Emissions Report	Compliance	<p>2023 Maintenance Outage - 2023 New Source Review (NSR) Annual Emission Report.</p> <p>- Comparison of Baseline and Actual Emissions and Operations.</p> <p>2023 Maintenance Outage</p> <p>Baseline Emissions (985,392 MWh, 11,041,311 MMBtu, 14.3% capacity factor)</p> <p>PM: 0.007 lb/MMBtu, 38.6 tons/yr.  NOx: 0.133 lb/MMBtu, 735.6 tons/yr.  SO2: 0.001 lb/MMBtu, 3.9 tons/yr.  CO2: 118.6 lb/MMBtu, 654,554 tons/yr.</p> <p>Actual Emissions (897,138 MWh, 10,210,390 MMBtu, 13.1% capacity factor)</p> <p>PM: 0.007 lb/MMBtu 35.7 tons/yr.  NOx: 0.141 lb/MMBtu, 718.4 tons/yr.  SO2: 0 lb/MMBtu, 3.7 tons/yr.  CO2: 118.6 lb/MMBtu, 605,502 tons/yr.</p> <p>Excluded Emissions: None</p> <p>Emission Changes:</p> <p>PM: 2.9 tons/yr  NOx: 17.2 tons/yr  SO2: 0.2 tons/yr  CO2: 49,051.4 tons/yr</p>

Activity Date	Activity Type	Compliance Status	Comments
03/12/2024	NSR Emissions Report	Compliance	<p>2020 Maintenance Outage - 2023 New Source Review (NSR) Annual Emission Report.</p> <p>- Comparison of Baseline and Actual Emissions and Operations.</p> <p>2023 Maintenance Outage</p> <p>Baseline Emissions (957,691 MWh, 10,776,246 MMBtu, 13.9% capacity factor)</p> <p>PM: 0.007 lb/MMBtu, 37.7 tons/yr.  NOx: 0.132 lb/MMBtu, 713 tons/yr.  SO2: 0.001 lb/MMBtu, 3.9 tons/yr.  CO2: 118.6 lb/MMBtu, 638,846 tons/yr.</p> <p>Actual Emissions (897,138 MWh, 10,210,390 MMBtu, 13.1% capacity factor)</p> <p>PM: 0.007 lb/MMBtu 35.7 tons/yr.  NOx: 0.141 lb/MMBtu, 718.4 tons/yr.  SO2: 0.001 lb/MMBtu, 3.7 tons/yr.  CO2: 118.6 lb/MMBtu, 605,502 tons/yr.</p> <p>Excluded Emissions: None</p> <p>Emission Changes:</p> <p>PM: 2.0 tons/yr  NOx: 5.4 tons/yr  SO2: 0.2 tons/yr  CO2: 33,343.6 tons/yr</p>
02/15/2024	Excess Emissions (CEM)	Compliance	<p>Quarterly Excess Emission Monitoring System Performance and Opacity Excess Emission Report.</p> <p>EU-Boiler 1 -Monthly SO2 emission rate averages: Oct. - Dec. 2023 = 0 lbs/MMBtu</p> <p>Greenwood Stack 1 (NOx): 407 hours. 0 emissions/downtime  Opacity: 25,002 minutes. 0 emissions/downtime  (SO2): 407 hours. 0 emissions/downtime</p>

Activity Date	Activity Type	Compliance Status	Comments
11/20/2023	Excess Emissions (CEM)	Compliance	<p>Quarter Excess Emission Monitoring System Performance and Opacity Excess Emission Reports for the Greenwood Energy Center.</p> <p>3rd Quarter 2023: Quarterly Excess Opacity Emissions Report, per EUBOILER1.VII.6. Quarterly Excess Emission Monitoring System Performance Reports, per EUBOILER1.VII.4. Quarterly report of monthly average Sulfur Dioxide Emission Rate, per EUBOILER1.VII.7.</p> <p>July - September 2023: SO2 emission rate averages = SO2/MMBtu</p> <p>Stack 1: NOx = 1616 operating hrs (48 hrs failed calibration downtime). No exceedances.</p> <p>Opacity = 99,216 operating minutes (144 minutes downtime instrument maintenance). No exceedances.</p> <p>Stack 1: SO2 = 1616 operating hours (26 hours failed calibration downtime). No exceedances.</p>
09/29/2023	ROP Semi 1 Cert	Compliance	<p>Resubmitted - Amended version. No deviations reported. An error was found on the certification submitted 9/14/23, and the facility was contacted. The corrected ROP Semi 1 Certification was amended and re-submitted and received 9/28/23. No violation will be issued for the error found on the Certification.</p>
09/25/2023	ROP Semi 1 Cert		<p>No deviations reported. An error was found on the certification and the facility was contacted. The corrected ROP Semi 1 Certification was amended and re-submitted and received 9/28/23.</p>
09/25/2023	ROP Semi 1 Cert	Compliance	<p>No deviations were reported.</p>

Activity Date	Activity Type	Compliance Status	Comments
05/09/2023	Excess Emissions (CEM)	Compliance	First Quarter 2023: Quarterly Excess Opacity Emissions Report, per EUBOILER1.VII.6. Quarterly Excess Emission Monitoring System Performance Reports, per EUBOILER1.VII.4. Quarterly report of monthly average Sulfur Dioxide Emission Rate, per EUBOILER1.VII.7.
05/05/2023	Annual Emissions Report (or MAERS)	Compliance	MAERS Report Submission. Peakers. Report received ontime. Reported emissions appear to be accurate.
03/30/2023	Annual Emissions Report (or MAERS)	Compliance	MAERS ROP Report Certification form accompanying MAERS submittal. Report received on 3/13, on time. Boiler 1.
03/30/2023	Other Non ROP	Compliance	2023 Outage Notification, Unit 1. Planned generating units outage for up to 3 months. Permit action not required since this is a scheduled maintenance activity and not a PSD modification.
03/23/2023	Excess Emissions (CEM)	Compliance	Fourth Quarter 2022: Quarterly Excess Opacity Emissions Report, per EUBOILER1.VII.6. Quarterly Excess Emission Monitoring System Performance Reports, per EUBOILER1.VII.4. Quarterly report of monthly average Sulfur Dioxide Emission Rate, per EUBOILER1.VII.7. Report indicates compliance, no reported hours of excess emissions.
03/23/2023	NSR Emissions Report	Compliance	Report indicates compliance.
03/23/2023	ROP Annual Cert	Compliance	Annual ROP Certification for Section 1 of the ROP. No deviations reported. Report indicates compliance.
03/23/2023	ROP SEMI 2 CERT	Compliance	Semi-Annual ROP Certification for Section 1 of the ROP. No deviations reported. Report indicates compliance.
03/23/2023	ROP Annual Cert	Compliance	Annual ROP Certification for Section 2 of the ROP. No deviations reported. Report indicates compliance.
03/23/2023	ROP SEMI 2 CERT	Compliance	Semi-Annual ROP Certification for Section 2 of the ROP. No deviations reported. Report indicates compliance.

Activity Date	Activity Type	Compliance Status	Comments
12/07/2022	Excess Emissions (CEM)	Compliance	Third Quarter 2022: Quarterly Excess Opacity Emissions Report, per EUBOILER1.VII.6. Quarterly Excess Emission Monitoring System Performance Reports, per EUBOILER1.VII.4. Quarterly report of monthly average Sulfur Dioxide Emission Rate, per EUBOILER1.VII.7. Reported Sulfur Dioxide Emission Rates: July 2022 - 0.00 lb. SO2/MMBtu August 2022 - 0.00 lb. SO2/MMBtu September 2022 - 0.00 lb. SO2/MMBtu
09/28/2022	Other Non ROP	Compliance	Changes in Responsible Officials to: Mark Chesney, Plant Manager, Fossil Generation, Greenwood Energy Center. Justin Morren, Plant Director, Fossil Generation, Greenwood Energy Center. Biljana Pecov, Plant Manager, Fossil Generation, Greenwood Peakers.
09/27/2022	Excess Emissions (CEM)	Compliance	Second Quarter 2022: Quarterly Excess Opacity Emissions Report, per EUBOILER1.VII.6. Quarterly Excess Emission Monitoring System Performance Reports, per EUBOILER1.VII.4. Quarterly report of monthly average Sulfur Dioxide Emission Rate, per EUBOILER1.VII.7. Reported Sulfur Dioxide Emission Rates: April 2022 - 0.00 lb. SO2/MMBtu May 2022 - 0.00 lb. SO2/MMBtu June 2022 - 0.00 lb. SO2/MMBtu
09/27/2022	Stack Test	Compliance	Stack testing of particulate emissions from EUBoiler1 (Unit 1). Results: EUBOILER1: 0.001 lbs/1,000 lbs @50% EA Permit Limit: 0.10 lbs/1,000 lbs
09/27/2022	Stack Test	Compliance	Stack testing of NOx and CO for Combustion Turbine Generator Peakers Units 11-1, 11-2, and 12-1. Results indicate compliance with permitted NOx and CO limits.
09/27/2022	ROP Semi 1 Cert	Compliance	Semi-annual ROP Certification for Section 2 of the ROP. No deviations reported.

Name: Robert Joseph Date: 08-19-24

Supervisor: 