

DEPARTMENT OF ENVIRONMENTAL QUALITY

AIR QUALITY DIVISION

FCE Summary Report

Facility : Consumers Energy Co. - Zeeland Generating Station	SRN : N6521
Location : 425 Fairview Rd.	District : Grand Rapids
	County : OTTAWA
City : ZEELAND State: MI Zip Code : 49464	Compliance Status : Compliance
Source Class : MAJOR	Staff : Michael Cox
FCE Begin Date : 7/11/2022	FCE Completion Date : 7/11/2023
Comments : FY 2023 FCE	

List of Partial Compliance Evaluations :

Activity Date	Activity Type	Compliance Status	Comments
07/11/2023	MAERS	Compliance	Report submittal certification form received on 3/13/23. Emissions are consistent with supporting documentation and the most recent inspection. This MAERS Report is acceptable.
06/13/2023	On-site Inspection	Compliance	Scheduled Unannounced Inspection

Activity Date	Activity Type	Compliance Status	Comments
05/05/2023	Excess Emissions (CEM)	Compliance	<p>1st Quarter 2023 Excess Emissions and Monitoring Systems Report and Quality Assurance Testing Report pursuant to MI-ROP-N6521-2020a was received on time and complete.</p> <p>The report is for Units 1A, 1B, 2A, and 2B. Units 1A and 1B are simple cycle turbines and Units 2A and 2B are combined cycle turbines.</p> <p>Unit 1A did not operate during the quarter.</p> <p>Unit 1B had a total operating time of 663.37 hours. Both the NOx and the CO CEMS had one (1) hour of reported downtime due to quality assurance calibrations; there were no associated excess emissions.</p> <p>Unit 2A operated for a total of 1,481.69 hours during the reporting period. Both the NOx and the CO CEMS reported 1.78 hours (0.12%) of downtime, with no associated excess emissions. The downtime was due to monitor malfunctions and calibrations.</p> <p>Unit 2B operated for a total of 1,482.12 hours for the reporting period. The NOx CEMS reported a total of 6.37 hours (0.43%) and the CO CEMS each reported a total of 0.37 hours (0.02%) downtime with no excess emissions for either. The downtime was due to monitor equipment malfunctions and calibrations.</p> <p>Linearity tests and Cylinder Gas Audits (CGA's) were also included in this submission with no notable issues.</p>
03/28/2023	ROP SEMI 2 CERT	Compliance	<p>The Semi-Annual Compliance Report pursuant to MI-ROP-N6521-2020a was received on time and complete (Postmarked 3/14/23). No deviations were reported for the reporting period.</p>

Activity Date	Activity Type	Compliance Status	Comments
03/28/2023	ROP Annual Cert	Compliance	<p>The Annual Compliance Report pursuant to MI-ROP-N6521-2020a was received on time and complete (Postmarked 3/14/23). No deviations were reported for the reporting period.</p>
02/13/2023	Excess Emissions (CEM)	Compliance	<p>The 4th Quarter 2022 Excess Emission Monitoring Systems Report and Quality Assurance Testing Report pursuant to MI-ROP-N6521-2020a was received on time and complete.</p> <p>The report is for Units 1A, 1B, 2A, and 2B. Units 1A and 1B are simple cycle turbines and Units 2A and 2B are combined cycle turbines.</p> <p>Unit 1A had a total operating time of 671.21 hours. The NO_x CEMS had a total of 1 hour (0.15%) downtime, and the CO CEMS also had a total of 1 hour (0.15%) downtime. Neither reported any associated excess emissions. The downtime was monitor equipment malfunctions.</p> <p>Unit 1B had a total operating time of 790.78 hours. Neither the NO_x nor the CO CEMS had any downtime, and no excess emissions.</p> <p>Unit 2A operated for a total of 1,376.08 hours during the reporting period. Neither the NO_x nor the CO CEMS had any downtime, and no excess emissions.</p> <p>Unit 2B operated for a total of 1,342.64 hours for the reporting period. The NO_x and CO CEMS each reported a total of 0.18 hours (0.01%) downtime with no excess emissions. The downtime was due to non-monitor equipment malfunctions.</p> <p>Linearity tests and Cylinder Gas Audits (CGA's) were also included in this submission with no notable issues.</p>

Activity Date	Activity Type	Compliance Status	Comments
11/07/2022	Excess Emissions (CEM)	Compliance	<p>The 3rd Quarter 2022 Excess Emission Monitoring Systems Report and Quality Assurance Testing Report pursuant to MI-ROP-N6521-2020a was received on time and complete.</p> <p>The report is for Units 1A, 1B, 2A, and 2B. Units 1A and 1B are simple cycle turbines and Units 2A and 2B are combined cycle turbines.</p> <p>Unit 1A had a total operating time of 1082.26 hours. The NOx CEMS had a total of 1.65 hours (0.15%) downtime, while the CO CEMS had a total of 13.78 hours (1.27%) downtime. Neither reported any associated excess emissions. The downtime was monitor equipment malfunctions.</p> <p>Unit 1B had a total operating time of 1097.54 hours. Neither the NOx nor the CO CEMS had any downtime, and no excess emissions.</p> <p>Unit 2A operated for a total of 1,854.30 hours during the reporting period. The NOx CEMS reported a total of 0.42 hours (0.02%) downtime, while the CO CEMS reported a total of 25.42 hours (1.37%) downtime. No excess emissions were reported for either. The downtime was due to equipment malfunctions and associated repairs.</p> <p>Unit 2B operated for a total of 1,834.80 hours for the reporting period. The NOx and CO CEMS each reported a total of 1 hour (0.05%) downtime with no excess emissions. The downtime was due to non-monitor equipment malfunctions.</p> <p>Linearity tests and Cylinder Gas Audits (CGA's) were also included in this submission with no notable issues.</p>

Activity Date	Activity Type	Compliance Status	Comments
10/10/2022	ROP Semi 1 Cert	Compliance	The Semi-annual deviation report pursuant to MI-ROP-N6521-2020a was received on time and complete. No deviations were reported for the reporting period.

Activity Date	Activity Type	Compliance Status	Comments
08/23/2022	Excess Emissions (CEM)	Compliance	<p>The 2nd Quarter 2022 Excess Emissions report pursuant to MI-ROP-N6521-2020a was received on time and complete.</p> <p>The report is for Units 1A, 1B, 2A, and 2B. Units 1A and 1B are simple cycle turbines and Units 2A and 2B are combined cycle turbines.</p> <p>Unit 1A had a total operating time of 376.52 hours. The NOx and the CO CEMS had a total of 3.03 hours (0.80%) downtime each. Neither reported any associated excess emissions. The downtime was non-monitor equipment malfunctions.</p> <p>Unit 1B had a total operating time of 789.99 hours. The NOx CEMS had a total of 10.63 hours (1.35%) downtime, while the CO CEMS had a total of 3.0 hours (0.38%) downtime. Neither reported any associated excess emissions. The downtime was due to equipment malfunctions and recalibrations.</p> <p>Unit 2A operated for a total of 1,170.78 hours during the reporting period. The NOx CEMS reported a total of 8.0 hours (0.45%) downtime, while the CO CEMS reported a total of 10.0 hours (0.56%) downtime. No excess emissions were reported for either. The downtime was due to equipment malfunctions and associated repairs.</p> <p>Unit 2B operated for a total of 1,767.78 hours for the reporting period. The NOx and CO CEMS each reported a total of 4.93 hours (0.28%) downtime with no excess emissions. The downtime was due to non-monitor equipment malfunctions.</p> <p>Linearity tests and Cylinder Gas Audits (CGA's) were also included in this submission with no notable issues.</p>

Activity Date	Activity Type	Compliance Status	Comments
08/23/2022	NSPS (Part 60)	Compliance	The Semi-Annual NOx Emissions data report pursuant to MI-ROP-N6521-2020a, and 40 CFR Part 60 Subpart Da for Units 2A and 2B were received on time and complete. Only Natural Gas was combusted during the reporting period. The required NOx emission data reports and 30 day rolling averages report no issues with 30 day rolling averages of 0.07 and 0.08 lbs/MWH for Units 2A and 2B, respectively.
08/04/2022	CEM RATA	Compliance	The Relative Accuracy Test Audit (RATA) for EUGT1A and 1B and EUGT2A and 2B continuous emissions monitoring systems (CEMS). The results for CO and NOx for all four (4) units indicate passing results. This report, however, needs to be reviewed by AQD's TPU for complete analysis of pass/fail status.

Name: Michael T. Cox

Date: 7/11/2023

Supervisor: HH