

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 : Kaitlyn DeVries
FCE Begin Date : 12/18/2017	FCE Completion Date : 12/17/2018
Comments : FY 2019 FCE	

List of Partial Compliance Evaluations :

Activity Date	Activity Type	Compliance Status	Comments
12/11/2018	Stack Test Observation	Compliance	Stack Test observations for Unit 2B.
11/27/2018	Scheduled Inspection	Compliance	The purpose of the inspection was to determine compliance with MI-ROP-N6521-2015a and other applicable air quality rules and regulations.
11/27/2018	Stack Test Observation	Compliance	Stack Test Observations of Unit 1B.

Activity Date	Activity Type	Compliance Status	Comments
11/02/2018	Excess Emissions (CEM)	Compliance	<p>The 3rd Quarter Excess Emissions Report for Units 1A, 1B, 2A, and 2B pursuant to MI-ROP-N6521-2015a was received on time and complete. Units 1A and 1B are simple cycle turbines and Units 2A and 2B are combined cycle.</p> <p>Unit 1A had a total operating time of 436.43 hours. A total of 0.48 hours of CEMs downtime for NOx was reported, but did not result in any excess emissions. Downtime was due to adjustments and recalibrations.</p> <p>Unit 1B had a total operating time of 373.97 hours with 0 hours of CEMS downtime for and no excess emissions.</p> <p>Unit 2A operated for a total of 1627.12 hours with no downtime or any excess emissions.</p> <p>Unit 2B operated for a total of 1623.98 hours during the reporting period and had no downtime or excess emissions.</p> <p>Linearity tests and cylinder gas audits were also conducted with no issues to note.</p>
09/28/2018	ROP Semi 1 Cert	Compliance	<p>The semi-annual compliance report pursuant to MI-ROP-N6521-2015a was received on time and complete (Postmarked 9-13-18). No deviations were reported for the reporting period. No further action is necessary at this time.</p>

Activity Date	Activity Type	Compliance Status	Comments
07/09/2018	CEM RATA	Compliance	<p>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.</p>
06/08/2018	Excess Emissions (CEM)	Compliance	<p>The 1st Quarter Excess Emissions report for Units 1A, 1B, 2A, and 2B pursuant to MI-ROP-N6521-2015a was received on time and complete.</p> <p>Units 1A and 1B are simple cycle turbines and Units 2A and 2B are combined cycle.</p> <p>Unit 1A had a total operating time of 131.37 hours, with no CEMS downtime or excess emissions reported.</p> <p>Unit 1B had a total operating time of 163.53 hours with no downtime or excess emissions reported.</p> <p>Unit 2A operated for a total of 1958.70 hours. A total of 31.27 hours (1.60%) downtime was reported for NOx and a total of 53.27 Hours (2.72%) downtime for CO; neither were associated with any excess emissions. The higher than normal downtime for this unit was associated with a failure of daily zero and span calibrations on February 10. It was determined that the failed calibrations were due to the sample probe extension tube becoming loose and falling into the stack. The replacement of the tube fixed the issues.</p> <p>Unit 2B operated for a total of 1982.15 hours during the reporting period and had a total of 2.00 hours (0.10%) of downtime both NOx and CO. No excess emissions were associated with either.</p> <p>Linearity tests and cylinder gas audits were also conducted with no issues to note.</p>

Activity Date	Activity Type	Compliance Status	Comments
08/02/2018	Excess Emissions (CEM)	Compliance	<p>The 2nd Quarter Excess Emissions report for Units 1A, 1B, 2A, and 2B pursuant to MI-ROP-N6521-2015a was received on time and complete.</p> <p>Units 1A and 1B are simple cycle turbines and Units 2A and 2B are combined cycle.</p> <p>Unit 1A had a total operating time of 585.63 hours. A total of 0.93 hours of CEMs downtime was reported, but did not result in any excess emissions.</p> <p>Unit 1B had a total operating time of 447.97 hours with 0.92 hours of CEMS downtime for NOx, and 8.22 hours (1.83 %) for CO CEMS being reported, but no associated excess emissions.</p> <p>Unit 2A operated for a total of 1786.32 hours. A total of 1.42 hours downtime was reported for NOx and a total of 0.42 hours downtime for CO; neither were associated with any excess emissions.</p> <p>Unit 2B operated for a total of 1774.42 hours during the reporting period and had a total of 1.02 hours of downtime both NOx and CO. No excess emissions were associated with either.</p> <p>All downtime for all of the units was due to monitor malfunctions, which were quickly fixed and returned to service.</p> <p>Linearity tests and cylinder gas audits were also conducted with no issues to note.</p>
08/02/2018	NSPS (Part 60)	Compliance	<p>The Semiannual NOx emissions report for 40 CFR Part 60 Subpart Da for Units 2A, and 2B were submitted on time and complete. 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.</p>

Activity Date	Activity Type	Compliance Status	Comments
04/18/2018	MAERS	Compliance	<p>ROP Certification form for MAERS submitted 3-12-18: The facility used appropriate MAERS emission factors, Stack test data, and CEMS data to calculate emissions. There was an increase in CO emissions compared to the previous year, but the attachment appears to report accurate calculations. There was a difference in the heating value and subsequent weighted average emission factor, compared to last year, which could account the difference in the CO emissions. Compared to years prior to last year, emissions are more consistent. No changes were made to the data. 4.18.2018. KDeVries</p>
04/18/2018	ROP Annual Cert	Compliance	<p>This report, pursuant to MI-ROP-N6521-2015a was received on time and complete. No deviations were reported for the reporting period. No further action is required at this time.</p>
04/18/2018	ROP SEMI 2 CERT	Compliance	<p>This report, pursuant to MI-ROP-N6521-2015a was received on time and complete. No deviations were reported for the reporting period. No further action is required at this time.</p>
02/09/2018	NSPS (Part 60)	Compliance	<p>The Semiannual NOx emissions report for 40 CFR Part 60 Subpart Da for Units 2A, and 2B were also submitted. The required NOx emission data reports and 30 day rolling averages report no issues.</p>

Activity Date	Activity Type	Compliance Status	Comments
02/09/2018	Excess Emissions (CEM)	Compliance	<p>The 4th Quarter Excess Emissions Report for Zeeland Generating Station Units 1A, 1B, 2A, and 2B required by MI-ROP-N6521-2015a was received on time and complete.</p> <p>No CEMS monitor downtime or excess emissions were reported for Unit 1A or 1B.</p> <p>Of the 1686.32 hours of operation for Unit 2A, a total of 0.08% CEMS monitor downtime was reported, for NOx, and a total of 1.44% downtime for CO.</p> <p>Unit 2B reported a total of 1688.33 Hours of operation with 0.06% CEMS monitor downtime for both NOx and CO. No excess emissions were reported for either.</p> <p>Linearity and Cylinder Gas Audits (CGA) reports were also included. These reports showed passing results with no issues noted.</p>

Name:

Karolyn Davis

Date:

12/17/2018

Supervisor:

