

	Michigan Department of Natural Resources and Environment Air Quality Division	
State Registration Number	RENEWABLE OPERATING PERMIT	ROP Number
N6731	STAFF REPORT	MI-ROP-N6731-2011

CMS Generation - Kalamazoo River Generating Station

SRN: N6731

Located at

6900 East Michigan Avenue, Comstock, Kalamazoo, Michigan 49093

Permit Number: MI-ROP-N6731-2011

Staff Report Date: January 31, 2011

This Staff Report is published in accordance with Sections 5506 and 5511 of Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451). Specifically, Rule 214(1) requires that the Michigan Department of Natural Resources and Environment (MDNRE), Air Quality Division (AQD), prepare a report that sets forth the factual basis for the terms and conditions of the Renewable Operating Permit (ROP).

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Purpose

Major stationary sources of air pollutants, and some non-major sources, are required to obtain and operate in compliance with a ROP pursuant to Title V of the federal Clean Air Act of 1990 and Michigan's Administrative Rules for air pollution control pursuant to Section 5506(1) of Act 451. Sources subject to the ROP program are defined by criteria in Rule 211(1). The ROP is intended to simplify and clarify a stationary source's applicable requirements and compliance with them by consolidating all state and federal air quality requirements into one document.

This report, as required by Rule 214(1), sets forth the applicable requirements and factual basis for the draft permit terms and conditions including citations of the underlying applicable requirements, an explanation of any equivalent requirements included in the draft permit pursuant to Rule 212(5), and any determination made pursuant to Rule 213(6)(a)(ii) regarding requirements that are not applicable to the stationary source.

General Information

Stationary Source Mailing Address:	CMS Generation Michigan Power L.L.C. 2400 Miller Road Dearborn, Michigan 48121
Source Registration Number (SRN):	N6731
North American Industry Classification System (NAICS) Code:	22112
Number of Stationary Source Sections:	1
Is Application for a Renewal or Initial Issuance?	Renewal
Application Number:	201000064
Responsible Official:	Thomas D. Wiegman, Plant Operator 313-336-7189
AQD Contact:	Dorothy Bohn, Environmental Quality Analyst 12 269-567-3552
Date Permit Application Received:	July 14, 2010
Date Application Was Administratively Complete:	August 13, 2010
Is Application Shield In Effect?	Yes
Date Public Comment Begins:	January 31, 2011
Deadline for Public Comment:	March 2, 2011

Source Description

CMS Generation Michigan Power L.L.C.'s Kalamazoo River Generating Station, located in Comstock, Michigan, operates one natural gas fired combustion turbine (EUCOMBTURB01) as a peaking unit. The turbine is a General Electric Frame 7 simple cycle combustion turbine nominally rated at 73.5 megawatts (786.5 mmBTU/hr) at base load. The turbine is restricted to combust natural gas as defined in 40 Code of Federal Regulations (CFR) 60.331(u).

EUCOMBTURB01 is equipped with a low-NOx combustor for control of NOx emissions. There are no add-on controls for any pollutant.

EUCOMBTURB01 was tested for NOx in 1999, 2004, and again in 2009. The performance test results indicated that the turbine was in compliance with the NOx emissions limit. The tests also established a relationship between the heat input and the NOx emissions.

A certified data acquisition system (DAS) is used to continuously record operating data and report emissions data for the turbine. One of the system capabilities is to monitor heat input so that the NOx emissions can be calculated using the relationship curve. The DAS is used to generate quarterly electronic data reports required by 40 CFR, Part 75.

The following table lists stationary source emission information as reported to the Michigan Air Emissions Reporting System in the **2010** submittal.

TOTAL STATIONARY SOURCE EMISSIONS

Pollutant	Tons per Year
Carbon Monoxide (CO)	1.8
Lead (Pb)	NA
Nitrogen Oxides (NO _x)	1.3
Particulate Matter (PM)	0.
Sulfur Dioxide (SO ₂)	0.0
Volatile Organic Compounds (VOC)	0.
Individual Hazardous Air Pollutants (HAP) **	

**As listed pursuant to Section 112(b) of the federal Clean Air Act.

See Parts C and D in the draft ROP for summary tables of all processes at the stationary source that are subject to process-specific emission limits or standards.

Regulatory Analysis

The following is a general description and history of the source. Any determinations of regulatory non-applicability for this source are explained below in the Non-Applicable Requirement part of the Staff Report and identified in Part E of the ROP.

The stationary source is located in Kalamazoo County, which is currently designated by the U.S. Environmental Protection Agency (USEPA) as attainment/unclassified for all criteria pollutants.

The stationary source is subject to Title 40 of the CFR, Part 70, because the potential to emit nitrogen oxides and carbon monoxide exceeds 100 tons per year.

The stationary source has an emission unit that was subject to Act 451, Part 55, Rule 220, for Major Sources Impacting Nonattainment Areas at the time of New Source Review (NSR) permitting.

Although EUCOMBTURB01 was installed after August 15, 1967, this equipment was exempt from NSR permitting requirements at the time it was installed. However, future modifications of this equipment may be subject to NSR.

Since the issuance of MI-ROP-N6731-2005, Kalamazoo County has been re-designated from non-attainment with respect to the 8-hour ozone standard to attainment.

EUCOMBTURB01 at the stationary source is not subject to the Maximum Achievable Control Technology Standards for Stationary Combustion Turbines promulgated in 40 CFR, Part 63, Subparts A and YYYY.

EUCOMBTURB01 at the stationary source is subject to the federal Greenhouse Gas emissions program promulgated in 40 CFR, Part 98, Subparts A and D.

EUCOMBTURB01 at the stationary source is subject to the federal Acid Rain program promulgated in 40 CFR, Part 72.

EUCOMBTURB01 at the stationary source is subject to the Clean Air Interstate Rule NOx annual trading program pursuant to Rules 802a, 803, 821, and 830 through 834.

EUCOMBTURB01 at the stationary source is subject to the Clean Air Interstate Rule NOx ozone season trading program pursuant to Rules 802a, 803, and 821 through 826.

The monitoring conditions contained in the ROP are necessary to demonstrate compliance with all applicable requirements and are consistent with the "Procedure for Evaluating Periodic Monitoring Submittals."

No emission units are subject to the federal Compliance Assurance Monitoring rule under 40 CFR, Part 64, because all emission units at the stationary source either do not have a control device or those with a control device do not have potential pre-control emissions over the major source thresholds.

Please refer to Parts B, C, and D in the draft ROP for detailed regulatory citations for the stationary source. Part A contains regulatory citations for general conditions.

Source-wide Permit to Install (PTI)

Rule 214a requires the issuance of a Source-wide PTI within the ROP for conditions established pursuant to Rule 201. All terms and conditions that were initially established in a PTI are identified with a footnote designation in the integrated ROP/PTI document.

The following table lists all individual PTIs that were incorporated into previous ROPs. The PTIs issued after the effective date of ROP No. MI-ROP-N6731-2005 are identified in Appendix 6 of the ROP.

PTI Number			
313-98B			

Equivalent Requirements

This permit does not include any equivalent requirements pursuant to Rule 212(5). Equivalent requirements are enforceable applicable requirements that are equivalent to the applicable requirements contained in the original PTI, a Consent Order/Judgment, and/or the State Implementation Plan.

Non-applicable Requirements

Part E of the draft ROP lists requirements that are not applicable to this source as determined by the AQD, if any were proposed in the application. These determinations are incorporated into the permit shield provision set forth in Part A (General Conditions 26 through 29) of the draft ROP pursuant to Rule 213(6)(a)(ii).

Processes in Application Not Identified in Draft ROP

There were no processes listed in the ROP application as exempt devices under Rule 212(4). Exempt devices are not subject to any process-specific emission limits or standards in any applicable requirement.

Draft ROP Terms/Conditions Not Agreed to by Applicant

This permit does not contain any terms and/or conditions that the AQD and the applicant did not agree upon pursuant to Rule 214(2).

Compliance Status

The AQD finds that the stationary source is expected to be in compliance with all applicable requirements as of the effective date of this ROP.

Action Taken by the MDNRE

The AQD proposes to approve this permit. A final decision on the ROP will not be made until the public and affected states have had an opportunity to comment on the AQD's proposed action and draft permit. In addition, the USEPA is allowed up to 45 days to review the draft permit and related material. The AQD is not required to accept recommendations that are not based on applicable requirements. The delegated decision maker for the AQD is Ms. Mary Douglas, Kalamazoo District Supervisor. The final determination for ROP approval/disapproval will be based on the contents of the permit application, a judgment that the stationary source will be able to comply with applicable emission limits and other terms and conditions, and resolution of any objections by the USEPA.

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Purpose

A Staff Report dated January 31, 2011, was developed in order to set forth the applicable requirements and factual basis for the draft ROP terms and conditions as required by R 336.1214(1). The purpose of this Staff Report Addendum is to summarize any significant comments received on the draft ROP during the 30-day public comment period as described in R 336.1214(3). In addition, this addendum describes any changes to the draft ROP resulting from these pertinent comments.

General Information

Responsible Official:	Thomas Wiegman, Plant Operater 313-336-7189
AQD Contact:	Dorothy Bohn, EQA 12 269-567-3552

Summary of Pertinent Comments

No pertinent comments were received during the 30-day public comment period.