

State Registration Number
N6833

**RENEWABLE OPERATING PERMIT
STAFF REPORT**

ROP Number
MI-ROP-N6833-2021

**Wolverine Power Supply Cooperative Incorporated
Wolverine Power, Gaylord Generating Station**

State Registration Number (SRN): N6833

Located at

2700 Millbocker Road, Gaylord, Otsego County, Michigan 49736

Permit Number: MI-ROP-N6833-2021

Staff Report Date: July 12, 2021

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) of the administrative rules promulgated under Act 451, requires that the Michigan Department of Environment, Great Lakes, and Energy (EGLE), 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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JULY 12, 2021 - STAFF REPORT

Purpose

Major stationary sources of air pollutants, and some non-major sources, are required to obtain and operate in compliance with an ROP pursuant to Title V of the federal Clean Air Act; and Michigan's Administrative Rules for Air Pollution Control promulgated under 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 Staff Report, as required by Rule 214(1), sets forth the applicable requirements and factual basis for the draft ROP terms and conditions including citations of the underlying applicable requirements, an explanation of any equivalent requirements included in the draft ROP 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:	Wolverine Power, Gaylord Generating Station 2700 Millbocker Road Gaylord, Michigan 49735
Source Registration Number (SRN):	N6833
North American Industry Classification System (NAICS) Code:	221112
Number of Stationary Source Sections:	1
Is Application for a Renewal or Initial Issuance?	Renewal
Application Number:	202000023
Responsible Official:	Joseph J Baumann, Vice President & General Counsel 231-775-5700
AQD Contact:	Caryn E. Owens, Environmental Engineer 231-878-6688
Date Application Received:	February 11, 2020
Date Application Was Administratively Complete:	February 11, 2020
Is Application Shield in Effect?	Yes
Date Public Comment Begins:	July 12, 2021
Deadline for Public Comment:	August 11, 2021

Source Description

Wolverine Power Supply Cooperative's, Gaylord Generating Station, is an electric power plant located on Millbocker Road about two miles west of Gaylord, Otsego County, Michigan. The site is located in a rural area with industrial or commercial sites adjacent to the west, east and north. The airport is located approximately 1 mile northeast of the site, and the closest residence is located approximately 1/3 mile south of the site.

The facility is a "peaking plant," meaning that it operates mainly for short periods of "peak load" when demand for electricity is high. The facility contains three General Electric Frame 5N simple-cycle combustion turbines, fired by natural gas. Each is coupled to an electric generator rated at 23,400 kW. Each unit includes a diesel engine used for starting the turbine. The facility also contains support and maintenance equipment for these gas turbines and generators.

The following table lists stationary source emission information as reported to the Michigan Air Emissions Reporting System (MAERS) for the year **2020**.

TOTAL STATIONARY SOURCE EMISSIONS

Pollutant	Tons per Year
Carbon Monoxide (CO)	12
Lead (Pb)	0
Nitrogen Oxides (NO _x)	48
Particulate Matter (PM)	1
Sulfur Dioxide (SO ₂)	0.5
Volatile Organic Compounds (VOCs)	0.3

This source is a true minor source of Hazardous Air Pollutants (HAPs), thus no HAP emissions data is listed.

See Parts C and D in the 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 in Otsego County, which is currently designated by the United States Environmental Protection Agency (USEPA) as attainment/unclassified for all criteria pollutants.

The stationary source is subject to Title 40 of the Code of Federal Regulations (CFR) Part 70, because the potential to emit of nitrogen oxides exceeds 100 tons per year.

The stationary source is a minor source of HAP emissions because the potential to emit of any single HAP regulated by Section 112 of the federal Clean Air Act, is less than 10 tons per year and the potential to emit of all HAPs combined are less than 25 tons per year.

The stationary source is considered a "synthetic minor" source in regard to the Prevention of Significant Deterioration regulations of 40 CFR 52.21 because the stationary source accepted legally enforceable permit conditions limiting the potential to emit of nitrogen oxides to less than 250 tons per year.

EUTURBINE01, EUTURBINE02 and EUTURBINE03 are not subject to New Source Performance Standards of Performance for Stationary Gas Turbines, promulgated in 40 CFR Part 60, Subpart GG, because the turbines were manufactured prior to October 3, 1977 and have not been modified. The turbines were installed at this location in 2001.

EUSTARTER01, EUSTARTER02 and EUSTARTER03 at the stationary source subject to the National Emission Standard for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines promulgated in 40 CFR Part 63, Subparts A and ZZZZ.

No emission units at the stationary source are subject to the federal Acid Rain program promulgated in 40 CFR Part 72, since each turbine is rated less than 25 MW, and burn a fuel with an annual average sulfur content of less than 0.05%. Additionally, No emission units at the stationary source are subject to the Cross-State Air Pollution Rule NO_x Annual Trading Program pursuant to 40 CFR Part 97, Subpart AAAAA, the Cross-State Air Pollution Rule NO_x Ozone Season Group 2 Trading Program pursuant to 40 CFR Part 97, Subpart EEEEE, or the Cross-State Air Pollution Rule SO₂ Group 1 Trading Program pursuant to 40 CFR Part 97, Subpart CCCCC, since each turbine is rated less than 25 MW.

A Compliance Schedule is not necessary to be included in Appendix 2 of the ROP since there have been no enforcement issues nor violation notices since issuance of the last ROP renewal.

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 have emission limitations or standards that are subject to the federal Compliance Assurance Monitoring rule pursuant to 40 CFR Part 64, because all emission units at the stationary source do not have a control device.

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-N6388-2015 are identified in Appendix 6 of the ROP.

PTI Number			
200-00			

Streamlined/Subsumed Requirements

This ROP does not include any streamlined/subsumed requirements pursuant to Rules 213(2) and 213(6).

Non-applicable Requirements

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

Processes in Application Not Identified in Draft ROP

PTI Exempt Emission Unit ID	Description of PTI Exempt Emission Unit	Rule 212(4) Citation	PTI Exemption Rule Citation
EUSPACEHEATER	Forced air heaters, 80,000 BTU/hr. or smaller, natural gas fired.	R 336.1212(4)(b)	R 336.1282(2)(b)(i)
EUGASHEATER	5.25 MMBTU/hr natural gas-fired heater for preheating fuel for the turbines.	R 336.1212(4)(b)	R 336.1282(2)(b)(i)

Draft ROP Terms/Conditions Not Agreed to by Applicant

This draft ROP 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 EGLE, AQD

The AQD proposes to approve this ROP. 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 ROP 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 Shane Nixon, Cadillac/Gaylord District Supervisor. The final determination for ROP approval/disapproval will be based on the contents of the ROP 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.

State Registration Number
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RENEWABLE OPERATING PERMIT
AUGUST 17, 2021 - STAFF REPORT ADDENDUM

ROP Number
MI-ROP-N6833-2021

Purpose

A Staff Report dated July 12, 2021, was developed to set forth the applicable requirements and factual basis for the draft Renewable Operating Permit (ROP) terms and conditions as required by Rule 214(1) of the administrative rules promulgated under Act 451. 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 Rule 214(3). In addition, this addendum describes any changes to the draft ROP resulting from these pertinent comments.

General Information

Responsible Official:	Joseph J Baumann, Vice President & General Counsel 231-775-5700
AQD Contact:	Caryn Owens, Senior Environmental Engineer 231-878-6688

Summary of Pertinent Comments

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

Changes to the July 12, 2021 Draft ROP

No changes were made to the draft ROP.