

Michigan Department of Environmental Quality  
Air Quality Division

State Registration Number  
B2803

**RENEWABLE OPERATING PERMIT  
STAFF REPORT**

ROP Number  
MI-ROP-B2803-2018a

**DTE Electric Company - Placid Peaking Facility**

SRN: B2803

Located at

4912 Edgar Road, Clarkston, Oakland, Michigan 48346

Permit Number: MI-ROP-B2803-2018a

Staff Report Date: March 12, 2018

Amended Date: March 25, 2019

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 Environmental Quality (MDEQ), 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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**RENEWABLE OPERATING PERMIT**

**MARCH 12, 2018 - 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 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 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:	DTE Electric Company - Placid Peaking Facility 4912 Edgar Road Clarkston, Michigan 48346
Source Registration Number (SRN):	B2803
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:	201700104
Responsible Official:	Ryan Randazzo, Plant Manager 734-231-1140
AQD Contact:	Kerry Kelly, Environmental Quality Analyst 586-753-3746
Date Application Received:	August 10, 2017
Date Application Was Administratively Complete:	September 20, 2017
Is Application Shield In Effect?	Yes
Date Public Comment Begins:	March 12, 2018
Deadline for Public Comment:	April 11, 2018

## **Source Description**

DTE Electric Company - Placid Peaking Facility is located at 4912 Edgar, Clarkston, Michigan. There are five diesel/No. 2 fuel oil-fired generator sets, each equipped with a diesel oxidation catalyst, and one 30,000 gallon (114 cubic meters) fuel tank on-site. The five diesel-fired compression ignition reciprocating internal combustion engines (RICE) are rated at 3,600 horsepower and have a 2.75 megawatt electrical generator connected to each engine. The engines were installed in 1970. The oxidation catalysts were installed on each engine in 2012. At the time of engine installation, fuel-oil burning equipment used for electric power generation was exempt from permitting pursuant to Rule 336.33(f) and Rule 336.36(c). The facility is bordered on the north side by Foster Lake and undeveloped land to the east. Nearby residential properties are located to the west and south of the facility. The nearest residents are located ~400 feet to the west and south.

The following table lists stationary source emission information as reported to the Michigan Air Emissions Reporting System (MAERS) for the year **2016**.

### **TOTAL STATIONARY SOURCE EMISSIONS**

<b>Pollutant</b>	<b>Tons per Year</b>
Carbon Monoxide (CO)	0.59
Lead (Pb)	NA
Nitrogen Oxides (NO <sub>x</sub> )	9.90
Particulate Matter (PM)	0.18
Sulfur Dioxide (SO <sub>2</sub> )	0.005
Volatile Organic Compounds (VOCs)	0.31

The 2016 MAERS AQD generated emissions for each HAP were less than 0.1 tons/year.

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

At the time of the initial ROP issuance in 2013, the stationary source was subject to Title 40 of the Code of Federal Regulations (CFR) Part 70, because the potential to emit of Greenhouse Gases was 100,000 tons per year or more calculated as carbon dioxide equivalents (CO<sub>2</sub>e) and 100 tons per year or more on a mass basis. In addition, at the time of initial ROP issuance in 2013, the stationary source operated as a synthetic minor for NO<sub>x</sub> under Rule 208(a). Rule 208(a) required emissions to be limited to less than 50% of major source thresholds, and submittal of annual renewal registration forms. Rule 208(a) was rescinded in 2016 and, as a result, the facility is now considered a major source for criteria pollutants. Currently, the stationary source is subject to Title 40 of the Code of Federal Regulations (CFR) Part 70, because the potential to emit of NO<sub>x</sub>, SO<sub>2</sub>, and CO exceeds 100 tons per year.

No emissions units at the stationary source are currently subject to the Prevention of Significant Deterioration (PSD) regulations of The Michigan Air Pollution Control Rules Part 18, Prevention of Significant Deterioration of Air Quality or 40 CFR 52.21 because the process equipment was constructed/installed prior to June 19, 1978, the promulgation date of the PSD regulations.

Although EU00001, EU00002, EU00003, EU00004 and EU00005 were installed after August 15, 1967, this equipment was exempt from New Source Review (NSR) permitting requirements at the time it was installed. However, future modifications of this equipment may be subject to NSR.

FGPEAKERS at the stationary source are subject to the National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines promulgated in 40 CFR Part 63, Subparts A and ZZZZ (RICE Area Source MACT). The ROP contains special conditions provided by DTE Electric Company in their application for applicable requirements from 40 CFR Part 63, Subparts A and ZZZZ. The AQD is not delegated the regulatory authority for this area source MACT.

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."

The emission limitation(s) or standard(s) for carbon monoxide from EU00001, EU00002, EU00003, EU00004 and EU00005 at the stationary source are exempt from the federal Compliance Assurance Monitoring (CAM) regulation under 40 CFR 64.2(b)(1)(i), because carbon monoxide is addressed by 40 CFR Part 63, Subparts ZZZZ. Therefore, EU00001, EU00002, EU00003, EU00004 and EU00005 are exempt from CAM requirements for carbon monoxide.

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. PTIs issued after the effective date of ROP No. MI-ROP-B2803-2013 are identified in Appendix 6 of the ROP.

PTI Number			
NA	NA	NA	NA

**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**

The following table lists processes that were included in the ROP Application as exempt devices under Rule 212(4). These processes are not subject to any process-specific emission limits or standards in any applicable requirement.

<b>PTI Exempt Emission Unit ID</b>	<b>Description of PTI Exempt Emission Unit</b>	<b>Rule 212(4) Rule Citation</b>	<b>PTI Exemption Rule Citation</b>
EUTank12	2,324-gallon Power Transformer 12 Storage tank containing mineral oil	Rule 212(4)(d)	Rule 284(2)(i)
EUTank101	12,000-gallon Power Transformer 101 Storage tank containing mineral oil	Rule 212(4)(d)	Rule 284(2)(i)
EUTank102	11,367-gallon Power Transformer 102 Storage tank containing mineral oil	Rule 212(4)(d)	Rule 284(2)(i)
EUTank2	1,112-gallon Power Transformer 2 Storage tank containing mineral oil	Rule 212(4)(d)	Rule 284(2)(i)
EUTankHB	3,075-gallon Breaker HB Storage tank containing mineral oil	Rule 212(4)(d)	Rule 284(2)(i)
EUTankHG	3,075-gallon Breaker HG Storage tank containing mineral oil	Rule 212(4)(d)	Rule 284(2)(i)
EUTankHI	3,075-gallon Breaker HI Storage tank containing mineral oil	Rule 212(4)(d)	Rule 284(2)(i)
EUTankRD	693-gallon Breaker RD Storage tank containing mineral oil	Rule 212(4)(d)	Rule 284(2)(i)
EUTankRE	420-gallon Breaker RE Storage tank containing mineral oil	Rule 212(4)(d)	Rule 284(2)(i)
EUTankRH	945-gallon Breaker RH Storage tank containing mineral oil	Rule 212(4)(d)	Rule 284(2)(i)
EUTankRI	420-gallon Breaker RI Storage tank containing mineral oil	Rule 212(4)(d)	Rule 284(2)(i)
EUTankRP	420-gallon Breaker RP Storage tank containing mineral oil	Rule 212(4)(d)	Rule 284(2)(i)
EUTankRQ	420-gallon Breaker RQ Storage tank containing mineral oil	Rule 212(4)(d)	Rule 284(2)(i)
EUTankRR	420-gallon Breaker RR Storage tank containing mineral oil	Rule 212(4)(d)	Rule 284(2)(i)
EUTankRU	420-gallon Breaker RU Storage tank containing mineral oil	Rule 212(4)(d)	Rule 284(2)(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 the MDEQ, 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 Joyce Zhu, Southeast Michigan 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.

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**APRIL 18, 2018 - STAFF REPORT ADDENDUM**

**Purpose**

A Staff Report dated March 12, 2018, was developed in order to set forth the applicable requirements and factual basis for the draft Renewable Operating Permit (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:	Ryan Randazzo, Plant Manager 734-231-1140
AQD Contact:	Kerry Kelly, Environmental Quality Analyst 586-506-9817

**Summary of Pertinent Comments**

The following comment was received from DTE Electric Company during the 30-day public comment period:

To clarify that requirements in FGPEAKERS SC III.2, III.3, and III.5 applies on an “engine by engine” basis, allowing other engines in FGPEAKERS to operate, please add “an engine in” in front of FG-PEAKERS.

**Changes to the March 12, 2018 Draft ROP**

The following changes were made to the draft ROP:

FGPEAKERS SC III.2, III.3, and III.5: The phrase "an engine in" was added before the term “FGPEAKERS” in the first sentence of each condition.

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**RENEWABLE OPERATING PERMIT**

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**MARCH 25, 2019 - STAFF REPORT FOR  
RULE 216(1)(a)(i)-(iv) ADMINISTRATIVE  
AMENDMENT**

**Purpose**

On June 7, 2018, the Department of Environmental Quality (DEQ), Air Quality Division (AQD), approved and issued Renewable Operating Permit (ROP) No. MI-ROP-B2803-2018 to DTE Electric Company - Placid Peaking Facility pursuant to Rule 214 of the administrative rules promulgated under Act 451. Once issued, a company is required to submit an application for changes to the ROP as described in Rule 216. The purpose of this Staff Report is to describe the changes that were made to the ROP pursuant to Rule 216(1)(a)(i-iv).

**General Information**

Responsible Official:	Ryan Randazzo, Plant Manager 734-231-1140
AQD Contact:	Caryn Owens, Environmental Engineer 231-876-4414
Application Number:	201900026
Date Application for Administrative Amendment was Submitted:	February 19, 2019

**Regulatory Analysis**

The AQD has determined that the change requested by the stationary source meets the qualifications for an Administrative Amendment pursuant to Rule 216(1)(a)(i).

**Description of Changes to the ROP**

Administrative Amendment Number 201900026 was to correct typographical errors in the Emission Unit Description Summary Table. The Description of Emission Units EU00001 through EU00003 indicate PLACID DG 11 PEAKERS, 11-# (11-1 through 11-5). The description has been missed for a very long time, and the units have always been referred to by the Company as Unit 12s. Since the error was recently noticed, the company submitted a request to have the error in the description corrected.

**Compliance Status**

The AQD finds that the stationary source is expected to be in compliance with all applicable requirements associated with the emission unit(s) involved with the change as of the date of approval of the Administrative Amendment to the ROP.

**Action Taken by the DEQ**

The AQD approved an Administrative Amendment to ROP No. MI-ROP-B2803-2018, as requested by the stationary source. The delegated decision maker for the AQD is the District Supervisor.