



October 9, 2023

Ms. Joyce Zhu, District Office Supervisor
EGLE AQD – Southeast Michigan District
27700 Donald Court
Warren, MI 48092-2793

Subject: Malfunction Abatement Plan
DTE Electric Company – Northeast Peaking Facility

Dear Ms. Zhu:

Enclosed is the new malfunction abatement plan (MAP) for the combustion and jet turbine generators at Northeast Peaking Facility. This MAP is required under the current ROP for Northeast Peaking Facility (MI-ROP-B2808-2023).

Should you have any questions regarding this submittal, please contact me at (248) 794-9390 or via email at alexis.thomas@dteenergy.com.

Sincerely,

Alexis Thomas /s/

Alexis Thomas
Staff Environmental Engineer
Environmental Management & Safety – Emissions Quality
DTE Electric

Cc (via email):

Matthew Karl, EGLE AQD, Senior Environmental Quality Analyst
Biljana Pecov, DTE Electric, Plant Manager – Peakers
Rahn Ledesma, DTE Electric, Maintenance Manager – Peakers
Timothy Ellsworth, DTE Electric, Supervisor - Peakers
Zachary Josefiak, DTE, EM&S, Environmental Engineer – Peakers
Barry Marietta, DTE, EM&S, Manager – Emissions Quality
File in EM&S SharePoint



DTE Electric Company

Northeast Peaking Facility

Malfunction Abatement Plan (MAP)

Prepared By:
DTE Electric Company
October 2023

1. Purpose

This Malfunction Abatement Plan (MAP) has been prepared to meet the requirements of the air permits issued by the State of Michigan for combustion turbine and jet turbine generators (CTGs 12-1, 11-2, 11-3, 11-4, 13-1, & 13-2) at the Northeast Peaking Facility. This permit requires Northeast Peaking Facility to "...implement and maintain a malfunction abatement plan as described in Rule 911(2)" and submit to AQD for review and approval. This MAP has been prepared by DTE Electric Company in accordance with Rule 911 of the Michigan Air Pollution Act (Part 55 of Michigan Act 451).

2. Scope

This MAP includes the systems and procedures for the DTE Electric Company (DTE) peaking units located at 6401 East Eight Mile Road, Warren, MI, 48091, hereafter referred to as the Northeast Peaking Facility (SRN B2808). Northeast Peaking Facility is an unmanned site and is maintained by the Peakers Group within DTE. DTE operates this peaking facility during peak power demand times to provide additional power to the grid at predetermined locations and other periods to maintain grid stability. Northeast Peaking Facility operates No.2 oil- or natural gas-fired combustion turbine generators (CTG) and No. 2 oil-fired jet turbine generators (JTG). CTG 12-1 is a No. 2 oil- or natural gas-fired CTG with a 24 MW capacity at a temperature of 20°F. CTGs 11-2, 11-3, and 11-4 are natural gas-fired CTGs with a 20 MW capacity at a temperature of 20°F. CTGs 13-1 and 13-2 are No. 2 oil-fired JTGs with a 23 MW capacity at a temperature of 20°F. All units are typically operated remotely. CTG 11-2, CTG 11-3 and CTG 11-4 were installed prior to August 15, 1967. As a result, this equipment is considered "grandfathered" and is not subject to New Source Review (NSR) permitting requirements. Although CTG 12-1, CTG 13-1, and CTG 13-2 were installed after August 15, 1967, this equipment was exempt from New Source Review (NSR) permitting requirements at the time it was installed.

3. Preventative Maintenance Program

3.1. Responsible Personnel

The Plant Director is responsible for ensuring that the Northeast Peaking Facility operates in compliance with all environmental and safety requirements and regulations. The Plant Director delegates day to day responsibilities for peaker operations and maintenance to the Plant Manager. The Plant Manager along with the Maintenance Manager and Peaker Operations Supervisor are responsible for overseeing the inspection, maintenance, and repair of all peaking equipment. The Environmental Engineer is responsible for advising the Peakers group and operators on response to environmental regulations.

3.2. Inspections

Operations personnel conduct walkdowns when onsite. The following preventative maintenance items are performed by Operations personnel as scheduled:

Task	Frequency
Collect lube oil samples	Annual
Inspect generator air filters and replace as needed	Annual
Check operation of control room heaters and vent fans	Annual
Run unit for load, set output at base load	Annual
Check operation of cooling fans	Annual

3.3. Replacement Parts

DTE Electric Company stocks parts necessary for routine maintenance and common replacements for the peaking equipment. If necessary, parts for more involved repairs or replacements for the systems are available on a quick turnaround basis from an appropriate vendor.

4. Monitoring Requirements

Operational parameters and alarms for each unit are programmed into the human machine interface (HMI) control system and are monitored by Peaker Operations. This control system will trip the units in the event of emergencies. The operations and maintenance (O&M) Manuals for the HMI are kept on file by the Peakers group. Other unit alarms are routed to the DTE Electrical System Operations Center (ESOC). In the event of an alarm that requires site response, Peaker Operations or vendor personnel will be dispatched to the site.

5. Corrective Action Procedures

If a malfunction or failure occurs that cannot be corrected by an operator, then a Work Order will be issued to repair the system. Maintenance or vendor personnel will respond to the situation and provide appropriate repairs.

6. Revision History

Revision No.	Changes	Reviewed By:	Date
0	Creation of Northeast Peaking Facility site-specific Malfunction Abatement Plan	Alexis Thomas	10/9/2023