# DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION **ACTIVITY REPORT: Off-site Inspection**

B280657396		
FACILITY: DTE Electric Company - Superior Peaking Facility		SRN / ID: B2806
LOCATION: 6000 FIRST STREET, SUPERIOR TWP		DISTRICT: Jackson
CITY: SUPERIOR TWP		COUNTY: WASHTENAW
CONTACT: Stefanie Ledesma, Staff Environmental Engineer		ACTIVITY DATE: 03/23/2021
STAFF: Brian Carley	<b>COMPLIANCE STATUS:</b> Compliance	SOURCE CLASS: MAJOR
SUBJECT: Scheduled targeted inspection		
RESOLVED COMPLAINTS:		

Facility Contact: Stefanie Ledesma, Staff Environmental Engineer Phone: 734-362-2302 Email: stefanie.ledesma@dteenergy.com

#### Purpose

I conducted a virtual inspection of the facility with Stefanie Ledesma of DTE Energy to determine the compliance of the DTE Electric Company - Superior Peaking Station with ROP MI-ROP-B2806-2018.

## Background

The Detroit Edison Superior Peaking Facility has four oil-fired combustion turbines that were installed in 1966 and are rated at approximately 19 MW each. Unit 1 has a 300 hp black start engine connected to it, which is used to start the unit and is subject to 40 CFR 63 Subpart ZZZZ (RICE MACT) as an area source. These units are only used when DTE Energy requires more power to the electrical grid or for maintenance purposes.

## **Compliance Inspection**

Timeframes for the records requested will be March 1, 2020 through February 28, 2021

## FGPEAKERS

This covers the four oil-fired combustion turbines at this facility. This facility was not operating at the time of the inspection. Stefanie provided me with the monthly totals of fuel usage and the hours of operation for the time period of January 2020 through February 2021. The totals for the requested timeframe were 270.260 gallons and 233.7 hours for all the units combined (see attachment 1). She texted me photos of the control panels for each unit which shows the hours meters that they use to track each unit's runtime (see images below). This is complying with SC VI.1 which requires that they record their monthly fuel usage. She also sent me a copy of the Fuel Oil Supply Agreement that contains fuel specifications of the fuel that they use (see attachment 2). They are using ultra-low sulfur diesel fuel that has a sulfur content of 15 ppm (0.0015%), which is well below their limit of 1.5% sulfur by weight per SC II.1. I determined that they are complying with the requirements of this table.

#### EU-BLKSTART11-1

They have a 300 HP black start engine which is used to start Unit 1 and is subject to the RICE MACT as an area source. They had last changed the oil and filter and inspected the hoses, belts, and air filter on December 6, 2020 as required by SC III.1 (see attachment 3). They are operating and maintaining this unit by doing annual inspections, doing required maintenance, and recording that activity in the DTE database per SC III.2 and recording the activity per SC VI.2 (see attachment 4). Stefanie stated that there has not been any additional maintenance done on this unit since the last inspection beyond what is required in SC III.1. They are not doing the oil analysis in lieu of specified oil change requirement that is optional per SC III.3. They also have an operation instruction manual for this emission unit that specifies how to operate and maintain the unit (see files for copy in the report for 8/13/2019 inspection). They are minimizing the time spent at idle at startup and the time needed for appropriate and safe loading of the engine per SC III.5 (see attachment 1). I determined that they are in compliance with the requirements of this MACT and this table.

#### **Compliance Determination**

Based on the inspection, annual and semi-annual certifications, and MAERS submittals, I determined that they are in compliance with their ROP.



**Image 1(Unit 11-1) :** Control panel for Unit 11-1 which shows the hours meter for that unit. Photo taken by Stefanie Ledesma, DTE on March 23, 2021.



**Image 2(Unit 11-4) :** Control panel for Unit 11-4 which shows the hours meter for that unit. Photo taken by Stefanie Ledesma, DTE on March 23, 2021.



**Image 3(Unit 11-2) :** Control panel for Unit 11-2 which shows the hours meter for that unit. Photo taken by Stefanie Ledesma, DTE on March 23, 2021.

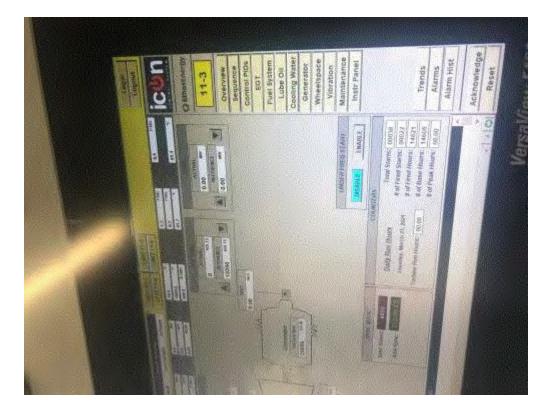


Image 4(Unit 11-3) : Control panel for Unit 11-3 which shows the hours meter for that unit. Photo taken by Stefanie Ledesma, DTE on March 23, 2021.

NAME Buin Cully DATE 3/24/21 SUPERVISOR

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