

Via email to Barry.Marietta@dteenergy.com

Mr. Barry Marietta Manager, Environmental Strategy DTE Energy

RE: Applicability Determination Request – DTE Electric Company – Greenwood Energy Center (SRN: 6145)

Dear Mr. Marietta:

The U.S. Environmental Protection Agency has received and reviewed your letter, dated August 22, 2023, on behalf of DTE Electric Company, located in Avoca, Michigan. Your letter made a determination request for exemption from 40 CFR Part 63, Subpart DDDDD "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters," and Subpart UUUUU "National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units." The request is for the electric generating unit (EGU), Unit 1, identified in the title V renewable operating permit (ROP) as EUBOILER1. To support the request, DTE provided heat input data for EUBOILER1, which is shown in the table below:

**Table 1:** Heat Input by Fuel from 2012-2022

Year	Total Heat Input (mmbtu)	Heat Input from Natural Gas (mmbtu)	Heat Input from Fuel Oil (mmbtu)	Heat Input from Natural Gas (%)	Heat Input from Fuel Oil (%)
2022	3,550,088	3,546,924	3,164	99.91	0.09
2021	6,766,520	6,763,767	2,753	99.96	0.04
2020	8,978,624	8,975,745	2,879	99.97	0.03
2019	8,667,698	8,664,486	3,212	99.96	0.04
2018	6,509,937	6,506,918	3,019	99.95	0.05
2017	4,211,663	4,206,374	5,289	99.87	0.13
2016	3,606,552	3,602,197	4,355	99.88	0.12
2015	1,613,894	1,609,789	4,105	99.75	0.25
2014	1,862,081	1,852,845	9,236	99.50	0.50
2013	2,592,451	2,575,368	17,083	99.34	0.66
2012	7,352,009	7,331,068	20,941	99.72	0.28

# Request

DTE is seeking an applicability determination on whether EUBOILER1 is exempt from 40 CFR Part 63, subparts DDDDD & UUUUU. As described in the request letter:

The unit is permitted to burn fuel oil and natural gas, however data shows that fuel oil is a very small portion of the fuel consumed by the unit. The unit currently only burns fuel oil for startup and does not have adequate storage capacity to burn fuel oil for a significant period of time.

#### DTE mentions that:

Although EUBOILER1 burns fuel oil, the determination was made at that time that the unit would limit oil consumption to less than 15% of the unit's overall heat input on an annual basis and less than 10% of the unit's heat input on a 3-calendar year average basis. Therefore, EUBOILER1 would be a natural gas-fired electric utility steam generating unit as defined by MATS [Mercury and Air Toxics Standards] (§63.10042) and MATS would not be applicable to EUBOILER1.

## In addition, DTE explains:

Given the fuel oil consumption evaluation outlined above related to MATS, DTE determined that IB MACT [Industrial Boiler Maximum Achievable Control Technology] was also not applicable. Although the unit is capable of burning fuel oil, use of fuel oil is maintained at levels below 15% of total heat input on an annual basis and less than 10% on a 3-calendar year average basis. In part, §63.7491(a) states "a natural gas-fired EGU as defined in subpart UUUUU of this part firing at least 85% natural gas on an annual heat input basis" is not subject to IB MACT. Therefore, DTE determined EUBOILER1 is exempt from the requirements of IB MACT as a natural gas-fired EGU as outlined in §63.7491(a).

### **Background and Analysis**

As discussed below, in accordance with DTE's request, EPA has determined that the electric generating unit EUBOILER1 is exempt from 40 CFR Part 63 subparts DDDDD and UUUUU.

# Subpart UUUUU

In order to be subject to subpart UUUUU, a source must "own or operate a **coal-fired EGU** or an **oil-fired EGU** as defined in section 63.10042 of this subpart." From the heat input by fuel data supplied by DTE in Table 1, the only fuel(s) fired in EUBOILER1 is natural gas and fuel oil. An oil-fired EGU is defined as the following:

Oil-fired electric utility steam generating unit means an electric utility steam generating unit meeting the definition of "fossil fuel-fired" that is not a coal-fired electric utility steam generating unit and that burns oil for more than 10.0 percent of the average annual heat input during the 3 previous calendar years after the compliance date for

your facility in § 63.9984 or for more than 15.0 percent of the annual heat input during any one of those calendar years. EGU owners and operators must estimate coal, oil, and natural gas usage for the first 3 calendar years after the applicable compliance date and they are solely responsible for assuring compliance with this final rule or other applicable standard based on their fuel usage projections. After the first 3 years of compliance, EGUs are required to evaluate applicability based on coal or oil usage from the three previous calendars years on an annual rolling basis.

Based on the same heat input data from Table 1, EUBOILER would not fit the definition of an oil-fired EGU as the unit does not burn enough oil to be 10.0 percent of the average annual heat input during the 3 previous calendar years after the compliance date or for more than 15.0 percent of the annual heat input during any one of those calendar years.

Section 63.9983 further provides in paragraphs (a) through (d) the types of electric steam generating units that are not subject to subpart UUUUU. Paragraph (b) in particular covers "Any electric utility steam generating unit that is not a coal- or oil-fired EGU and that meets the definition of a natural gasfired EGU in § 63.10042." A natural gas-fired EGU is defined as the following:

Natural gas-fired electric utility steam generating unit means an electric utility steam generating unit meeting the definition of "fossil fuel-fired" that is not a coal-fired, oil-fired, or IGCC [Integrated Gasification Combined Cycle] electric utility steam generating unit and that burns natural gas for more than 10.0 percent of the average annual heat input during the 3 previous calendar years after the compliance date for your facility in § 63.9984 or for more than 15.0 percent of the annual heat input during any one of those calendar years. EGU owners and operators must estimate coal, oil, and natural gas usage for the first 3 calendar years after the applicable compliance date and they are solely responsible for assuring compliance with this final rule or other applicable standard based on their fuel usage projections.

Based on the applicable heat input data, EUBOILER1 would meet the definition of a natural gas-fired electric utility steam generating unit as it burns natural gas for more than 10.0 percent of the average annual heat input during the 3 previous calendar years after the compliance date and more than 15.0 percent of the annual heat input during any one of those calendar years.

### Subpart DDDDD

In order to be subject to subpart DDDDD a source must:

Own or operate an industrial, commercial, or institutional boiler or process heater as defined in § 63.7575 that is located at, or is part of, a major source of HAP [Hazardous Air Pollutant], except as specified in § 63.7491. For purposes of this subpart, a major source of HAP is as defined in § 63.2, except that for oil and natural gas production facilities, a major source of HAP is as defined in § 63.7575.

Section 63.7491 further provides in paragraphs (a) through (n) the types of boilers or process heaters that are not subject. In particular, paragraph (a) references "An electric utility steam generating unit

(EGU) covered by subpart UUUUU of this part or a **natural gas-fired EGU as defined in subpart UUUUU** of this part **firing at least 85 percent natural gas on an annual heat input basis**."

As discussed above, given the heat input data provided by DTE for the unit in question, EUBOILER1 meets the definition of a natural gas-fired EGU as defined under section 63.10042 of subpart UUUUU and the exemption listed under paragraph (a) of section 63.7491 of subpart DDDDD.

# **Determination**

EPA has reviewed your request and has concluded that electric generating unit, Unit 1, identified as EUBOILER1 in the applicable ROP, is not subject to 40 CFR Part 63, Subpart DDDDD National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters as well as Subpart UUUUU National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units. While EUBOILER1 is not subject to subparts DDDDD and UUUUU given the information provided to EPA, DTE must ensure that the unit remains within the definition of a "natural gas-fired electric utility steam generating unit" as defined under section 63.10042 of subpart UUUUU and firing at least 85 percent natural gas on an annual heat input basis.

This applicability determination is made in reliance on the accuracy of the information provided to EPA by DTE and does not relieve DTE of the responsibility for complying fully with any and all applicable federal, state, and local laws, regulations, and permits. If you have any further questions, please contact Brian Blanchard, of my staff, at <a href="mailto:Blanchard.Brian@epa.gov">Blanchard.Brian@epa.gov</a> or (312) 886-9493.

Sincerely,

Aburano, Digitally signed by Aburano, Douglas Date: 2023.10.24 09:37:28 -05'00'

Douglas Aburano Manager Air Programs Branch

cc: Julie Brunner, Michigan EGLE Shamim Ahammod, Michigan EGLE