

A CMS Energy Company

Environmental Services

June 5, 2019

Ms. Kaitlyn DeVries, Environmental Quality Analyst

Michigan Department of Environment, Great Lakes, and Energy – Air Quality Division

Grand Rapids District Office

350 Ottawa Avenue, NW, Unit 10

Grand Rapids, MI 49503-2341

Re: Consumers Energy Company's J.H. Campbell Plant (B2835) Response to Violation Notice, Dated April 25, 2019

Dear Ms. DeVries:

Consumers Energy Company (CE) provides this response to the Michigan Department of Environment, Great Lakes, and Energy-Air Quality Division's (EGLE-AQD) Violation Notice (VN) sent to Mr. Norman Kapala and dated April 25, 2019. The VN refers to the opacity exceedance at EUBOILER2 on January 31, 2019 at CE's J.H. Campbell Plant. EUBOILER2 is subject to opacity and other air quality requirements detailed in Renewable Operating Permit (ROP) number MI-ROP-B2835-2013b.

As noted in the VN, the written Excess Emission Event Notification submitted to EGLE (see attachment) provided the detailed steps that CE has taken to correct the alleged violations and prevent any reoccurrence. As one of those steps, the Alarm Response Procedures (ARPs) for the Secondary Air Pre-Heater outlet and Pulse Jet Fabric Filter (PJFF) inlet high flue gas temperatures were reviewed and modified by the Campbell Plant's Management. ARPs are operator protocols and are incorporated into the Maintenance Malfunction Abatement Plan (MMAP) by reference. The purpose of this revision process was to ensure better understanding of the need to timely initiate shutdown procedures upon a PJFF high temperature bypass event. The ARPs were modified to provide clearer direction and the Operations Staff were trained on the revised ARPs.

As suggested in the VN, we also reviewed the MMAP for deficiencies, clarity and potential revisions. We do not believe the MMAP¹ should be modified based on this event. The MMAP refers to the ARPs, which we did modify as noted above. An excerpt of the applicable language from the MMAP is below:

"2. Emergency Bypass Shut-down

This shut-down method is intended to protect the filter bags from upset conditions. It can be initiated manually by an Operator from the DCS screen. Additionally, an emergency bypass shut-down will be initiated when either of the two following conditions exists:

¹Based on our recent review, we plan to submit a revised MMAP to EGLE under a separate cover letter with updates unrelated to this event.

- a. Fabric Filter inlet temperature is at the High-High set point (375°F) for 10 minutes before going into emergency bypass which then initiates the boiler shut-down procedure controlled by an operator. The alarm has a delay to avoid nuisance shutdowns/alarms.
- b. Fabric Filter inlet temperature is at the High-High set point (380°F) any length of time. This will override the High-High temperature timer and initiate a sequence shutdown. There is a delay to avoid nuisance shutdowns."

The VN also discusses the requirement to continuously operate certain control equipment. CE believes this requirement should be considered in the context of the definition of "continuously operate" from the Consent Decree and the Appendix of the MI-ROP-B2835-2013b (emphasis added):

"'Continuously Operate' or 'Continuous Operation' means that when a pollution control technology or combustion control is required to be used at a Unit pursuant to this Consent Decree (including, but not limited to, SCR, FGD, DSI, ESP, Baghouse, or Low NO_x Combustion System), it shall be operated at all times that the Unit it serves is in operation (except (a) the SCRs on Campbell Units 2 and 3 need not be operated during scheduled maintenance on the applicable Unit's Urea Based Ammonia System and (b) as otherwise provided by Section XV (Force Majeure)), consistent with the technological limitations, manufacturers' specifications, good engineering and maintenance practices (including Campbell Unit 2 and Unit 3 scheduled Urea Based Ammonia System outages), and good air pollution control practices for minimizing emissions (as defined in 40 C.F.R. § 60.11(d)), as applicable, for such equipment and the Unit."

The manufacturer design and specifications of the PJFF dictate that a bypass of the fabric filter compartments is to occur when the exhaust flue gas temperature reaches or exceeds 380°F. If the PJFF is not bypassed, there is an elevated risk of damage and/or destruction of the PJFF due to the heightened potential for all or some of the fabric filter bags within the PJFF catching fire as well as the associated concerns for employee safety.

In the January 31, 2019 event, the exhaust gas temperatures reached 380 °F, and thus a bypass of the system was appropriately done consistent within the system's technological limitations, manufacturers' specifications, good engineering and maintenance practices. In addition, start-up and shutdown of a unit is often times more harmful to the environment than reducing load, troubleshooting and repairing pollution control equipment online, as was attempted in this circumstance. Although this attempted online repair failed and the unit ultimately had to be shutdown, operating at low load allowed electrical generation to continue to flow to the grid during a Midcontinent Independent System Operator (MISO) declared resource issue during extremely dangerous and low temperatures as noted in the attached Excess Emission Report. Consequently, we believe that we were at all times operating the PJFF consistent with the letter and spirit of the requirement to continuously operate the equipment. As such, we believe we have substantively complied with the Consent Decree and our obligations therein.

If you have any questions or would like additional information, please contact me at 517-788-0428.

Sincerely,

James M. Walker, P.E.

Air Quality Supervisor

Consumers Energy Company

Enclosure:

J.H. Campbell Unit 2 Excess Emission Event Notification to EGLE

cc: Mr. Joseph Firlit, Consumers Energy

mer M. Walker

Mr. Norman Kapala, Consumers Energy

Mr. James Roush, Consumers Energy

Ms. Linda Hilbert, Consumers Energy

Ms. Sarah Marshall, EPA

Ms. Mary Ann Dolehanty, EGLE

Dr. Eduardo Olaguer, EGLE

Ms. Jenine Camilleri, EGLE

Mr. Christopher Ethridge, EGLE

Ms. Heidi Hollenbach, EGLE