



December 30, 2025

Ms. Tiffany Myers, District Supervisor
Water Resources Division
Michigan Department of Environment, Great Lakes and Energy (EGLE)
Jackson District Office
301 E. Louis B. Glick Highway - 4th Floor
Jackson, Michigan 49201

Re: Flue Gas Desulfurization Wastewater (FGD) Voluntary Incentive Program (VIP)/
Cessation of Coal Combustion (COCC) 2025 Annual Progress Reports
DTE – Monroe Plt
NPDES Permit No. MI0001848

Dear Ms. Myers,

Enclosed is the annual progress report submitted in accordance with 40 CFR 423.19(h)(3) and Permit Section I.A.16.e. This report includes the required updates outlined in 40 CFR 423.19(h)(4).

On October 13, 2020, the U.S. Environmental Protection Agency (EPA) finalized the Effluent Limit Guidelines (ELG) Reconsideration Rule (2020 Rule), revising portions of the 2015 ELG Rule. The 2020 Rule addressed requirements for bottom ash transport water (BATW) and flue gas desulfurization wastewater (FGD WW), establishing Best Available Technology (BAT) discharge limits and introducing the Voluntary Incentive Program (VIP). Under the VIP, facilities that adopt advanced treatment technologies—such as membrane filtration or zero-liquid discharge—may comply by December 31, 2028, allowing additional time for design, procurement, and installation of these systems.

On October 13, 2021, DTE Electric Company submitted a Notice of Planned Participation (NOPP) for the FGD Wastewater VIP in accordance with 40 CFR 423.19(h)(1). This annual progress report provides the required updates for that participation.

On July 26, 2023, the Michigan Public Service Commission approved DTE's Integrated Resource Plan (IRP), which includes the retirement of two Monroe Power Plant units by December 31, 2028. In alignment with EPA's Direct to Final Rule, DTE submitted a Cessation of Coal Combustion (COCC) NOPP for Units 3 and 4 on April 28, 2023, pursuant to 40 CFR 423.19(f)(1). These units will follow the COCC compliance pathway as outlined in that submittal.

In May 2024, EPA issued the ELG Supplemental Rule, introducing additional technical requirements for BATW, FGD WW, combustion residual leachate (CRL), and legacy wastewater (LWW). Subsequently, in September 2025, EPA proposed the ELG Deadline Extensions Rule, which remains pending. Despite these developments, DTE's compliance strategy for Monroe Power Plant remains unchanged:

- Units 1 and 2 will comply with FGD WW requirements through the VIP (Enclosure 1).
- Units 3 and 4 will comply through early cessation of coal combustion (Enclosure 2).

If you have any questions regarding this submittal, please contact Marcela Orlandea at (248) 207-7768 or via email at marcela.orlandea@dteenergy.com.

Sincerely,



Daniel Casey
Plant Manager
Monroe Power Plant
Energy Supply - DTE Electric Company
734-384-2203
Enclosures

Cc: Alexandria Seeger - EGLE, Jackson District Office
Jason Logan - DTE EM&S, Monroe Power Plant
Claire Souder - DTE EM&S, Monroe Power Plant
Christopher Paquette - DTE EM&S
Barry Marietta - DTE EM&S
Marcela Orlandea - DTE EM&S

Enclosure 1

Flue Gas Desulfurization Wastewater (FGD) Voluntary Incentive Program (VIP) 2025 Annual Progress Report

Facility Identification

Monroe Power Plant is located at 3500 East Front Street, Monroe, Michigan. MONPP consists of four B&W supercritical wall-fired boilers firing a blend of subbituminous coal, bituminous coal and petroleum coke and is rated for a maximum gross output of 3,280 MW. The units started commercial operation from 1971 to 1974. This flue gas desulfurization wastewater (FGD WW) NOPP annual progress report applies to all operational units at MONPP for both the VIP NOPP (Units 1 and 2) and the COCC NOPP (Units 3 and 4).

Technology Projected to be Utilized for VIP Compliance (Units 1 and 2)

DTE selected to pursue the VIP compliance subcategory to comply with the Steam Electric Power Generating ELG. DTE has evaluated a suite of technologies for FGD WW treatment that would qualify for VIP compliance. These technologies included but were not limited to membrane treatment, thermal reduction (such as crystallization), encapsulation, and spray dryer evaporators.

During previous feasibility and front-end engineering efforts, DTE determined that pursuing a zero-liquid-discharge (ZLD) status was more feasible and cost effective for the plant and ratepayers.

The selected approach to achieve a zero liquid discharge operational state and be compliant with the VIP compliance requirement is based on the following operational changes to FGD wastewater management:

- **Wastewater Management:** Currently gypsum is washed with water which generates a wastewater stream. The wastewater will be diverted from the existing process and transferred via a wastewater truck to a new holding tank near the Dry Fly Ash Silo located in DTE Monroe's F-Yard. The wastewater will be used in lieu of the City of Monroe's water treatment plant effluent to condition the dry fly ash. The wastewater will be pumped into the existing pin mixers like the existing process for disposal.
- **Wastewater Reduction:** When gypsum is not washed the associated wastewater is not generated. Unwashed gypsum will be disposed. The water used for washing gypsum will be diverted and returned to the cooling water return system. There will be piping modifications to the FGD water systems to implement wastewater reduction.

Engineering Dependency Charts

Enclosure 1a includes a schedule that shows the amount of time required for the installation of the selected VIP technology for FGD WW treatment system that is capable of achieving compliance with the revised 2020 Rule at Monroe Power Plant Units 1 and 2.

The draft schedule in Enclosure 1a allows appropriate project execution time to implement a VIP technology that would meet the VIP limits. DTE has progressed through a preliminary design phase to develop an overall cost estimate. The preliminary design and overall project

cost have been approved by DTE leadership. The final design phase of project development has begun.

Updates to Initial NOPP

The information presented in this annual progress report represents the best information available to meet the contents of the annual progress report as specified in 40 CFR 423.19(h)(4). DTE has identified the following factors that could result in modifications of information submitted in this NOPP annual progress report:

1. **Integrated Resource Plans** – An updated IRP will be submitted to the Michigan Public Service Commission (MPSC) in 2026.
2. **Other Regulatory Filings** – Many projects required for compliance with Effluent Limitation Guidelines (ELG) will also need approval through future regulatory filings, including electric rate cases. Outcomes of these proceedings may impact the scope and timing of this NOPP.
3. **Regulatory Changes and Rule Modifications** – In September 2025, the U.S. Environmental Protection Agency (EPA) proposed the ELG Deadline Extensions Rule to extend compliance deadlines for coal-fired power plants. While this proposed rule does not currently affect the ELG compliance strategy at MONPP, the final rule—or other future regulatory changes—could require changes to DTE’s compliance strategy.
4. **Other Factors** – Additional considerations, such as legal challenges to EPA’s ELG rules or future rulemakings by current or subsequent administrations, may also affect this NOPP

Enclosure 1a

VIP Implementation Schedule

The overall schedule follows a traditional general contractor approach. Preliminary engineering was completed in 2025 which included concept design and a concept design report, laboratory testing, and cost estimating. Monroe's generation of fly ash, gypsum, and wastewater are directly correlated to capacity factor and is expected to vary for time.

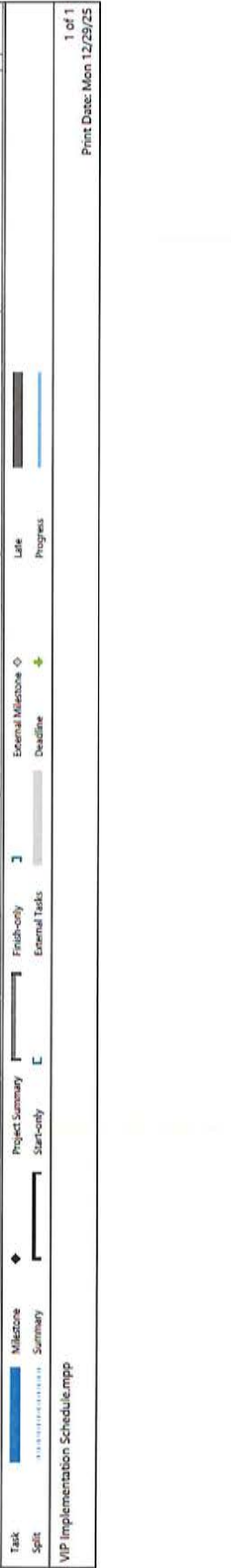
The previous site survey and geotechnical report for Monroe's Dry Fly Ash will be utilized for the detailed design. Procurement packages will be developed for long-lead process equipment. Submittal drawings and information from the major process equipment vendors are required for the balance of plant and detailed engineering. The long-lead process equipment includes wastewater haul trucks, wastewater holding tank, and wastewater transfer pumps. The site survey, geotechnical report, and vendor submittal documentation will be used to design equipment foundations. A 3D scan will be used to capture the existing conditions, a 3D model is created from the 3D scan, and the 3D model will be used for detailed engineering. The engineering deliverables involve development of process flow diagrams, piping & instrumentation diagrams, general arrangement drawings, one-line diagrams, foundation drawings, lists, 3D models, isometric drawings, cable schedules, control narratives, etc. Balance of plant commodities will be provided by the successful general contractor. Procurement activities include development of technical specifications, issuing packages to bid, evaluating bids received, negotiating and awarding contracts, receipt of submittals, review of submittal information, release of manufacturing to fabricate, fabrication of equipment / components, delivery to site, construction, commissioning, and closeout. This section of the annual progress report applies to Units 1 and 2 at MONPP for VIP compliance.



Confidential - Draft DTE - Monroe VIP Compliance

Timescale Summary Schedule

ID	Task Name	Duration	Start	Finish	24	2025	2026	2027
1	Project Name	682 days	Mon 4/7/25	Mon 12/13/27				
2	Preliminary Engineering	115 days	Mon 4/7/25	Wed 9/17/25				
3	Kickoff/Gather Data	1 mon	Mon 4/7/25	Fri 5/2/25				
4	Conceptual Design Report - Draft	1.5 mons	Mon 4/7/25	Fri 5/16/25				
5	Laboratory Testing	2 mons	Mon 5/15/25	Mon 6/30/25				
6	Cost Estimate	3 mons	Tue 6/24/25	Wed 9/17/25				
7	Conceptual Design Report - Final	2 mons	Wed 7/23/25	Wed 9/17/25				
8	Detailed Design	160 days	Mon 10/27/25	Mon 6/15/26				
9	Release for Detailed Design	0 days	Mon 10/27/25	Mon 10/27/25				
10	Civil Engineering	3 mons	Mon 10/27/25	Fri 1/23/26				
11	Structural Engineering	4 mons	Mon 11/24/25	Fri 3/20/26				
12	Mechanical Engineering	6 mons	Mon 10/27/25	Fri 4/17/26				
13	Electrical Engineering	4 mons	Mon 2/23/26	Mon 6/15/26				
14	I&C Engineering	3 mons	Mon 3/23/26	Mon 6/15/26				
15	Specifications	229 days	Tue 2/10/26	Tue 1/5/27				
16	Process Equipment	220 days	Tue 2/10/26	Fri 12/18/26				
17	Bid	2 mons	Tue 2/10/26	Mon 4/6/26				
18	Award	1 mon	Tue 4/7/26	Mon 5/4/26				
19	Submittals	2 mons	Tue 5/5/26	Tue 6/30/26				
20	Fabrication	6 mons	Wed 7/1/26	Fri 12/18/26				
21	Construction	140 days	Tue 6/16/26	Tue 1/5/27				
22	Bid	2 mons	Tue 6/16/26	Mon 8/10/26				
23	Award	1 mon	Tue 8/11/26	Tue 9/8/26				
24	Submittals	2 mons	Wed 9/9/26	Tue 11/3/26				
25	Mobilization	2 mons	Wed 11/4/26	Tue 1/5/27				
26	Construction	180 days	Wed 1/6/27	Thu 9/16/27				
27	Civil Construction	2 mons	Wed 1/6/27	Tue 3/2/27				
28	Foundation Construction	3 mons	Wed 2/3/27	Tue 4/27/27				
29	Mechanical Construction	4 mons	Wed 3/31/27	Wed 7/21/27				
30	Electrical and I&C Construction	4 mons	Wed 5/26/27	Thu 9/16/27				
31	Commissioning	60 days	Fri 9/15/27	Mon 12/13/27				
32	I/O Checkout / Commissioning	1 mon	Fri 9/17/27	Thu 10/14/27				
33	Performance Testing	1 mon	Fri 10/15/27	Thu 11/11/27				
34	Tuning for Compliance	1 mon	Fri 11/12/27	Mon 12/13/27				
35	Closeout	30 days	Tue 12/14/27	Tue 1/25/28				
36	Closeout Package	1.5 mons	Tue 12/14/27	Tue 1/25/28				



Enclosure 2

Unit 3 & Unit 4 Cessation of Coal 2025 Annual Progress Report

Facility Identification

Monroe Power Plant (MONPP) is located at 3500 East Front Street, Monroe, Michigan. MONPP consists of four B&W supercritical wall-fired boilers firing a blend of subbituminous coal, bituminous coal and petroleum coke rated for a maximum gross output of 3,280 MW. The units started commercial operation from 1971 to 1974. This section of the annual progress report to cease coal burning generation activities by December 31, 2028 applies to Units 3 and 4 at MONPP.

Expected Date of Coal Cessation

Since the release of the 2023 Direct to Final Rule, DTE has evaluated the feasibility of coal cessation on Units 3 and 4 at MONPP. DTE submits this 2025 Annual Progress Report maintaining the commitment to cease burning coal at MONPP Units 3 and 4 by December 31, 2028.

Method for Cessation of Coal Burning Activities

DTE's current Integrated Resource Plan (IRP) was approved on July 26, 2023 and included a planned retirement for MONPP Units 3 and 4 by December 31, 2028. The 2020 Rule details that the cessation of coal could occur by either unit retirement or repowering to another fuel source. The option to retire generation units is the option DTE has considered for two of the four MONPP units.

Regulatory Approval of Coal Cessation

The NOPP submitted in April 2023 represents the first formal submittal to a regulatory body regarding DTE's intentions to meet the 2020 Rule's cessation of coal compliance subcategory. In the preamble of the 2020 Rule, EPA acknowledges that a company may submit a cessation of coal NOPP and may not receive regulatory approval of those actions until a later date.

DTE's IRP was approved by the Michigan Public Service Commission (MPSC) on July 26, 2023 and qualifies as the regulatory approval identified by the 2020 Rule for the cessation of coal compliance subcategory.

Supporting Documentation of Coal Cessation Commitment

This 2024 Annual Progress Report documents DTE's commitment regarding its intentions to utilize the 2020 Rule's cessation of coal compliance subcategory. The finalized IRP settlement can be found on the Michigan Public Service Commission (MPSC) website under [Filing: U-21193-0527 \(site.com\)](#). Any future regulatory filings, if and when they become available, may be provided as additional documentation in support to achieve compliance with ELG requirements.

Timeline for Achieving Coal Cessation

Monroe Units 3 and 4 are expected to cease operation of coal burning activities by December 31, 2028.

Risks and Potential Milestone Delays

This annual progress report reflects the most accurate information available to meet the requirements of NPDES Permit MI0001848 I.A.16.e.1. However, several factors may require updates to the information provided in this Notice of Planned Project (NOPP):

1. **Integrated Resource Plans** – An updated IRP will be submitted to the Michigan Public Service Commission (MPSC) in 2026.
2. **Other Regulatory Filings** – Many projects required for compliance with Effluent Limitation Guidelines (ELG) will also need approval through future regulatory filings, including electric rate cases. Outcomes of these proceedings may impact the scope and timing of this NOPP.
3. **Regulatory Changes and Rule Modifications** – In September 2025, the U.S. Environmental Protection Agency (EPA) proposed the ELG Deadline Extensions Rule to extend compliance deadlines for coal-fired power plants. While this proposed rule does not currently affect the ELG compliance strategy at MONPP, the final rule—or other future regulatory changes—could influence DTE’s compliance strategy.
4. **Other Factors** – Additional considerations, such as legal challenges to EPA’s ELG rules or future rulemakings by current or subsequent administrations, may also affect this NOPP.