

215 South Cascade Street
PO Box 496
Fergus Falls, Minnesota 56538-0496
218 739-8200
www.otpc.com

Via email at airaction@epa.gov

March 31, 2025



Honorable Lee M. Zeldin
Office of the Administrator (1101A)
United States Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460

RE: Presidential Exemption: *National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units Review of the Residual Risk and Technology Review (MATS RTR)*, 89 Fed. 38508 (May 7, 2024): **Coyote Station, Near Beulah, North Dakota**

Dear Administrator Zeldin:

Otter Tail Power Company (Otter Tail), as operator on behalf of the Co-owners of Coyote Station¹, respectfully requests a Presidential Exemption under Section 112(i)(4) of the Clean Air Act (CAA) from compliance with the revised standards and requirements finalized in the above-referenced MATS RTR rule (MATS RTR or the Rule). Otter Tail² and the Co-owners^{3,4,5} are seeking a two-year exemption from the current compliance date of July 6, 2027 (as calculated, July 6, 2029) for the Coyote Station, with the potential for a further extension, as allowed under Section 112(i)(4).

I. Executive Summary

Otter Tail and the Co-owners seek an exemption from compliance with the MATS RTR emissions standards for the Coyote Station, which combusts North Dakota lignite coal. Otter

¹ Otter Tail is a co-owner and the operating agent for Coyote Station. The other co-owners are Montana-Dakota Utilities Co., Northern Municipal Power Agency (for which Minnkota Power Cooperative (Minnkota) is a business agent), and NorthWestern Energy Public Service Corporation (the Co-owners). Otter Tail makes this request as the operating agent for the Station and has authority make this request on behalf of the Co-owners.

² Otter Tail is an electric utility that provides generation, transmission, and distribution of electricity and energy services for approximately 133,000 residential, commercial, and industrial customers across 70,000 square miles in Minnesota, North Dakota, and South Dakota.

³ Montana-Dakota Utilities Co. is a subsidiary of MDU Resource Group, Inc. engaged in the distribution of natural gas and the generation, transmission, and distribution of electricity in the states of North Dakota, South Dakota, Montana, and Wyoming. Montana-Dakota provides electric service at retail, serving 145,686 residential, commercial, industrial and municipal customers in 185 communities and adjacent rural areas as of 2024.

⁴ The Northern Municipal Power Agency (NMPA) is a Joint Action Agency serving as the energy supplier for 12 municipal utilities in Minnesota and North Dakota. NMPA is a member of the Minnkota Power Cooperative joint system. Minnkota of Grand Forks, North Dakota, is the operating agent for NMPA. NMPA headquarters is located in Thief River Falls, Minnesota.

⁵ NorthWestern Energy Public Service Corporation, a wholly owned subsidiary of NorthWestern Energy Group, Inc., has provided electricity and / or natural gas to customers in South Dakota and Nebraska since 1923.

Tail and the Co-owners seek an exemption for a two-year period from the current compliance date, extending to July 6, 2029. We support this request with information regarding the following:

- The new mercury limitation of 1.2 lb/TBtu has not been demonstrated as achievable on a long-term basis – as required by the MATS RTR – at Coyote Station. Without a two-year exemption, Coyote Station will need to make expenditures throughout 2025 and 2026 related to testing and monitor procurement before EPA is able to complete reconsideration of the Rule.
- The PM continuous emissions monitors (PM CEMS) required by the Rule at Coyote Station are not reliable at low levels of PM. Reliable monitoring technology is not available on or after the compliance date. Coyote Station has achieved low emitting EGU (LEE) status under the existing standards and currently uses periodic stack testing as its compliance measure.

II. Background

A. About Coyote Station

The Coyote Station, located near Beulah, ND, is an approximate 427 MW coal-fired electrical generating unit (EGU) designed to combust North Dakota lignite produced at the nearby Coyote Creek Mine. Coyote Station has been providing reliable, economical, and environmentally responsible power since 1981. Coyote Station generates electricity to support the Midcontinent Independent System Operator (MISO) and the Southwest Power Pool (SPP) portions of our national electrical grid. The Station is equipped with efficient and cost-effective environmental controls, including dry flue gas desulfurization and a fabric filter baghouse for sulfur dioxide and particulate matter control. Coyote Station is subject to the MATS RTR requirements.

B. MATS RTR and Presidential Exemption Section 112(i)(4)

1. The MATS RTR

EPA promulgated MATS under CAA Section 112 which regulates hazardous air pollutant (HAP) emissions. Congress defines EPA's scope of review for the RTR under the CAA in Sections 112(d)(6) and 112(f)(2). CAA Section 112(d)(6) defines the technology review for air toxics standards such as MATS as follows:

The Administrator shall review, and revise as necessary (taking into account developments in practices, processes, and control technologies), emission standards promulgated under this section no less often than every 8 years.⁶

⁶ 42 U.S.C. § 7412(d)(6).

EPA originally finalized the RTR for MATS on May 22, 2020 (the 2020 MATS RTR).⁷ In that rulemaking, EPA determined that the residual risks from coal-fired and oil-fired EGUs were acceptable and did not identify any new technologies to control HAPs for these units. EPA finalized the RTR without any changes to emissions standards or work practices.

When President Biden took office, he directed EPA to reconsider the 2020 MATS RTR. On May 7, 2024, EPA published the final MATS RTR. The MATS RTR lowers the PM emission standard from 0.030 lb/MMBtu to 0.010 lb/MMBtu. The Rule also tightens the standard for emissions of mercury from lignite-fired EGUs from 4.0 lb/TBtu to 1.2 lb/TBtu. The MATS RTR also requires that existing coal-fired EGUs use PM CEMS to demonstrate compliance with the PM emission standard, eliminating the stack testing option. The LFE status option for PM, total non-Hg HAP metals, and individual non-Hg HAP metals for coal-fired and solid-oil derived fuel-fired EGUs has also been removed. The compliance deadline for both of these requirements is July 6, 2027.

On March 12, 2025, the Trump Administration announced its intention to reconsider the MATS RTR. In a fact sheet released that day, EPA cited concerns regarding the Rule. EPA stated that the Rule may be inconsistent with the authority granted under CAA and will require large estimated costs to comply given that industry has already successfully reduced emissions of mercury and other HAPs.⁸ Otter Tail supports EPA's decision to reconsider the MATS RTR for the reasons identified in our comments⁹ in the MATS RTR docket.

2. The Presidential Exemption

CAA 112(i) sets a schedule for compliance. In Section 112(i)(4), Congress provided the President with executive discretion to exempt a stationary source from compliance with standards and limitations provided under Section 112.

The President may exempt any stationary source from compliance with any standard or limitation under this section for a period of not more than 2 years if the President determines that the technology to implement such standard is not available and that it is in the national security interests of the United States to do so. An exemption under this paragraph may be extended for 1 or more additional periods, each period not to exceed 2 years. The President shall report to Congress with respect to each exemption (or extension thereof) made under this paragraph.

The President's discretion may be exercised upon satisfying a showing that (1) the technology is not available for implementing the standard, and (2) the national security interests of the United States warrant the President's exercise of the discretion.

⁷ 85 Fed. Reg. 31286 (May 22, 2020).

⁸ EPA, *Mercury and Air Toxics Standards (MATS): Powering the Great American Comeback Fact Sheet*, (Mar. 12, 2025), <https://www.epa.gov/system/files/documents/2025-03/fact-sheet-reconsideration-of-mercury-and-air-toxics-standards.pdf>.

⁹ *Otter Tail Power Company Comments on: National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units Review of the Residual Risk and Technology Review; Proposed Rule*, Docket No. EPA-HQ-OAR-2018-0794-5975 (June 23, 2023), https://downloads.regulations.gov/EPA-HQ-OAR-2018-0794-5975/attachment_1.pdf (Otter Tail Comments).

On March 12, 2025, EPA released a fact sheet¹⁰ regarding the MATS RTR as part of “Powering the Great American Comeback” (the Fact Sheet). The Fact Sheet recognizes the regulatory uncertainty for coal plants, including those in North Dakota. It offers the opportunity for “any source interested in a Presidential exemption, should provide their recommendations to EPA by March 31, 2025.” This letter responds to EPA’s invitation. EPA also announced on its website the availability of exemptions and directed requests for exemption be submitted by March 31.¹¹

Accordingly, Otter Tail and the Co-owners seek a two-year exemption from the MATS RTR standards for Coyote Station, due to technological unavailability related to the lignite mercury standard, the PM CEMS requirements, and the time and cost necessary to meet the requirements. Section III explains that the technology required to meet the Rule’s new lignite mercury standard is not available, and Section IV explains that PM CEMS are likewise unavailable. Section V finds that it is in the national security interest to issue an exemption from compliance with the MATS RTR for Coyote Station.

III. Technology to Implement the MATS RTR Mercury Standard Has Not Been Proven to Be Available

The new lignite mercury limit has not been shown to be achievable with current, available control technology.¹² Likewise, the technology has not been shown to be available at Coyote Station on the long-term basis required by the MATS RTR.

Coyote Station utilizes halogenated Powdered Activated Carbon (PAC) sorbent to control mercury via PAC injection. This is the same control technology EPA found under the Biden Administration should be able to achieve over 90% removal efficiency to meet the new mercury standard. However, the 2024 MATS RTR does not present any demonstrated evidence that the long-term mercury removal efficiency demanded by the Rule is possible. Instead, the Rule assumes that operators can simply add more PAC in their systems to achieve the emissions limitation. During the comment period on the proposed MATS RTR, Otter Tail presented evidence to EPA to explain why this assumption is incorrect.

As described in those comments, the mercury “removal curves flattens and there are diminishing returns in increasing sorbent injection rates.”¹³ In other words, operators cannot simply “dial-up” the sorbents used to decrease mercury emissions to meet the new standard. This fact is further underscored by testing performed by one of our Co-owner’s agents, Minnkota Power Cooperative. Minnkota’s Milton R. Young Station purchased brominated PAC for the purpose of determining if that product could achieve improved mercury removal as compared to non-brominated PAC. The testing results at the Young Station Unit 1 demonstrate that the

¹⁰ <https://www.epa.gov/system/files/documents/2025-03/fact-sheet-reconsideration-of-mercury-and-air-toxics-standards.pdf>.

¹¹ <https://www.epa.gov/stationary-sources-air-pollution/clean-air-act-section-112-presidential-exemption-information>.

¹² See Pet’rs’ Brief at 16-17, *North Dakota v. EPA*, No. 24-1119, Doc. 2077742 (Oct. 1, 2024).

¹³ Otter Tail Comments at 4.

technology EPA chose (brominated PAC) was not effective in removing more mercury and thus attaining the emissions standard.¹⁴

Young Station Unit	Average Hourly Hg Emissions Value Achieved at Full Load (Sorbent Trap) Brominated PAC	Average Hourly Hg Emissions Value Achieved at Full Load (Sorbent Trap) Non-Brominated PAC
Unit 1	2.57 lb/TBtu	2.17 lb/TBtu

Minnkota then added more PAC than Unit 1's system is currently capable of injecting, by renting portable equipment. Those testing results show that even injecting more PAC will not achieve the new mercury limit. Minnkota presented a plotted curve that confirms the leveling off effect, such that increasing the amount of sorbent results in diminishing improvement in mercury control. The projected curve shows this leveling off takes place somewhere less than 80% capture. The plotted trend line, based on the test values, is far below EPA's conclusion that injection of brominated PAC at the rate of 3.0 lb/MMacf will result in a 90% removal rate, which was EPA's assumption in the MATS RTR. Accordingly, Minnkota's findings further support the conclusion that a feasible control strategy has not been identified for lignite units on a long-term basis, including the Coyote Station unit, to achieve the new mercury limitation.

Coyote Station has had some short-term success (on the order of one-week) using PAC to reach mercury emissions levels in the range of the new mercury limit. However, the new mercury limit must be met on a consistent and continuous 30-day basis by the July 6, 2027 compliance date. While these short-term results are helpful, longer-term testing does not currently exist to demonstrate that the new standard is achievable at Coyote Station on a continuous go-forward basis, especially given many factors that affect a lignite EGU such as load fluctuations, seasonal changes, and lignite mercury content.

In addition, Otter Tail demonstrated in its comments that the sorbent injection rate "is not the only factor affecting the Hg emission rate from an EGU"—other operating conditions impact the mercury removal efficiency and limit the emissions control technology.¹⁵ For example, EPA overlooked the key issue of variability and the substantial differences between lignite coal and subbituminous coal in setting the new mercury standard.¹⁶ Namely, lignite contains much higher mercury inlet values than other types of coal.¹⁷ North Dakota lignite, in particular, has substantial mercury content variability, as well, which makes mercury control difficult.¹⁸ At a mine-mouth site, like Coyote Station, the quality of the lignite and mercury content can vary from day-to-day. This makes assuring compliance difficult and highlights the importance of compliance margins to take variability into account.

¹⁴ Sargent & Lundy, *Mercury Testing Results for the MATS Residual Risk and Technology Review*, at 3-5 (May 22, 2024), Attachment A ("At the current injection capabilities of the existing system (i.e. requiring minimal modifications/retrofit of the existing equipment), BPAC cannot be applied to reduce Hg emissions to 1.2 lb/TBtu.").

¹⁵ Otter Tail Comments at 6.

¹⁶ See *id.* at 2-5.

¹⁷ See *id.* at 7.

¹⁸ See *id.* at 2, 6.

The Rule will impose significant costs that would jeopardize the future use of lignite-fired units and imperil grid reliability. In the near term, the Coyote Station owners would need to expend approximately \$100,000 per month to conduct longer-term mercury testing. This testing would need to occur over multiple months to determine if compliance can be achieved – compounding the costs of this endeavor. The testing would need to occur later this year (2025) and continue in 2026. Granting this exemption would avoid these costs if EPA were to reconsider the MATS RTR and provide relief from the 1.2 lb/TBtu standard for lignite units. In addition, Coyote Station has budgeted to install mercury CEMS in 2026, at a cost of \$500,000, to monitor mercury with more real time data during the testing. Indeed, the MATS RTR does not account for these types of costs associated with mercury testing, monitoring, and the PAC supply chain deliveries necessary for increased sorbent injection.

Based on this information, Otter Tail and the Co-owners conclude that the technology to meet the mercury standard is not available. Therefore, the MATS RTR is potentially queued to directly impact the future availability of Coyote Station, a critical lignite asset. Accordingly, Coyote Station should be granted a two-year exemption.

IV. PM CEMS Are Not Technologically Able to Assure Compliance with the Revised PM Standard

The MATS RTR requires the installation of PM CEMS to demonstrate compliance with the revised 0.010 lb/MMBtu PM standard. Coyote Station has achieved LEE status under the current rule and complies with MATS using periodic PM stack testing. PM CEMS are not installed at Coyote Station. For the reasons identified below, CEMS are not a technology that is available due to inaccuracies and correlation challenges at low PM levels.

The accuracy of PM CEMS at low PM emissions levels is not proven. PM CEMS do not directly measure PM emissions. In other words, the instrument does not measure the mass of PM and the volume of flue gas from which that mass of PM was sampled. Instead, commercially available PM CEMS measure some property (i.e., light scatter or beta attenuation) that must be correlated to actual stack PM measurements.¹⁹ At lower emissions levels, PM CEMS have not been demonstrated to have the sensitivity needed to accurately account for lower emissions levels. Technological feasibility has not been proven at low PM emissions levels.²⁰

Due to the indirect measurements, PM CEMS correlation testing must ensure the measurements are true to the actual fPM emission rates.²¹ But the low PM standard in the Rule makes developing this correlation curve “virtually impossible.”²² Similarly, the Quality

¹⁹ The EPA statement at 88 Fed. Reg. at 24872, that a beta gauge “detector measures the amount of radiation emitted by the sample” is categorically incorrect and illustrative of several uninformed statements (e.g., cost estimates) about PM CEMS in the preamble to the proposed rule.

²⁰ See *PG&E Comments on EPA’s Proposed Rule: NESHA Coal- and Oil-Fired Electric Utility Steam Generating Units Review of the Residual Risk and Technology Review*, Docket No. EPA-HQ-OAR-2018-0794-5994, at 22 (June 28, 2023) (PG&E Comments) (citing and attaching Ralph L. Roberson, *Technical Comments on EPA’s Proposed Rule: Mercury and Air Toxics Standards Risk and Technology Review*, at 3 (2023) (PM CEMS Technical Memo)).

²¹ *Id.*

²² *Id.*

Assurance/Quality Control (QA/QC) criteria for CEMS are extremely difficult to meet at such low levels.²³

At the time of the proposed rule, no commercially available PM CEMS would have been able to meet the tight confidence and tolerance intervals associated with the low proposed PM standard.²⁴ EPA was, thus, forced to address these issues in the final MATS RTR by adjusting the QA criterion and correlation procedures.²⁵ These changes are not enough to address the fundamental issue that PM CEMS are simply not able to reliably measure such low PM levels – the error rates of the instrument prohibit it.²⁶ Therefore, the CEMS technology to demonstrate compliance with the new PM standard is unavailable.

Coyote Station has been able to demonstrate very low PM emission rates with its current control technology. It initially demonstrated compliance via quarterly stack testing. After meeting the criteria to attain LEE status under the MATS Rule for PM, Coyote Station has demonstrated compliance on an every 3-year basis. Coyote Station cannot demonstrate compliance using PM CEMS because CEMS cannot reliably verify the low levels of PM that would comply with the new standard.²⁷

Furthermore, there are high costs associated with procuring, installing, certifying, testing, and operating PM CEMS.²⁸ Assuming that the technology would somehow be feasible to install, Otter Tail and the Co-owners have budgeted \$400,000 to install PM CEMS in 2026 at Coyote Station. Granting this exemption would avoid these costs if EPA were to reconsider the MATS RTR and provide relief from the PM CEMS requirement.

Finally, PM CEMS must be installed and tested by vendors that are certified, and there are only a limited number of vendors that are available. As two-thirds of coal-fired EGUs have not yet installed PM CEMS, the MATS RTR requirement will overwhelm the current supply of PM CEMS and the availability of vendors to perform the necessary work.²⁹ For these reasons, and because CEMS technology is unavailable at low PM levels, Coyote Station should receive a two-year exemption for compliance with the CEMS requirement in the MATS RTR.

²³ See *Comments of the Class of '85 Regulatory Response Group on the Proposal on National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units Review of the Residual Risk and Technology Review*, Docket No. EPA-HQ-OAR-2018-0794-5989, at 16 (June 28, 2024) (Class of '85 Comments).

²⁴ PM CEMS Technical Memo at 5.

²⁵ See 89 Fed. Reg. at 38528-29.

²⁶ See PG&E Comments at 23 (finding insurmountable the “uncertainties inherent the in the measurement device” and the “problems associated with relative size of the uncertainty to the limited data range of fPM concentrations and the confidence levels and tolerances”); see also Class of '85 Comments at 18.

²⁷ See Otter Tail Comments at 10.

²⁸ See PG&E Comments at 26; see also Class of '85 Comments at 18 (estimating \$180,000 to \$400,000 for “site preparation and engineering analysis, analyzer equipment and installation costs, and initial PS-11 correlation testing”).

²⁹ See Class of '85 Comments at 16.

V. National Security Interests Support an Exemption

Compliance with the requirements in the MATS RTR is not in the national security interest of the nation. President Trump's Executive Order (E.O.) 14156 declares a national energy emergency and confirms that energy generation and grid reliability are issues of national security.³⁰ The MATS RTR is one of the "policies of the previous administration" that will contribute to the "inadequate and intermittent energy supply" and "increasingly unreliable grid."³¹ Similarly, in E.O. 14154, *Unleashing American Energy*, President Trump acknowledged that the past administration's regulations—which include this Rule—have "limited the generation of reliable and affordable electricity" and, in turn, "weaken[ed] our national security."³² The E.O. calls for the review and potential rescission of rules like this one, which "impose an unburden on the . . . use of domestic energy resources."³³ To ensure "an abundant supply of reliable energy" that will help "protect the United States's economic and national security and military preparedness," the MATS RTR should be subject to exemption.³⁴

In North Dakota, specifically, lignite-fired power plants provide the majority of electric power generated and consumed in the State and, therefore, the MATS RTR has a more profound impact on North Dakota than other areas of the country. The Rule's stringent new limits and the high costs associated with compliance, in combination with other prior rulemakings impacting coal-fired EGUs, could force source owners to prematurely retire coal-fired EGUs before there is sufficient new dispatchable generation to replace them, seriously endangering grid reliability. Further, grid reliability is already in jeopardy in North Dakota: The North American Electric Reliability Corporation (NERC) estimates continued future shortfalls in the State.³⁵ NERC also reports that, with respect to the MISO region, "[r]esource additions are not keeping up with generator retirements and demand growth" and "[r]eserve margins fall below Reference Margin Levels (RML) in winter and summer."³⁶ North Dakota's region of MISO is already in a tenuous, overburdened portion of the grid.

The North Dakota Transmission Authority (NDTA) studied the outfall from a grid failure. NDTA reports consequences such as the loss of tax revenue and a decrease in economic activity for the region. The interruption of power delivery from a grid failure will cause damage to public health. North Dakotans rely on electricity to heat their homes during the extreme winter temperatures typical of the long winter season. Affordable and consistent electricity powers essential medical services to the elderly, infirm, and to vulnerable individuals with chronic health

³⁰ See 90 Fed. Reg. 8433, 8433 (Jan. 29, 2025) ("generation capacity of the United States [is] . . . far too inadequate to meet our Nation's needs" and "a reliable, diversified, and affordable supply of energy" is necessary to ensure "military preparedness").

³¹ *Id.* at 8433.

³² 90 Fed. Reg. 8353, 8353 (Jan. 29, 2025).

³³ *Id.* at 8354.

³⁴ *Id.* at 8353.

³⁵ NERC, *2024 Long-term Reliability Assessment* (Dec. 2024), https://www.nerc.com/pa/RAPA/ra/Reliability%20Assessments%20Dl/NERC_Long%20Term%20Reliability%20Assessment_2024.pdf

³⁶ *Id.* at 6.

conditions. Evidence from grid failures in other areas of the country in winter storms Uri and Elliott show the documented health impacts and morbidity caused by those events.³⁷

The potential for unit retirements and strain on North Dakota's portion of the grid profoundly affects the national security. North Dakota has three critical active military installations:

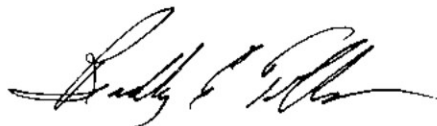
- Camp Grafton (a training site for the North Dakota National Guard, providing instruction for military personnel in engineering, logistics, and maneuver operations);
- Grand Forks Air Force Base (the home to the 319th Air Refueling Wing, which operates KC-135 Stratotankers—providing vital aerial refueling to U.S. and allied aircraft worldwide); and
- Minot Air Force Base (a cornerstone of nuclear deterrence and key location for both strategic bombers and intercontinental ballistic missiles).

It serves the national security interests to ensure that these bases have reliable power delivery. Thus, maintaining the supply of reliable, affordable energy in North Dakota and across the country is vital to national security.

VI. Conclusion

Otter Tail and the Co-owners appreciate the opportunity to present reasons for which the Coyote Station should be exempt from MATS RTR compliance requirements for a two-year period. We respectfully request your consideration and are happy to answer any questions.

Respectfully submitted,



Bradley E. Tollerson
Vice President, Energy Supply
Otter Tail Power Company
Designated Representative, Coyote Station

³⁷ See, e.g., Hanchey, "Mortality Surveillance During Winter Storm Uri, United States 2021," *Disaster Med Public Health Prep* (Dec. 2023), <https://pubmed.ncbi.nlm.nih.gov/37974501/>; Sharma, "Winter Storm Elliott death toll climbs to 56 as thousands still without power in -40 temperatures," *Yahoo News* (Dec. 26, 2022), <https://www.yahoo.com/news/winter-storm-elliott-power-outages-154557710.html>.