



400 West Summit Hill Drive, Knoxville, Tennessee 37902-1401

March 28, 2025

Electronic Submittal (airaction@epa.gov)

Dear Sir or Madam:

TENNESSEE VALLEY AUTHORITY'S (TVA) INTEREST IN OBTAINING PRESIDENTIAL EXEMPTION FROM U.S. ENVIRONMENTAL PROTECTION AGENCY'S (EPA) RULE, NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS: COAL- AND OIL-FIRED ELECTRIC UTILITY STEAM GENERATING UNITS REVIEW OF RESIDUAL RISK AND TECHNOLOGY REVIEW – For TVA's CUMBERLAND FOSSIL PLANT.

TVA appreciates the opportunity to submit this request under Section 112(i)(4) of the Clean Air Act for a Presidential Exemption from the National Emission Standards for Hazardous Air Pollutants (NESHAPS): Coal- and Oil- Fired Electric Steam Generating Units Review of Residual Risk and Technology Review Final Rule (89 FR 38508 (May 7, 2024)). This request is specific to TVA's Cumberland Fossil Plant located at 815 Cumberland City Road, Cumberland City, TN 37050.

TVA is a non-profit corporate agency of the United States that provides wholesale power to 153 independent local power companies and 61 directly served large industries and federal facilities. TVA receives no taxpayer funding, deriving virtually all its revenues from sales of electricity. As part of its regional resource development mission, TVA operates the nation's largest public power system, providing electricity to approximately 10 million people in an 80,000 square mile area comprised of most of Tennessee and parts of Alabama, Georgia, Kentucky, Mississippi, North Carolina and Virginia. The energy resources that TVA relies on to serve the public are diverse and include nuclear plants, natural gas plants, hydroelectric plants, coal-fired power plants.

TVA's Cumberland Fossil plant has a gross capacity of 2,678 MW. The plant was commissioned in 1968 with two identical coal-fired units. This facility is currently equipped with the state-of-the-art air pollution controls. The ability for TVA to navigate future asset strategy and utilize the current transmission infrastructure is critical to grid reliability. The timing of regulatory deadlines plays a role in the ability to effectively retire and replace aging coal-fired units to accommodate load growth. The timely replacement of the coal units with natural gas units is critical for preserving grid reliability.

TVA submitted public comments to EPA in June 2022 during the rulemaking, discussing underestimation of the costs of compliance and potential implementation problems in utilizing PM CEMS. (TVA's comments are attached to this letter as Attachment 1.) In Section 3.5.2.2 of the Regulatory Impact Analysis, EPA compared the CEMS costs to the costs of quarterly testing. The costs listed for CEMS do not include costs for the annual Relative Response Audit (RRA) or the 3-year (minimum) Relative Correlation Audit (RCA) required when utilizing PM CEMS as a compliance indicator. Cumberland currently demonstrates compliance with the

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2025-EPA-04883

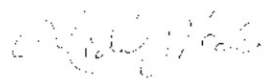
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current standard with quarterly testing and will have to install the required PM CEMS by July 8, 2027.

TVA is requesting an exemption from the requirement to install and operate CEMS on the coal-fired units prior to the end of 2028. The technology to implement PM CEMS to eliminate quarterly stack testing is problematic at a fPM standard of 0.01 lb/MMBTU. (The Revised MATS rule no longer provides sources the flexibility to demonstrate compliance using either PM CEMS or quarterly testing but instead requires the use of PM CEMS to demonstrate compliance with the new standard of 0.01 lb/MMBTU.) This low level of the standard provides such a limited data range to generate a certification curve that it would be difficult to establish a valid correlation of the PM CEMS. Without a valid correlation, the data generated from the CEMS would not be reliable for use in assessing compliance. While it is true that MATS already requires PM CEMS for new coal-fired EGUs, there have been no coal-fired EGUs constructed since MATS was promulgated in 2012 and that requirement is merely theoretical. Moreover, the cost of operating PM CEMS is much higher than EPA's estimates, let alone the fact that the expenditure on installing CEMS would be wasteful as the coal-fired units would be replaced by natural gas-fired units at the end of 2028. An extension from the requirement to install and operate CEMS on the retiring coal-fired units would facilitate the transition from coal to gas in a timely and efficient manner without endangering grid reliability. Further, TVA's operation of the Cumberland Fossil Plant is essential to national security until replacement with natural gas-fired generation is commercially operational as TVA provides wholesale electricity directly to federal facilities integral to national security. The higher cost of operating CEMS and the unavailability of CEMS technology to measure fPM with any reliability poses an undue burden on the continued operation of domestic energy and TVA rate payers. The Executive Order, *Unleashing American Energy*, seeks to remove burdens posed on the development of domestic energy by requiring agencies to reconsider existing regulations such as the 2024 MATS rule.

If you have questions, please contact me at mjmcall@tva.gov.

Sincerely,



Michael McCall
VP, Environment
Tennessee Valley Authority

Enclosure

Tennessee Valley Authority's (TVA) comments on the U.S. Environmental Protection Agency's (EPA) Proposal for National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units Review of the Residual Risk and Technology Review

- I. TVA recommends that EPA follow the principle used in recently promulgated regulations, such as the Effluent Limitation Guidelines, to include a subcategory for "EGU's Permanently Ceasing Coal Combustion by 2028." Those EGUs for which the owner or operator commits to retire the unit by a certain threshold date would be grouped in this subcategory. Any EGU that falls in this subcategory should be exempt from installing PM CEMS until the time the EGU is retired or withdrawn from the Subcategory. If withdrawn from the Permanent Cessation Subcategory, the EGU shall become subject to the revised MATS limits and the requirement to install PM CEMS.
 - A. For units that fall in the Permanent Cessation Subcategory, compliance with the standard should be demonstrated through quarterly PM emissions testing through the last full operating quarter prior to unit retirement.
 - B. In Section 3.5.2.2 of the Regulatory Impact Analysis, EPA has compared the CEMS costs to the costs of quarterly testing. However, the costs listed for CEMS do not include costs for the annual Relative Response Audit (RRA) or the 3-year (minimum) Relative Correlation Audit (RCA) required when utilizing PM CEMS as a compliance indicator. The inclusion of these costs would demonstrate a considerable increase in the cost of PM CEMS. As explained in PGen's comments, the 10-year cost of PM CEMS is much higher than EPA's estimates. This higher cost further supports not requiring units that fall in the Permanent Cessation category to install CEMS prior to their imminent retirement.
- II. As a general matter, EPA's proposal to eliminate quarterly stack testing is problematic, especially if the fPM standard is reduced to a level of 0.01 lb /MMBTU. This level of the proposed standard provides such a limited data range that it would be difficult to establish a valid correlation of the PM CEMS. (See PGen Comments, Section III.A.) While it is true that MATS already requires PM CEMS for new coal-fired EGUs, there have been no coal-fired EGUs constructed since MATS was promulgated in 2012 and that requirement is merely theoretical. Moreover, the cost of operating PM CEMS is much higher than EPA's estimates (See PGen Comments, Section III.B.). There are some utilities that have installed PM CEMS for other reasons such as requirements in NSR consent decrees to monitor PM emissions. TVA, therefore, recommends that the proposal continue to provide sources the choice of determining compliance with the PM Standards either through quarterly testing or use of CEMS.
 - A. TVA notes that the Title V permits for certain facilities have certified PM CEMS that monitor PM on a much shorter basis than the averaging time for MATS limits, e.g., 24-hour averages or 3-hour averages. While conducting PS-11 or RCA, regulatory agencies do not permit exceedance of the applicable thresholds

even for testing purposes. This should be considered while setting revised filterable particulate matter and other emission limits in this rulemaking.

- III. EPA proposes a reduction in the current fPM standard from 0.03 lb/MMBtu to 0.01 lb/MMBtu while soliciting comment in the proposal to reduce the standard down to 0.006 lb/MMBtu. However, EPA concedes in the 2020 RTR and in the proposed rule that there are no new practices, processes and control technologies for this source category. EGU HAP emissions continue to decline further, absent any revisions of the MATS standards, due to regulatory and economic pressures leading to coal-fired EGU retirements. TVA, for example, has retired 60 percent of its coal fleet and is evaluating the retirement of the balance of the fleet by 2035. Because of the continuing downward trend in HAP emissions from coal-fired EGUs, revising the standards merely to accelerate this trend slightly is not necessary, given the potential for adverse effects on reliability resulting from early retirements.
- IV. The analysis used to determine a reduction in the standard was comprised of limited data and not representative of all operating quarters of available data. The capability for a source to retain the lower standard when assuming all factors such as fuel variations, operating conditions, ambient conditions, load, and various other conditions is not represented in EPA's analysis. Further, EPA's proposed revision of the fPM standard is not cost-effective. EPA's cost data analysis under-predicted the capital required for ESP "rebuild" and failed to recognize the need for a design and operating margin.
 - A. Regulatory scrutiny under future regulations such as the Interstate Transport Rules and Regional Haze SIPS may result in installation of DSI or SDA technologies to reduce SO₂ emissions. The installation of these technologies will likely increase the inlet particulate loading to the baghouses (more hydrated lime and reaction byproducts expected to increase inlet loading anywhere from 100% to 800%) placing such units at risk of not being able to meet the fPM standard of 0.01 lb/MMBTU.
- V. EPA should reevaluate its rationale for revising the Hg standard for lignite EGUs because the level of Hg reduction is not feasible in commercial systems. EPA's analysis ignores the variability of Hg content in lignite and the role of SO₃ that compromises sorbent performance and effectiveness.
- VI. EPA correctly concluded that the Hg standard for non-lignite fired EGUs should not be revised. Likewise, TVA agrees with EPA that no revisions are necessary for other HAP standards, such as Organic HAPs and Acid Gases.