




4775 Lexington Road

P.O. Box 707

Winchester, Kentucky 40392

www.ekpc.coop

A Touchstone Energy Cooperative 

Via email at airaction@epa.gov

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):
H.L. Spurlock Station, Maysville, Kentucky
J.S. Cooper Station, Burnside, Kentucky

Dear Administrator Zeldin:

East Kentucky Power Cooperative (EKPC) respectfully requests a Presidential Exemption under Clean Air Act (CAA) from compliance with the revised standards and requirements finalized in the above-referenced MATS RTR rule. EKPC seeks an exemption for a two-year period from the current compliance date of July 6, 2027 (as calculated, July 6, 2029) for the Spurlock Station (Spurlock) and Cooper Station (Cooper), with the potential for a further extension should the reconsideration of the MATS RTR require EPA additional time.

I. Executive Summary.

EKPC seeks an exemption from compliance with the MATS RTR emissions standards for the Spurlock and Cooper Stations, which combust bituminous coal. EKPC seeks an exemption for a two-year period from the current compliance date, extending to July 6, 2029. EKPC supports its request with information regarding the following:

- Filterable particulate matter (fPM) control technology is not available to meet the new fPM limitation for Spurlock Units 3 and 4. For these circulating fluidized bed (CFB) units, the units' control technologies cannot reliably meet the new limit without jeopardizing unit availability.
- PM continuous emissions monitors (PM CEMS) are not reliable at low levels of PM, which would be required to accurately measure for compliance. The lack of reliable monitoring further compounds technology availability on or after the compliance date.

EKPC is the owner and operator of the units at Spurlock and Cooper Stations. The signatory is the Executive Vice President and Chief Operating Officer of EKPC with authority to bind the cooperative.

II. Introduction.

EKPC actively participated in the MATS RTR rulemaking process, consistently raising substantial concerns regarding the technological feasibility, compressed time frames, flawed underpinnings, and the resulting impacts on grid reliability and national security. EKPC respectfully presents the reasons for the

President's consideration that favor him granting a Section 112(i)(4) exemption from compliance with the MATS RTR for Spurlock and Cooper in Kentucky.

A. About EKPC Power Cooperative

EKPC is a not-for-profit cooperative corporation owned, operated, and governed by its members which use the energy and services EKPC provides. The Owner-Member cooperatives to which EKPC provides energy supply 520,000 homes, farms, and businesses across 87 counties in Kentucky. EKPC's purpose is to generate electricity and transmit it to 16 Owner-Member cooperatives that distribute it to retail, end use consumers. EKPC provides wholesale energy and services to sixteen distribution cooperatives through baseload units, peaking units, hydroelectric power, solar, and landfill gas-to-energy units, transmitting electric power across rural Kentucky via more than 2,900 miles of transmission lines.

EKPC is the voice for a substantial number of end users of electricity in its service territory who live in substantial poverty. These communities place a high value on affordable energy costs. EKPC's service territory includes rural areas with some of the lowest economic demographics in the United States. In these areas, families are literally faced with a regular choice between food, electricity and medicine. Of the eastern Kentucky counties that EKPC's owner-member cooperatives serve, 40 counties experience persistent poverty, as reported by the United States Department of Agriculture (USDA).

East Kentucky is a member of PJM Interconnection (PJM). PJM is a regional transmission organization (RTO) that coordinates the movement of wholesale electricity in 13 states and the District of Columbia. East Kentucky is a member of the National Rural Electric Cooperative Association (NRECA). NRECA represents the interests of rural electric cooperatives across the country.

B. Spurlock and Cooper Stations

Spurlock Station is located near Maysville, Kentucky on the Ohio River. It is EKPC's flagship plant, owned and operated by the cooperative. The electric generating units (EGUs) at the facility are:

- Spurlock Unit 1 – is a wall-fired unit (344 MW)¹ that combusts bituminous coal. Unit 1 has cold side ESP, WFGD, Wet ESP, SCR and low-NOx burners to control PM, SO₂, SO₃ / H₂SO₄ mist, hazardous air pollutants (HAPs) and NO_x respectively, installed on or before April 2009.
- Spurlock Unit 2 – is a tangential-fired unit (555 MW) that combusts bituminous coal. Unit 2 has a hot side ESP, WFGD, Wet ESP, SCR, low-NOx burners, and over-fire air to control PM, SO₂, SO₃ / H₂SO₄ mist, HAPs and NO_x, respectively, installed on or before October 2008.
- Spurlock Unit 3 – is a coal-fired CFB unit (305 MW), which is designed to emit less NO_x in the combustion process. Unit 3 has a SNCR to control NO_x, a dry FGD to control SO₂/SO₃, and a filter fabric baghouse to control PM and HAPs.
- Spurlock Unit 4 – is a CFB unit (315 MW), which is designed to emit less NO_x in the combustion process. Unit 4 has a SNCR to control NO_x, a dry FGD to control SO₂/SO₃ and a filter fabric baghouse to control PM and HAPs.

Cooper Station is located near Burnside, Kentucky adjacent to Lake Cumberland. Cooper Station is a critical asset due to its location in rural, south-central Kentucky. Cooper Station serves a transmission-constrained area. The closest natural gas pipeline is currently almost 40 miles from Cooper Station. The EGUs at the facility are:

¹ Spurlock Unit MW values are taken from the Consent Decree in *United States v. EKPC*, No. 04-34-KSF (E.D. Ky). MW values are provided for descriptive reference only and are only generally reflective of unit capabilities.

- Cooper Unit 1 – is a wall-fired unit (124 MW)² that combusts bituminous coal. Unit 1 has low-NOx burners. It is tied into the Unit 2 dry FGD and pulse jet fabric filter to control SO₂, HAPs and PM and shares a common stack with Cooper Unit 2.
- Cooper Unit 2 – is a wall-fired unit (240 MW) that combusts bituminous coal. Unit 2 has a SCR and low-NOx burners, dry FGD and filter fabric baghouse to control PM, HAPs and SO₂/SO₃. It shares a common stack with Cooper Unit 1.

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

1. **The MATS RTR**

EPA promulgated MATS under CAA Section 112 which regulates 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.³

EPA originally finalized the RTR for MATS on May 22, 2020 (the 2020 MATS RTR).⁴ 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 fPM 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 fPM emission standard, eliminating the stack testing option. The low emitting EGU (LEE) status option for fPM, 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.

EKPC strongly supports EPA's decision to reconsider the MATS RTR for the reasons identified in our comments in the MATS RTR docket. The 2020 MATS RTR analysis should have been affirmed.

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

² Cooper Unit MW values are taken from the Consent Decree in *United States v. EKPC*, No. 04-34-KSF (ED Ky). MW values are provided for descriptive reference only and are only generally reflective of unit capabilities.

³ 42 U.S.C. § 7412(d)(d).

⁴ 85 Fed. Reg. 31286 (May 22, 2020).

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.

On March 12, 2025, EPA released a fact sheet⁵ 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 Kentucky. 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.

III. EKPC Requests Presidential Consideration to Exempt Spurlock and Cooper Stations from Compliance with the Revised MATS RTR Standards.

A. The Technology to Implement the revised MATS RTR Filterable Particulate Matter (fPM) Standard is Not Available by the July 6, 2027 Compliance Date (Spurlock Units 3 and 4).

Spurlock 3 and 4 are similar CFB units, equipped with baghouses. CFBs are designed to emit less NO_x and SO₂ in the combustion process through a unique, efficient fluidized bed. While Spurlock Unit 4 is a better fPM performer, Spurlock Unit 3 is not presently capable of meeting the new fPM Limitation of 0.010 lb/mmBtu on a sustained basis. For Unit 3, no data exists to confirm that compliance can in fact be achieved. EKPC has devised a strategy to improve fPM removal performance of the Spurlock Unit 3 baghouse. It requires the expenditure of upgrades to modify the baghouse design.

The baghouses for both units are older, 2005-vintage vintage controls and were not designed to consistently achieve fPM levels with sufficient margin to assure compliance with the new fPM Limitation. Short of replacing the baghouses with a completely new design, the CFBs cannot maintain the new fPM limitation on a consistent basis with the same level of availability. Therefore, the technology is not available.

Since the Unit 3 and 4 baghouses are undersized to achieve the fPM Limitation, they must operate flawlessly to attain compliance. In EKPC's experience with baghouse operation at CFB units, the baghouses will certainly fail, despite best engineering and maintenance practices, due to the lack of any margin to meet the aggressively low new fPM Limitation. EKPC must then take the unit offline. Forced outages will increase, resulting in potential penalties and exposure to market volatility in the PJM market. Lower fPM emission limitations, in general, put environmental control equipment under more stress in the summer and winter on peak days. Since the limit for fPM was reduced substantially (67%), there is little to no margin for error.

To put the effect of the Final Rule in context, a single hole the size of a human pinky finger in a single fabric filter bag within the baghouse can cause an exceedance of the new standard and, thereby, force the unit offline. It is simply unreasonable to assume that a baghouse will perform seamlessly under every operating condition in every period of the year. Therefore, even after an upgrade to the Unit 3 baghouse, the fPM limitation is likely to cause EKPC to take down or derate the unit. If this occurs on peak demand days (when PJM is calling for all available generators to produce power), PJM penalizes operator for forced outages by requiring payment market prices for power during periods when power purchases are the most expensive. Based on past pricing, EKPC estimates the penalty and damages caused by one forced outage event on Spurlock Unit 3 could easily exceed \$35 million per day. For a non-profit cooperative such as EKPC, an entire year's worth of margins could be wiped out in a single weekend of extreme weather.

⁵ <https://www.epa.gov/system/files/documents/2025-03/fact-sheet-reconsideration-of-mercury-and-air-toxics-standards.pdf>

Cost of Spurlock Unit 3 Seven Day Outage

PJM Market Pricing Conditions	Cost of Replacement Power for Unit 3	Lost Capacity Payment	PJM Non-Performance Penalty PAI	Total
Winter Average Cost	\$1,640,785	\$232,066	0	\$1,872,851
Summer Average Cost	\$1,600,361	\$232,066	0	\$1,832,427
Winter High Cost	\$3,371,164	\$232,066	0	\$3,503,230
Winter Storm Event	\$13,203,225	\$232,066	\$17,595,000	\$31,030,291

Note 1: Winter Average Cost is based on replacement power at an average day-ahead price for January 2023

Note 2: Winter High Cost is based on replacement power at an average 168 highest hours

of real-time LMP in January 2024

Note 3: Winter Storm Event is based on replacement power at an average 168 highest hours of real-time LMP in December 2022 around and including Winter Storm Elliott

Note 4: All prices include 7-days of power

Note 5: PJM Performance Assessment Interval (PAI) Non-Performance Penalty is assessed during a reliability event due to certain triggering events identified in the PJM Tariff, such as during a manual load shed event. The cost calculation assumes a 23 Hour PAI event.

The table above illustrates that for an unplanned forced outage in PJM, EKPC could experience up to a \$31,030,291 dollar penalty for not dispatching as a result of a hole in the baghouse the size of a pinky finger. These costs show that the extraordinarily low fPM limitation causes very real, tangible cost at a moment when power is needed the most. Indeed, this analysis assumes that replacement power is even available for purchase from the PJM market during a Final Rule-induced forced outage.

EKPC, as a non-profit electric cooperative, has limited financial resources to risk PJM penalties of this magnitude. These costs will place upward pressure on rates for rural customers and impact EKPC's ability to supply affordable, reliable energy to customers. For these reasons, the technology to comply with the new fPM limitation on a long-term and consistent basis for Unit 3 and 4 is not presently available and will not be available by July 6, 2027.

B. Particulate Matter Continuous Emissions Monitoring Systems (PM CEMS) are not technologically able to assure compliance with revised MATS RTR fPM requirements with a sufficient level of accuracy.

EKPC currently complies with MATS using PM CEMS to assure compliance with the presently-effective, substantially higher PM emissions limit of 0.030 lb/mmBtu. While PM CEMS can measure PM at higher levels with greater accuracy, CEMS are not a technology that is available due to unreliable data measurement and correlation challenges at low PM levels.

The accuracy of PM CEMS at low PM emissions levels is not proven. A fundamental problem with PM CEMS is that they 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.⁶ 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.⁷

In addition, PM CEMS correlation testing will be lengthy, easy to fail and expensive to correlate to the new MATS RTR requirements. Correlation of the EKPC CEMS to these requirements will necessitate extensive testing in 2026. EKPC must bring a third-party testing company on-site to assist. We anticipate a contractor backlog considering the massive demand for CEMS devices to be

⁶ The EPA statement at 88 Fed. Reg. at 24,872, 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.

⁷ See RLR Consulting, LLC, "Technical Comments on EPA's Proposed Rule: Mercury and Air Toxics Standards Risks and Technology Review – PM CEMS," June 16, 2023 (RLR Report).

correlated industry-wide. This correlation testing project money will be expended next year unless this exemption is granted because CEMS must be prepared to serve as the compliance measure for all 6 units by July 2027.⁸

In summary, PM CEMS technology is not available to demonstrate compliance at the low levels required by the new fPM limit. CEMS correlation at low PM levels also poses significant challenges. If a unit fails the correlation test, then its monitoring instrument is out of compliance, and the unit cannot operate.

C. National Security Interests of the United States Strongly Support Granting the Exemption for Spurlock and Cooper Stations.

Executive Order 14156 (E.O. 14156) declares a national energy emergency. That E.O. recognizes that an affordable supply of energy is essential to the national defense. However, the MATS RTR stands at odds with the E.O. in general and as to the national security in the Kentucky region.

The reliability of grid in Kentucky is in a tenuous place. Multiple unit retirements in a short time frame compound the problem, without sufficient replacement generation. The North American Electric Reliability Corporation (NERC) reports that the PJM has an “elevated risk.” Specifically, “The risk occurs on days where temperatures are very low across the entire PJM area, which results in high loads. While normal resource performance can meet these demand forecasts, resource performance from thermal resources on very cold days has historically been below normal due to freezing and fuel supply issues. Furthermore, solar resources are not likely to contribute during some of the coldest hours, resulting in very low total electricity supply and thus projections of load loss.”⁹ Summer load-loss is also possible and most likely to occur during wide-area heat events that coincide with low wind and low solar output or very high outage and derates in the thermal generation.¹⁰

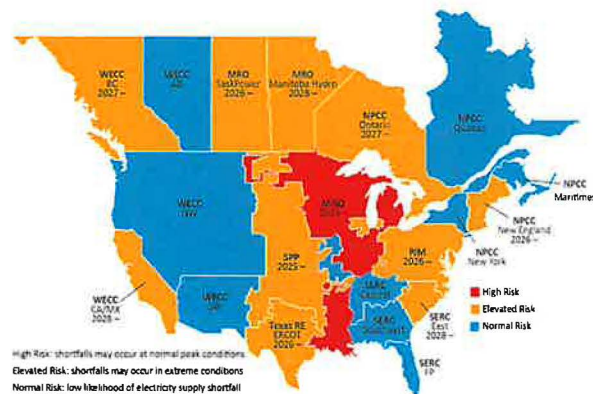


Figure 1: Risk Area Summary 2025–2029

Recent testimony before Congress of PJM's President & CEO, Manu Asthana, further underscores the fragility of the grid in the PJM region. Mr. Asthana submitted testimony before the House Committee on Energy & Commerce, Subcommittee on Energy on March 25, 2025 that highlights the record winter demand while also supporting neighbor systems in the east.¹¹ PJM notes recent trends that show an increased adequacy risk in PJM's region and many parts of the country. These trends are due to the increased electricity demand from electrification, the pace of retirements “due to state and federal policies” exceeding construction of new generation; and the time needed for

⁸ See RLR Report.

⁹ *Id.* at 6.

¹⁰ *Id.* at 16.

¹¹ Asthana Testimony, House Committee on Energy & Commerce, Subcommittee on Energy (Mar. 25, 2025) at 3, https://d1dth6e84htgma.cloudfront.net/03_25_2025_ENG_Testimony_Asthana_dcac17e12c.pdf

interconnection, which has improved.¹² PJM calls for owners that have announced retirements to reconsider to support resource adequacy.¹³

Consistent with PJM's demand projections, Kentucky utilities are predicting increasing demand.¹⁴ Consequently, reductions in unit availability and forced outages are critical events to avoid. The interruption of power delivery from a grid failure causes damage to public health. Affordable and consistent power allows medical providers to provide essential services to the elderly, infirm, and to vulnerable individuals with chronic health conditions. Evidence from grid failures during Winter Storm Elliott in the PJM region documents health impacts and morbidity caused by those events.¹⁵

As to the national defense¹⁶ reliable power is crucial to sustain the following functions:

- Power military bases
- Power emergency services to enable quick responses to emergencies, such as acts of war, weather catastrophes, and cybersecurity threats
- Power essential government functions that prevent threats to the country
- Allow fast deployment of military resources
- Power manufacturing facilities that make military weapons, vehicles, vessels, and aircraft infrastructure.

The Department of Defense runs global military operations from domestic bases. Operations require a resilient and dependable power supply for mission readiness. Back home, on-base generation and microgrids are necessary to support the thousands of military workers working and living on- and off-base, including the goods and services that support those communities.¹⁷ Power outages destabilize the military defense.

Kentucky has three active military installations, including prominent Fort Knox – one of the largest military installations in the country. Kentucky's military bases¹⁸ are:

- **Blue Grass Army Depot (BGAD)** is located in Richmond, Kentucky on 14,494 acres of mostly open fields with some wooded areas. The Depot provides industrial services support, ammunition maintenance, Air Force bomb thermal arc coating, ultrasonic testing for mortar ammunition, logistics support and is a training site for military personnel.
- **Fort Campbell** is one of the most well-known military bases in the U.S. Fort Campbell is the home of the 101st Airborne Division (Air Assault). It is located squarely on the dividing line between Kentucky and Tennessee.
- **Fort Knox** is one of the largest military installations in the United States, covering over 156 square miles. Fort Knox is a United States Army facility located in northern Kentucky, covering three counties with a population of more than 12,000. Though officially under Army command, the United States Marine Corps shares sections of the base for training areas. Fort Knox is well known within both military and civilian sectors for being the home of the United States Bullion Repository, the Army Human Resources Command and the Army Cadet Command. Within the military community, Fort Knox is recognized worldwide as the home of the M1 Abrams Tank crewman training program.¹⁹

¹² *Id.* at 4-5.

¹³ *Id.* at 10.

¹⁴ <https://www.lanereport.com/177888/2024/12/utilities-power-up/>; <https://kentucky Lantern.com/2024/07/09/driving-surge-in-demand-for-power-data-centers-eye-kentucky/>

¹⁵ 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>.

¹⁶ See <https://www.utilitydive.com/news/aging-grid-threatens-national-security-reliability-cyber-threat-transmission/705362/>

¹⁷ https://acore.org/wp-content/uploads/2021/10/MGI_National_Security_Transmission_Factsheet.pdf

¹⁸ <https://www.milbases.com/kentucky>

¹⁹ <https://militarybases.com/kentucky/fort-knox/>

These three prominent army bases are crucial to the nation's security interests. Reliable power delivery to these installations is essential. Thus, maintaining a healthy grid in Kentucky will ensure that the national security is preserved in the Commonwealth and the country.

IV. Conclusion.

EKPC appreciates the opportunity to present the reasons why the Spurlock and Cooper Stations 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,



Don Mosier
Executive VP & COO