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U.S. Environmental Protection Agency
EPA Docket Center (EPA/DC)
Office of Water Docket
Mail Code 28221T
1200 Pennsylvania Avenue NW
Washington, DC 20460

Attn: Docket ID No. EPA-HQ-OAR-2021-0668

Re: Comments of American Municipal Power, Inc. ("AMP") on Proposed Rule: Federal Implementation Plan Addressing Regional Ozone Transport for the 2015 Ozone National Ambient Air Quality Standard – 87 Fed. Reg. 20036 (April 6, 2022)

Dear EPA Administrator Reagan and Agency Staff:

On behalf of American Municipal Power, Inc., and the Ohio Municipal Electric Association, we appreciate this opportunity to provide the following comments in response to the above-referenced notice of proposed rulemaking.

BACKGROUND ON AMP/OMEA

American Municipal Power, Inc. (AMP) is a nonprofit wholesale power supplier and services provider for 133-member municipal electric systems in the states of Ohio, Pennsylvania, Michigan, Virginia, Kentucky, West Virginia, Indiana, and Maryland and the Delaware Municipal Electric Corporation, a joint action agency with nine members headquartered in Smyrna, Delaware. AMP's mission is to serve members through public power joint action, innovative solutions, robust advocacy and cost-effective management of power supply and energy services. AMP offers a wide variety of services to help member communities improve the quality of municipal utility services to their customers. AMP provides these services on a cooperative, nonprofit basis for the mutual benefit of member communities.

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AMP members receive their power supply from a diversified resource mix that includes wholesale power purchases and energy produced at AMP and member-owned generating facilities utilizing fossil fuels, hydroelectric, wind, solar and other renewable resources. Assets include the AMP Fremont Energy Center, a natural gas combined cycle in Fremont, Ohio, a majority ownership stake in the coal-fired Prairie State Energy Campus, diesel, and natural gas peaking units, and hydroelectric, solar and wind projects throughout the region. AMP has actively worked over the past two decades to diversify our power supply portfolio to include renewable resources and continues to explore additional opportunities for new renewable energy resources.

The Ohio Municipal Electric Association (OMEA) represents the Ohio and federal legislative interests of AMP and member Ohio municipal electric systems. Although closely aligned with AMP, the OMEA is a separate, nonprofit entity guided by a 16-member Board of Directors. However, subsequent "AMP" references herein also represent the interests and comments of OMEA.

In recognition of our unique position as both a wholesale power supplier and services provider, as well as the owner and operator of electric generating assets in Ohio, AMP offers the following comments for consideration.

BACKGROUND

The EPA proposed a federal implementation plan (FIP) to address the 2015 National Ambient Air Quality Standard (NAAQS) for ozone (Proposed Rule or FIP) under Clean Air Act (CAA or Act) Section 110(a)(2)(D)(i)(I) also known as the “Good Neighbor Provision.” EPA proposes implementation mechanisms to achieve enforceable emissions reductions required to eliminate significant contributions of ozone precursor emissions in 26 upwind states that EPA believes are significantly contributing to downwind nonattainment or interference with maintenance of the 2015 ozone NAAQS. In nine of these states, AMP and /or its members have generating assets.

In 2015, EPA revised the primary and secondary ozone standard to 70 parts per billion. States were required to file state implementation plans (SIPs) to fulfill their interstate transport obligations by October 2018. Where EPA made a finding that a state had not submitted a Good Neighbor SIP, or if EPA disapproved the SIP, EPA is required under CAA section 110(c)(1) to issue a FIP within two years to assure downwind states are protected. The standards are designed for the initial phase of proposed emissions reductions to be achieved prior to the August 2, 2024 attainment date for areas classified as moderate nonattainment under the 2015 ozone NAAQS.

EPA is now proposing to promulgate new or revised FIPs for 25 states that will include new nitrogen oxide (NOx) ozone season emission budgets for electric generating units (EGUs), with the implementation of these budgets beginning in the 2023 ozone season.

EPA is also proposing to tighten the emission budgets in the 25 states subject to a new or revised FIP for each ozone season after the initial 2023 implementation in order to maintain the initial stringency of the emissions budget while taking into account retirements and other changes to the EGU fleet over time. EPA is also proposing to extend the Cross-State Air Pollution Rule (CSAPR) NOx Ozone Season Group 3 trading program beginning in the 2023 ozone season through the 2025 ozone season. Further, EPA is proposing new emissions budgets for the CSAPR NOx Ozone Season Group 3 Trading Program beginning in the 2026 ozone season. Beginning in 2026, emission budgets would be set at levels achieved by installing selective catalytic reduction (SCR) controls at approximately 30 percent of the largest coal-fired power plants in the covered states that do not currently have SCR controls. The proposed rule would also establish a daily emissions rate limit for large coal-fired units, which would take effect in 2024 for units with existing controls and in 2027 for units installing new controls, to ensure environmental controls are operated “effectively and consistently” at these plants throughout the ozone season.

AMP COMMENTS

AMP concurs with many other interested parties that the rulemaking has provided insufficient time to prepare substantive comments. The scope of this action and the corresponding state disapprovals of 15 interstate transport SIPs requires an in-depth review of the agency’s modeling data, assumptions and analysis, which is not possible during the time allotted for public comment, even with the deadline extension of June 21, 2022. However, taking into consideration the limited time permitted to analyze the voluminous technical information, AMP provides the following comments.

I. EPA Exceeds its Statutory Authority with this Rule Proposal

The approach utilized in the proposal exceeds EPA’s statutory authority. CAA section 110(c)(1) authorizes EPA to issue a FIP to resolve a state’s CAA section 110(a)(2)(D)(i)(I) obligations only after the Administrator (1) finds that a state has failed to submit a SIP or the SIP does not satisfy the minimum criteria; or (2) disapproves a SIP in whole or part and the state fails to correct the deficiency. CAA section 110(a)(2)(D)(i)(I), the Good Neighbor obligation, requires a state to submit a SIP adequate to ensure that sources within the state are prevented from significantly contributing to nonattainment, or interfering with maintaining attainment, in any other state. A state’s Good Neighbor obligation has always been defined by the reductions contained within the state budget. In other words, the budget represents the emissions that remain in each state after the amounts that EPA has determined would impact neighboring states’ attainment have been eliminated. Once a state meets its budget, the state has satisfied the section 110(a)(2)(D)(i)(I) Good Neighbor obligation. Yet in the proposed rule, EPA takes the approach that if the NOx controls identified in the rule are available and are capable of being implemented, then they must be implemented regardless of the status of overall NOx reductions and irrespective of whether the state is meeting the budget.[1] EPA’s proposed rule requiring specific NOx controls for EGUs exceeds the statutory authority provided to EPA under the CAA (*EPA v. EME Homer City Generation, L.P.,* 572 US 489 (2019)).

[1] 87 Fed. Reg. 20095

Moreover, EPA's proposal introduces the new concept of "dynamic" budgets for EGUs, where state budgets would be adjusted for each control period beginning with the 2025 ozone season by applying the control stringency selected by EPA to updated heat input data measured in the two years prior to the control period. EPA's authority to "continuously adjust" budgets in this manner also exceeds its statutory authority.

If EPA had the authority to continually change state emission budgets in such fashion (which they do not), it would have to make each change pursuant to a notice-and-comment rulemaking structure of section 307(D)(1)(B) of the Act. Instead, EPA proposes within the rule to adjust state emissions budgets each year by administratively issuing a notice of data availability, announcing the state budget for the following ozone season.[2] Thus, as proposed, the rule violates the rulemaking requirements of the CAA.

Additionally, the Supreme Court has clearly affirmed that such "overcontrol," reducing state level emissions beyond that which is necessary to achieve attainment in downwind States, is prohibited. *EPA v. EME Homer City Generation, L.P.*, 572 US 489, 492 (2019). In promulgating a Good Neighbor FIP, EPA is required to quantify the emissions from a state that impact the downwind states. Once those emissions reductions required by a budget are achieved, the state has met its obligations. EPA's proposal to continue to ratchet down emissions beyond what is required for states to meet their attainment obligations amounts to an unlawful overcontrol. Indeed, this proposal goes well beyond a "trading program" as typically understood, and rather is a regulatory program that sets emission limitations and mandates specific required emission control equipment for EGUs. Regulating existing EGUs in such a manner is beyond the Good Neighbor provisions in CAA Section 110 and, thus, beyond the EPA's authority. AMP recommends that, at a minimum, EPA delay further work on this rule until the Supreme Court decides *West Virginia v. EPA* (Sup. Court 20-1530), argued Feb. 28, 2022 to definitively determine EPA's authority in this regard.

II. Timing Issues and Cost Control Related to CSAPR

The Good Neighbor Provision requires implementation plans that "prohibit [ ]…any source or other type of emission activity within the State from emitting any air pollutant in amounts which will…contribute significantly to nonattainment in…any other State with respect to any" NAAQS. 42 U.S.C. 7410(a)(2)(D)(i). Mobile sources, such as motor vehicles, engines and equipment are the leading contributors to NOx emissions at both the state and national level. To date, EPA has not subjected mobile sources, such as on-road vehicles, to the same ozone standard attainment deadlines established under the CAA and reinforced in recent judicial actions (*North Carolina v. EPA*, 531 F.3d 896 D.C. Cir. 2008 and *Wisconsin v. EPA* 938 F.3d 303 D.C. Cir. 2019).

There are practical impacts to be considered as EPA is considering the costs of additional controls necessitated by this rule. Specifically, although the CSAPR rule for the 2008 standard

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[2] 87 Fed. Reg. 20117.

found that a reasonable control cost was $1,800 per ton NOx, the proposed rule, considered here, finds that $7,500 per ton is reasonable. The cost of allowances associated with the 2008 standard do not reflect EPA's reasonable control cost. As an example, Ohio NOx allowance prices under the current system recently increased to $26,000 per ton which is incongruent with EPA's reasonable cost of control. Unpredictable and unreasonably high NOx allowance prices can impact dispatching decisions and ultimately, the cost of power to AMP member communities. AMP recommends EPA reassess the implementation of the current 2008 rule and use this as a guide to anticipate NOx allowance costs under the current proposal and adjust allocations accordingly to minimize and mitigate allowance price volatility.

III. Treatment and impacts on AMP Peaking Units

AMP natural gas-fired combustion turbines provide supplemental power during peak-load periods. Continuing to regulate these small natural gas peaking units under the rule in this manner will result in reliability and financial impacts to AMP member communities. As a real-world example:

- In 2021, the AMP combustion turbines subject to CSAPR had total, combined NOx emissions of 29 tons.
- The 2021 shift to Group 3 resulted in additional allowance costs to AMP of $161,000 at $7,000/ton of NOx.
- Allowance costs have continued to rise, with costs as high as $26,000/ton of NOx as of May 25, 2022.

These rising costs have a direct impact on dispatching decisions for natural gas peaking units. Reluctance to operate such units due to allowance costs can result in higher market power and transmissions costs and, ultimately higher costs for customers. Furthermore, the underutilization of these units during periods of high demand potentially leads to reliability issues on the grid.

IV. EPA should Exempt Low-Utilization Gas Turbines from the Rule

AMP natural gas-fired combustion turbines are used to supply electricity primarily during periods of peak demand to reduce the electrical load in member communities, ultimately reducing annual capacity and transmission costs for a number of communities while maintaining reliability of the grid. In addition, these units reinforce reliability in their communities by providing valuable emergency backup services during system outages. While these units typically operate less than 100 hours per year, and in most cases far less frequently, their value includes the ability to provide critical load to the community in an emergency. Operating permits for these turbines include federally enforceable restrictions on potential to emit. These assets are subject to the Acid Rain Program and associated monitoring provisions in 40 Code of Federal Regulations (CFR) Part 75, and are qualified as low-mass emissions (LME) units as provided in 40 CFR 75.19. Each turbine is equipped with NOx emission controls (either water injection or SCR). As an example, the JV2 Hamilton unit reported 11 tons of NOx emissions for 2021. This was the highest level of reported emissions among AMP's low-utilization LME units.

While LME units have several options to demonstrate ongoing compliance, AMP uses the default emission factors in 40 CFR 75.19 for reporting purposes. The proposed CSAPR rule does not appear to take LME units into account when allocating allowances based on a presumptive level of NOx control. For example, at the 2026 presumptive control level of 0.03 lb. NOx / MMBtu, AMP turbines would be allocated 5 times fewer allowances as a result of using the default emission factor in 75.19 Table LM-2. This places AMP in the untenable position of having to purchase additional allowances, perform emissions testing to develop a fuel-and-unit-specific emission factor, or install a continuous emission monitoring system. None of these expenses are justified for low utilization LME units.

Further, the "generation shifting" in the IPM modeling for future years 2023 and 2026 fail to account for the operational and regulatory reality of low-utilization natural gas-fired peaking units. As an example, the 2026 model projections "shift" additional operations to AMP's JV2 Hamilton and JV2 Bowling Green facilities. This results in these units generating 3-15 times more electricity relative to the 2021 baseline year. This is not possible due to regulatory constraints. These are both LME units and operating at EPA's projected levels would result in the loss of LME status and potential permit violations. Losing this status would require the installation of CEMS systems or frequent emission testing. The possible impacts resulting from the proposed shift are not only unreasonable, but also fail to demonstrate that EPA considered the existing regulatory framework and operation of such units in its proposed rule.

EPA already receives emission and operational data from low utilization LME units employed by AMP and similarly situated entities. These data demonstrate these units have a *de minimis* impact on state-wide emissions on an ozone season basis and further that they are already strictly regulated and controlled emission sources. For instance, equipping a 32 MW gas turbine that emits 11 tons NOx per year with a selective catalytic reduction (SCR) system with an 80% reduction efficiency would result in a $607,272 cost per ton of NOx removed (assuming a $167/kW retrofit cost for SCR based on EPA's Control Cost Manual). As such, further emission reductions are cost prohibitive.

For these reasons, AMP encourages EPA to exempt LME units from the CSAPR program entirely.

V. EGUs Under 25 MW Should Continue to be Excluded from the Rule.

Based on its assessment, EPA rightfully concludes that smaller units that serve a generator with a nameplate capacity less than or equal to 25 MW should continue to be excluded from the rule.[3] EPA rationale is sound, concluding that regulating such sources is not warranted due to the low potential reductions, relatively high cost per ton of reduction and high monitoring and other

[3] 87 Fed. Reg. 20084-85.

compliance burdens that would ensue. EPA has historically provided similar exclusions for small units based on this same rationale, including the NOx SIP Call, CAIR, and CSAPR. Nevertheless, EPA is requesting comment as to whether regulating such smaller units may offer cost-effective NOx reduction potential.

AMP strongly opposes regulating these smaller units under the proposed rule. EPA's historical justifications for excluding small units continue to be justified today. As EPA points out, "EPA's preliminary survey of current data, compared to this initial justification, does not appear to offer a compelling reason to depart from this past practice by requiring emission reductions from these small EGU sources as part of this rule."[4] AMP and its members are in agreement with EPA's proposal to retain the 25 MWe threshold carried forward from this long line of past rules.

Further, small units are generally limited in operation and have a low contribution to heat input during the ozone season. When operating a small percentage of available hours, the total NOx emissions available for reduction during the ozone season are limited. For example, AMP's units of this size generally operate less than 100 hours per year, during peak demand periods, only a few hours at a time and are limited by federally enforceable permit restrictions.

This is also the case for the small units operated by AMP members, whose average time in service is below 100 hours per year or has significantly decreased over the last decade. Several member units are likewise subject to federally enforceable limited use restrictions, with permit terms restricting operation to no more than 10% of a unit's annual heat input capacity. Member units' actual operating hours fall well below this limitation. For example, one member's three limited use boilers were operated less than 1% of the available hours in 2021, and a separate member's similar units were operated just 7% of the available hours in 2021. Further NOx emissions reductions from these types of intermittently operated small units would be negligible and at significant cost.

In addition, it is not technically feasible to retrofit boilers that operate intermittently with end of pipe controls like SCR that require steady-state conditions and operating temperatures. Adding SCR NOx controls to intermittently operated boilers with low utilization would also be overly burdensome for minimal emissions reductions. This is in line with EPA's negative evaluation of SCR retrofits at small EGUs, which "found that such controls become markedly less cost-effective at lower levels of generating capacity."[5]

Moreover, many small units, including those operated by AMP and members are already adequately equipped with emissions controls. It would be unreasonable for EPA to conclude that adding new controls or upgrading existing controls on units that operate intermittently is cost effective on a per-ton basis. One example is the AMP Bowling Green facility, which includes turbines that are already controlled using an SCR system. Annual emissions from this site last year were 2 tons of NOx. Another example is the AMP diesel peaking fleet. AMP operates a

[4] 87 Fed. Reg. 20085.
[5] 87 Fed. Reg. 20085.

number of diesel-fired generators, a number of which are Tier 4 diesels, which produce approximately 1.8 MW per engine. These units operate during peak demand periods for a few hours at a time. Annual emissions are approximately 1 ton of NOx per year. At a control cost of $180,000 for installation of a SCR (from the EPA Control Cost Manual for a new unit), installing controls on a single unit would cost $225,000 per ton of NOx at an 80% control level. Regulating such sources would result in no meaningful or cost-effective NOx reductions.

VI. Support for Comments Submitted by the American Public Power Association and Large Public Power Council.

AMP is a member of both the American Public Power Association (APPA) and Large Public Power Council (LPPC)[6] and supports the comments provided by each organization. Of particular note, AMP supports LPPC comments associated with the new daily backstop and secondary emissions limits in the proposed Rule. These changes would negatively impact one of our generating assets, the Prairie State Energy Campus, in the same manner as described in those comments. AMP also agrees with LPPC that this rulemaking, in conjunction with other EPA rules impacting the electric generation sector, could result in a significant loss of generating capacity, and that EPA needs to develop a clear framework for dealing with associated grid reliability issues.

AMP and its members appreciate the opportunity to submit comments on this important proposed rulemaking. If the Agencies have any questions, please do not hesitate to contact the undersigned.

Respectfully Submitted,

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[6] Our comments may differ on some issues from the APPA and/or LPPC comments. To the extent that the positions and recommendations in AMP's comments differ from those expressed in the comments of APPA or LPPC, the positions expressed herein should be viewed as controlling.