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May 15, 2024

Michael S. Regan, Administrator  
U.S. Environmental Protection Agency  
1200 Pennsylvania Avenue, N.W.  
Washington, D.C. 20460

Re: Supplemental Air Plan Actions: Interstate Transport of Air Pollution for the 2015 8-Hour Ozone National Ambient Air Quality Standards and Supplemental Federal "Good Neighbor Plan" Requirements for the 2015 8- Hour Ozone National Ambient Air Quality Standards; Docket No. EPA-HQ-OAR-2023-0402

Administrator Regan:

Please find the attached comments filed on behalf of the Midwest Ozone Group ("MOG") regarding a supplemental proposed rule and withdrawal of proposed rules by the U.S. Environmental Protection Agency entitled "Supplemental Air Plan Actions: Interstate Transport of Air Pollution for the 2015 8-Hour Ozone National Ambient Air Quality Standards and Supplemental Federal "Good Neighbor Plan" Requirements for the 2015 8- Hour Ozone National Ambient Air Quality Standards." 89 Fed. Reg. 12,741 (February 16, 2024). The comment period on this proposal ends on May 16, 2024.

MOG is an affiliation of companies and associations\* that draws upon its collective resources to seek solutions to the development of legally and technically

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\* The members of and participants in the Midwest Ozone Group include: Alcoa, Ameren, American Electric Power, American Forest & Paper Association, American Iron and Steel Institute, American Wood Council, Appalachian Region Independent Power Producers Association, Associated

sound air quality programs that may impact on their facilities, their employees, their communities, their contractors, and the consumers of their products. MOG's primary efforts are to work with policy makers in evaluating air quality policies by encouraging the use of sound science. MOG has been actively engaged in a variety of issues and initiatives related to the development and implementation of air quality policy, including the development of transport rules (including the Revised CSAPR Update), NAAQS standards, nonattainment designations, petitions under Sections 126, 176A and 184(c) of the Clean Air Act ("CAA"), NAAQS implementation guidance, the development of Good Neighbor State Implementation Plans ("SIPs") and related regional haze and climate change issues. MOG Members and Participants own and operate numerous stationary sources that are affected by air quality requirements including the ozone NAAQS.

As will be pointed out in these comments, EPA's proposed rule is both legally and technically flawed. It is MOG's position that EPA's failure to conduct new photochemical modeling of air quality improvements related to twenty-eight states is a fatal flaw of this rule and EPA's failure to include the most recent on-the-books or on-the-way control requirements renders its air quality analysis void. Additionally, MOG objects to Kansas and Tennessee being included on the basis only of linkages to "violating monitor" maintenance-only receptors – a new category.

These comments also renew MOG's objection to the related Good Neighbor SIP disapproval proposals, the Federal Implementation Plan, and Interim Final Rules. These comments specifically refer to MOG's position that EPA's reliance on the original FIP as the basis for this proposed rule is fatally flawed, EPA should not advance any FIP until uncertainties related to SIP disapproval litigation are resolved, EPA has documented state-level emission budgets for 2026 in the final rule federal register and policy TSD that are not consistent with the state-level emission budgets in 2026 provided with the docketed version of the AQAT for several states, and

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Council of Industrial Boiler Owners, Duke Energy Corp., East Kentucky Power Cooperative, ExxonMobil, FirstEnergy Corp., Indiana Energy Association, Indiana-Kentucky Electric Corporation, Indiana Municipal Power Agency, Indiana Utility Group, Hoosier Energy REC, inc., LGE/ KU, Marathon Petroleum Company, National Lime Association, North American Stainless, Nucor Corporation, Ohio Utility Group, Ohio Valley Electric Corporation, Olympus Power, Steel Manufacturers Association, and Wabash Valley Power Alliance.

further, placing additional NOx controls on EGU and non-EGU stationary sources will have no meaningful impact on air quality in downwind nonattainment and maintenance areas.

As these comments demonstrate, the proposed Supplemental Air Plan Actions: Interstate Transport of Air Pollution for the 2015 8-Hour Ozone National Ambient Air Quality Standards and Supplemental Federal "Good Neighbor Plan" Requirements for the 2015 8- Hour Ozone National Ambient Air Quality Standards is fatally flawed both legally and technically and should be withdrawn.

Respectfully submitted,



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**MIDWEST OZONE GROUP COMMENTS ON THE  
SUPPLEMENTAL AIR PLAN ACTIONS: INTERSTATE  
TRANSPORT OF AIR POLLUTION FOR THE 2015 8-  
HOUR OZONE NATIONAL AMBIENT AIR QUALITY  
STANDARDS AND SUPPLEMENTAL FEDERAL “GOOD  
NEIGHBOR PLAN” REQUIREMENTS FOR THE 2015 8-  
HOUR OZONE NATIONAL AMBIENT AIR QUALITY  
STANDARDS.**

**Docket No. EPA–HQ–OAR–2023–0402**

**89 Federal Register 12,741 (February 16, 2024)**

**May 15, 2024**

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**COMMENTS OF MIDWEST OZONE GROUP ON THE PROPOSED  
SUPPLEMENTAL AIR PLAN ACTIONS: INTERSTATE TRANSPORT OF  
AIR POLLUTION FOR THE 2015 8-HOUR OZONE NATIONAL  
AMBIENT AIR QUALITY STANDARDS AND SUPPLEMENTAL  
FEDERAL “GOOD NEIGHBOR PLAN” REQUIREMENTS FOR THE  
2015 8-HOUR OZONE NATIONAL AMBIENT AIR QUALITY  
STANDARDS.**

**MAY 15, 2024**

**I. Introduction**

The Midwest Ozone Group (“MOG”) offers these comments<sup>1</sup> on the U.S. Environmental Protection Agency proposed rule entitled “Supplemental Air Plan Actions: Interstate Transport of Air Pollution for the 2015 8-Hour Ozone National Ambient Air Quality Standards and Supplemental Federal “Good Neighbor Plan” Requirements for the 2015 8- Hour Ozone National Ambient Air Quality Standards.” 89 Fed. Reg. 12,741 (February 16, 2024). The comment period on this proposal ends on May 16, 2024.

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<sup>1</sup> These comments were prepared with the technical assistance of Alpine Geophysics, LLC. Comments or questions about this document should be directed to David M. Flannery, Kathy G. Beckett, Keeleigh S. Huffman (Steptoe & Johnson PLLC, P.O. Box 1588, Charleston, WV 25326-1588) or Edward L. (Skip) Kropp, (Steptoe & Johnson PLLC, P.O. Box 36425, Indianapolis, IN 46236; dave.flannery@steptoe-johnson.com / (304) 353-8171; kathy.beckett@steptoe-johnson.com / (304) 353-8172; keeleigh.huffman@steptoe-johnson.com / (304) 353-8132 or skip.kropp@steptoe-johnson.com / (317) 946-9882 respectively.

<sup>2</sup> The members of and participants in the Midwest Ozone Group include: Alcoa, Ameren, American Electric Power, American Forest & Paper Association, American Iron and Steel Institute, American Wood Council, Appalachian Region Independent Power Producers Association, Associated Electric Cooperative, Berkshire Hathaway Energy, Big Rivers Electric Corp., Buckeye Power, Inc., Citizens Energy Group, City Water, Light & Power (Springfield IL), Cleveland Cliffs, Council of Industrial Boiler Owners, Duke Energy Corp., East Kentucky Power Cooperative, ExxonMobil, FirstEnergy Corp., Indiana Energy Association, Indiana-Kentucky Electric Corporation, Indiana Municipal Power Agency, Indiana Utility Group, Hoosier Energy REC, inc., LGE/ KU, Marathon Petroleum Company, National Lime Association, North American Stainless,



sound air quality programs that may impact on their facilities, their employees, their communities, their contractors, and the consumers of their products. MOG's primary efforts are to work with policy makers in evaluating air quality policies by encouraging the use of sound science. MOG has been actively engaged in a variety of issues and initiatives related to the development and implementation of air quality policy, including the revision of the ozone and particulate matter NAAQS, development of transport rules (including the Revised CSAPR Update and the 2015 ozone NAAQS federal implementation plan), nonattainment designations, petitions under Sections 126, 176A and 184(c) of the Clean Air Act ("CAA"), NAAQS implementation guidance, the development of Good Neighbor State Implementation Plans ("SIPs"), attainment designations, exceptional events, and related regional haze and climate change and environmental justice issues. MOG Members and Participants own and operate numerous stationary sources that are affected by numerous air quality requirements. As such, MOG and its membership have an interest in EPA's proposed rule entitled: "Supplemental Air Plan Actions: Interstate Transport of Air Pollution for the 2015 8-Hour Ozone National Ambient Air Quality Standards and Supplemental Federal 'Good Neighbor Plan' Requirements for the 2015 8- Hour Ozone National Ambient Air Quality Standards" ("Supplemental Air Plan"). 89 Fed. Reg. 12,666 (February 16, 2024).

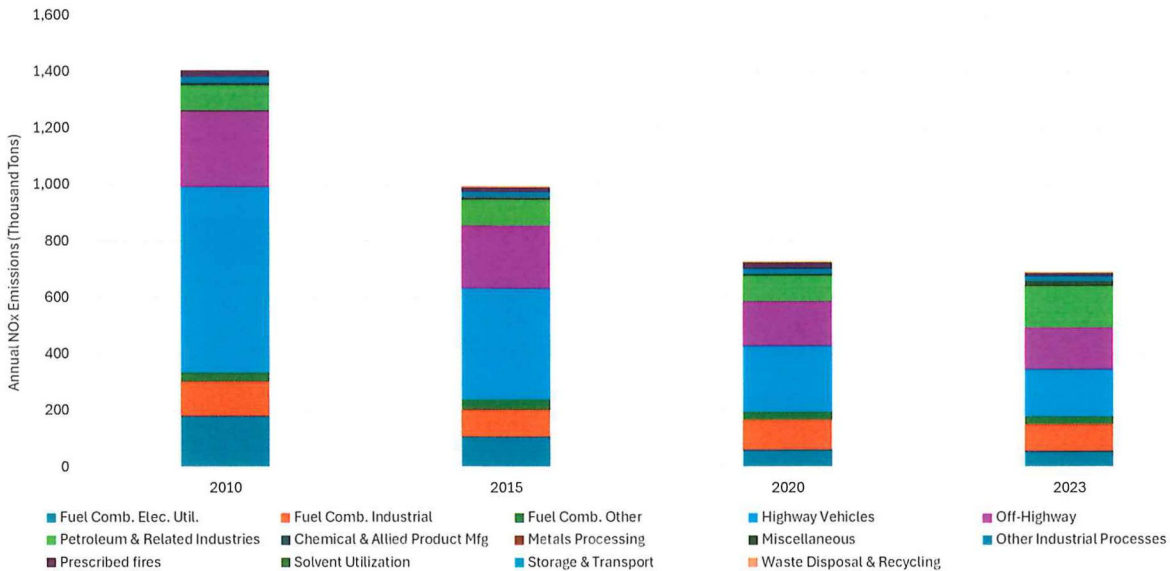
**II. Emissions of NO<sub>x</sub> have been steadily reducing in recent years and are expected to continue for the foreseeable future as the result of new regulatory programs and routine retirements.**

EPA's proposal has failed to properly account for the steady reduction in NO<sub>x</sub> emissions that have occurred in recent years and should be expected to continue into the future. EPA's published data<sup>3</sup> on annual anthropogenic emission trends from the five upwind states (Arizona, Iowa, Kansas, New Mexico, and Tennessee) show a steady decrease with 2023 reported values being 50% lower than values from 2010. Figure 1 presents the data as reported by EPA in their most current Air Pollutant Emissions Trends Data summaries.

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Nucor Corporation, Ohio Utility Group, Ohio Valley Electric Corporation, Olympus Power, Steel Manufacturers Association, and Wabash Valley Power Alliance.

<sup>3</sup> <https://www.epa.gov/air-emissions-inventories/air-pollutant-emissions-trends-data>.



**Figure 1.** Historical annual anthropogenic NOx emission trends from five upwind states (AZ, IA, KS, NM, and TN) from 2010 to 2023.

### III. EPA’s reliance on the twenty-three state FIP as the basis for this 5-state proposal is fatally flawed.

EPA bases this proposed Supplemental Air Plan on a FIP that is fundamentally flawed, thereby setting the proposal up for failure. MOG highlighted the FIP’s inconsistencies and incorrectness in its comments<sup>4</sup> filed on June 21, 2022:

EPA seeks to advance its proposal at Steps 1 and 2 based upon inaccurate air quality modeling and without consideration of the flexibility guidance issued by EPA for use in the preparation of Good Neighbor SIPs relating to the 2015 ozone NAAQS. Additionally, the proposal is flawed because of the agency’s failure to align the timing of the upwind and downwind states’ responsibilities as it selected the analytical year for evaluating the Good Neighbor Provisions of the CAA.

Further, the agency has erred at Steps 3 and 4 in assessing control requirements for EGUs and non-EGUs, in redefining the EGU emission trading program and in taking significant technical shortcuts to accommodate its self-imposed deadlines. For reasons related to

<sup>4</sup> EPA-HQ-OAR-2021-0668-0323.

timing and resource constraints, and not for technical reasons, EPA elected not to perform full-scale photochemical air quality modeling in support of quantifying the impact of air quality improvements associated with various control cases considered for adoption in the proposed FIP. Instead, EPA applied a “simplified” Air Quality Assessment Tool (AQAT) as the method for estimating the impacts of the control cases at Step 3 of the transport analysis. In place of a direct comparison of the final remedy to an air quality simulation, EPA provides only a comparison of various calibration factors as justification for their conclusion that the simplified AQAT supports the proposal in determining air quality concentration changes at individual receptors at magnitudes in the hundredths (0.01) of ppb – an infinitesimally small value. Considering the importance of this regulation, significant cost to impacted industries and electric consumers, potential impact on electric supply reliability, and miniscule air quality benefit projected for the required control scenario, at a minimum, EPA should have run an air quality simulation to corroborate its findings with the simplified AQAT. Anything less constitutes arbitrary and capricious action.

As such, EPA’s actions that build upon a flawed rulemaking creates an entire framework that itself flawed, which is arbitrary and capricious. It cannot be that such a proposal will be able to stand alone, should the challenges to the underlying rulemaking result in a finding by court that it is unlawful. Considering that states and industry alike are challenging the FIP, EPA should be aware of the possibility that it will be overturned. By neglecting to consider the ongoing litigation and concerns raised by the regulated community regarding the faulty FIP, EPA acts in a manner that is unlawful and out of the scope the Clean Air Act.

#### **IV. The CAA prohibits EPA from promulgating a FIP in the absence of final action disapproving any underlying SIPs.**

Section 110(c) of the CAA states that “The [EPA] Administrator shall promulgate a Federal implementation plan at any time within 2 years after the Administrator”: (1) finds that a state has failed to make a required submission or that the state plan submitted “does not satisfy” the minimum criteria in Section 110(k)(1)(A), or (2) “disapproves a State implementation plan submission in whole or in part,” unless the State corrects the deficiency and the Administrator approves the correction before the Administrator promulgates the plan. The Act anticipates a legally and technically justified disapproval, after which EPA is required to

promulgate a Federal Implementation Plan (“FIP”) within two years, unless the State corrects the deficiency before promulgation of the FIP.

That said, EPA has a non-discretionary duty under Section 110(k)(5) to notify the State of the deficiency and establish reasonable deadlines for the submission of plan revisions. Section 110(k)(5) requires EPA's notice of finding of inadequacy to be public. This section of the CAA creates an administrative process of up to 18 months for states to address flaws in the disapproved SIPs.

It is undisputed that EPA has failed to explain its decision not to collaboratively work with states as required by Section 110(k)(5). These accelerated SIP disapprovals and FIP proposals clearly indicate that transparency and cooperation are not priorities. In the spirit of cooperative federalism written into the Clean Air Act, EPA should have provided updated guidance, new modeling, instructions on corrections for specific state deficiencies, and adequate time for state response and public comment and review. EPA failed to do that, instead forging ahead on its own, and with its own agenda. Furthermore, although EPA claims that the SIPs are defective, none of the underlying data has changed. Where the disapprovals are based on changes to EPA's methodology and interpretation that states were not informed of until after SIP Disapprovals, then EPA's decisions are arbitrary and capricious.

One critical factor raised by states in their litigation of the SIP Disapprovals is that EPA failed to act timely on the state SIP submittals. EPA received the state submittals as early as 2018 and delayed action until 2022. This proposal effectively penalized states and further, the citizens of those states, by not giving states the statutory opportunity to collaboratively engage on the SIPs. EPA's actions effectively dismiss resource intensive state agency work by failing to review it or engage in assessment.

MOG asserts it is legally necessary and appropriate that EPA revise its proposals to allow states the Clean Air Act's statutorily enumerated opportunity to respond to EPA's findings of deficiency before proposing a FIP, essentially in tandem with the SIP denials.

**V. EPA should not advance any FIP until uncertainties related to SIP disapproval litigation are resolved.**

EPA has proposed a Supplemental Air Plan which seeks to partially disapprove and partially approve SIPs from Arizona, Iowa, Kansas, New Mexico,



and Tennessee and further, to add each state to the Good Neighbor Plan. The haste to disapprove five SIPs and add those five states to the FIP indicates the stubbornness of EPA, even in the light of all the judicial action on both the SIPs and the Good Neighbor Plan.

EPA is refusing to acknowledge that the Good Neighbor Plan is faulty, even while more than half of the states included in the Plan have stays of their SIP disapproval in place. Each court that has been asked to stay a SIP disapproval related to the Good Neighbor Plan has done so. Not a single court has denied such a request, showing that these courts agree that petitioners are likely to succeed on the merits of the SIP disapprovals. The result of the stays of the 12 SIP disapprovals is that 89 percent of the original anticipated reductions in emissions of nitrogen oxides (“NOx”) from EGUs and 60 percent of the original anticipated NOx emission reductions from non-EGUs have been removed from the Good Neighbor Plan. Since the underlying SIP disapprovals have been stayed in twelve states by the orders of seven U.S. Courts of Appeals, MOG and other others have urged EPA to recognize the flaws underlying the Good Neighbor Plan and to stay it entirely. However, EPA has done just the opposite – continue to propose rules based on unlawfully disapproved SIPs.

Additionally, EPA has yet to analyze the efficacy or cost-effectiveness of implementing the FIP in only a portion of the twenty-three states or considered the impact of a limited marketplace in its trading program now that regional courts have stayed the SIP Disapprovals. What EPA did do is rush through the process of promulgating the FIP to avoid criticism of its broken Good Neighbor Plan. It is evident that EPA is attempting to build back its Good Neighbor Plan by adding new states that the Courts of Appeals have effectively removed via stays. There is no evidence that the Good Neighbor Plan can be justified under these conditions.

EPA cannot in good faith use supplemental rulemaking to attempt to fix the Good Neighbor Plan especially where the Plan and underlying SIP Disapprovals are presently being litigated. It is a poor use of time, resources, and efforts by EPA, but further, it shows a lack of interest in creating a dialogue between the regulated community and the federal government in managing issues of air quality. MOG urges EPA to withdraw the rule proposed here and cease further rulemaking based on the challenged SIP Disapprovals and FIP.

## **VI. The CAA does not require EPA to propose these actions at this time.**

As previously noted by MOG in these comments and others, EPA has taken an unnecessary and hurried approach that is inconsistent with and unsupported by applicable law. EPA's actions are not substantiated by appropriate science and modeling. EPA's FIP and the rulemaking proposed since have been time constrained by EPA's own design which prevents thoughtful technical analyses of the agency's proposals and meaningful participation by all stakeholders.

Section 110(c) of the CAA states that "The [EPA] Administrator shall promulgate a Federal implementation plan at any time within 2 years after the Administrator": (1) finds that a state has failed to make a required submission or that the state plan submitted "does not satisfy" the minimum criteria in Section 110(k)(1)(A), or (2) "disapproves a State implementation plan submission in whole or in part," unless the State corrects the deficiency and the Administrator approves the correction before the Administrator promulgates the plan. The Act anticipates a legally and technically justified disapproval, after which EPA is required to promulgate a Federal Implementation Plan ("FIP") within two years, unless the State corrects the deficiency before promulgation of the FIP.

MOG previously recommended EPA to adhere to the CAA which does not mandate promulgation of a FIP in an abbreviated time frame but instead allows as much as two years to work with the states to address any concerns the Administrator may have about their plans, specifically allowing states the opportunity to correct any deficiencies. Instead, EPA rushed through the promulgation of a FIP without sufficient collaboration with the states, resulting in an onslaught of litigation from both state and industry petitioners. EPA continues to hold on to the faulty and improper FIP by promulgating additional interim and supplemental rules in attempt to give credibility to its FIP. This series of events by EPA is offensive and disenfranchises the state/local governments and citizens most directly impacted and undercuts the ongoing litigation aforementioned.

## **VII. Object to Kansas and Tennessee being included on the basis only of linkages to "violating monitor" maintenance-only receptors – a new category.**

The EPA received comments during the proposed FIP stating that the methodology to identify receptors in 2023 appeared overly optimistic considering current measured data. These commenters suggested that the EPA give greater weight to current measured data as part of the method for identifying projected receptors. In response to those comments the EPA developed an additional maintenance-only receptor category, which includes what they refer to as "violating monitor" receptors. Specifically, the EPA identified "violating monitor" receptors

as those monitoring sites with measured 2021 and preliminary 2022 design values and fourth high maximum daily MDA8 ozone concentrations in both 2021 and 2022 (preliminary data) that exceed the NAAQS, although model-projected design values for 2023 are below the NAAQS.

There are forty-nine monitoring sites that are identified as “violating-monitor” maintenance-only receptors in 2023 (located in AZ, CO, CT, IL, IN, MI, NV, NM, NY, OH, TX, UT, and WI). The EPA used the approach of considering “violating-monitor” maintenance-only receptors as confirmatory of the proposal’s identification of receptors and did not implicate additional linked states in the final rule. Rather, EPA notes, using this approach served to “strengthen the analytical basis” for EPA’s Step 2 findings by establishing that many upwind states covered in this rule were also projected to contribute above 1 percent of the NAAQS to these additional “violating monitor” maintenance-only receptors.

Kansas has been included in the list of linked states because of a single monitor in Allegan, Michigan (260050003) whose 2023 average design value of 66.2 ppb and maximum design value of 67.4 ppb are overridden by the new definition of “violating” with 2021 and 2022 4<sup>th</sup> high and 3-year design values exceeding the level of the 2015 ozone NAAQS (>70 ppb).

Tennessee has been included on the list of linked states because of five monitors in Texas, each with average and maximum 2023 design values projected under 68 ppb but with 2021 and 2022 4<sup>th</sup> high and 3-year design values exceeding the level of the 2015 ozone NAAQS (>70 ppb).

MOG objects to the inclusion of Kansas and Tennessee on the basis only of linkages to “violating monitor” maintenance-only receptors. “Violating Monitors” is a new category of monitor created by EPA out of whole cloth to address negative comments received on the proposed FIP. The comments criticized EPA modeling as being inaccurate, but EPA has now jury rigged a work around and created a new monitor category instead of addressing the accuracy issue with its models. EPA cannot have it both ways. Either the model accuracy is sufficient to predict future attainment problems and the state(s) contributions to non-attainment receptors or it is not. It is capricious for EPA to reject model results for attainment status of a monitor as inconsistent with monitor data while proffering the predicted contributions which are the basis of the attainment prediction from the same model.

EPA has also received comments on SIP disapprovals and the FIP previously that call into question the lawfulness of claiming a state is violating the good

neighbor prohibition of 112(d)(ii)(a) by using modeled contribution data on days when a monitor is modeled in attainment of the standard. Now not only is EPA using a state's predicted contribution on days EPA models the monitor in attainment, but EPA also proposes to go a step further and use contribution data when there is no modeled non-attainment. It should be clear that a state is only prohibited from contributing significantly to non-attainment.

EPA has touted using models for its attainment projections for decades, despite comments from stakeholders for decades that its models were not sufficiently accurate to support regulatory actions costing the regulated community billions of dollars. Now that monitoring data is proving prior comments correct, MOG urges EPA to develop modeling platforms that are sufficiently accurate to support regulatory actions.

#### **VIII. Use of 2016v3 modeling without allowing public comments violates the Administrative Procedures Act because of the significant differences between 2016v2 and 2016v3 results.**

Between the proposed and final version of EPA's interstate transport analyses related to the 2015 Ozone NAAQS, the 2016v3 emissions modeling platform was developed by EPA as an update to the 2016v2 platform. The updated platform and associated emission projections (to 2023 and 2026) incorporate updates made in response to comments by stakeholders, improved methods, some corrections, and refinements to projection factors due to data that has become available following the release of 2016v2.

The 2016v3 platform incorporates updated emissions based on: MOVES3, the 2017 NEI nonpoint inventory, the 2019 NEI point source inventory, the Western Regional Air Partnership oil and gas inventory, and inventories for Canada and Mexico.

**Table 1** presents the total anthropogenic NO<sub>x</sub> emissions change between the two platforms by state. As can be seen, there are some significant changes across states that are influenced both the relative distribution of emission sources (**Table 2**) in the base year (2016) and presented future year (2023) in addition to the projected future year design values at downwind monitors and the selection of top ten future year dates that are part of the significant contribution metrics used in assigning linkages between upwind states and downwind monitors.



**Table 3** and **Table 4** reflect the changes in percent emission reduction across anthropogenic NO<sub>x</sub> emissions by state between the 2016 base year and 2023 projection year in moving from the 2016v2 modeling platform to the 2016v3 platform. Twenty-six (26) states and tribal lands have a lower percent reduction in the updated 2016v3 platform than they did in the 2016v2 platform. Alternately, twenty-four (24) states, inclusive of Washington D.C., have a higher percent reduction in annual anthropogenic NO<sub>x</sub> between the two platforms.

This will also explain why there are differences in the maximum average and maximum relative contribution values from upwind states to downwind monitors, as presented in **Table 5**, and why new states are now associated with linkages to downwind monitors when in the proposal they were not.

MOG objects to the changes made between the 2016v2 and 2016v3 modeling platforms (both base year and projection year emissions and resulting modeling) without an opportunity for public comment. These changes were significantly significant that the revisions do not simply constitute "...additional fact gathering merely supplement[ing] information in the rulemaking record by checking or confirming prior assessments without changing methodology."<sup>5</sup> Indeed the revised platform amounts to an entirely new methodology and clearly should have been subject to notice and comment under the Administrative Procedures Act.

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<sup>5</sup> EPA-HQ-OAR-2021-0668-1127, page 906

**Table 1. Ozone Season NOx Emissions and Emissions Change Between 2016v2 and 2016v3 Modeling Platform for both Base Year (2016) and Future Year (2023)**

State	Ozone Season NOx Emissions (Tons)				Ozone Season NOx Change			
	2016v2	2016v3	2023v2	2023v3	2016v3-2016v2	2016v3-2016v2 (%)	2023v3-2023v2	2023v3-2023v2 (%)
Alabama	96,083	95,881	66,312	62,236	-202	-0.2%	-4,076	-6.1%
Arizona	68,422	70,468	38,612	45,689	2,046	3.0%	7,077	18.3%
Arkansas	69,147	71,390	43,202	48,316	2,243	3.2%	5,114	11.8%
California	204,664	206,798	139,593	143,158	2,134	1.0%	3,565	2.6%
Colorado	75,917	83,459	53,121	53,682	7,542	9.9%	562	1.1%
Connecticut	17,471	17,624	11,820	11,320	152	0.9%	-500	-4.2%
Delaware	10,054	10,507	6,878	7,001	453	4.5%	123	1.8%
District of Columbia	1,930	1,812	1,390	1,158	-118	-6.1%	-232	-16.7%
Florida	171,769	174,273	100,080	99,464	2,505	1.5%	-615	-0.6%
Georgia	113,167	117,678	67,589	74,320	4,511	4.0%	6,731	10.0%
Idaho	29,282	30,394	19,622	19,977	1,113	3.8%	355	1.8%
Illinois	139,357	142,753	97,086	93,730	3,395	2.4%	-3,355	-3.5%
Indiana	128,933	134,756	73,491	80,266	5,822	4.5%	6,775	9.2%
Iowa	65,573	71,902	46,836	51,561	6,328	9.7%	4,725	10.1%
Kansas	91,448	93,921	62,587	62,841	2,473	2.7%	254	0.4%
Kentucky	85,279	89,100	54,506	54,497	3,821	4.5%	-9	0.0%
Louisiana	137,143	138,841	103,038	105,826	1,698	1.2%	2,788	2.7%
Maine	19,913	21,384	14,097	15,739	1,471	7.4%	1,642	11.6%
Maryland	42,823	44,020	25,735	25,546	1,198	2.8%	-188	-0.7%
Massachusetts	40,157	41,700	28,105	30,375	1,543	3.8%	2,269	8.1%
Michigan	113,980	112,845	80,760	74,659	-1,135	-1.0%	-6,101	-7.6%
Minnesota	88,733	90,058	62,656	63,850	1,325	1.5%	1,194	1.9%
Mississippi	56,907	60,394	34,435	37,544	3,487	6.1%	3,110	9.0%
Missouri	119,207	122,725	76,251	78,783	3,518	3.0%	2,532	3.3%
Montana	40,318	41,083	28,408	28,391	765	1.9%	-18	-0.1%
Nebraska	56,857	61,664	43,827	47,930	4,807	8.5%	4,104	9.4%
Nevada	28,578	31,319	18,286	23,066	2,741	9.6%	4,780	26.1%
New Hampshire	10,935	11,453	7,287	7,514	518	4.7%	228	3.1%
New Jersey	53,852	54,415	34,476	34,030	563	1.0%	-447	-1.3%
New Mexico	78,754	79,829	65,186	73,072	1,075	1.4%	7,886	12.1%
New York	97,765	101,403	69,960	69,157	3,639	3.7%	-803	-1.1%
North Carolina	96,518	98,111	58,908	65,920	1,593	1.7%	7,012	11.9%
North Dakota	66,061	76,900	59,167	73,341	10,839	16.4%	14,173	24.0%
Ohio	146,859	146,897	85,480	81,856	38	0.0%	-3,623	-4.2%
Oklahoma	119,254	114,428	90,114	85,520	-4,825	-4.0%	-4,594	-5.1%
Oregon	51,436	52,776	33,155	31,783	1,340	2.6%	-1,372	-4.1%
Pennsylvania	158,968	155,446	107,022	100,143	-3,523	-2.2%	-6,878	-6.4%
Rhode Island	6,907	7,207	4,559	4,601	300	4.3%	42	0.9%
South Carolina	63,731	64,353	43,650	44,381	622	1.0%	731	1.7%
South Dakota	20,222	22,194	12,972	14,390	1,972	9.8%	1,418	10.9%
Tennessee	85,041	88,013	52,389	55,463	2,971	3.5%	3,075	5.9%
Texas	414,349	433,013	305,019	332,363	18,664	4.5%	27,344	9.0%
Tribal Data	17,758	18,396	4,057	5,976	638	3.6%	1,918	47.3%
Utah	53,577	55,852	35,692	40,748	2,275	4.2%	5,056	14.2%
Vermont	5,719	5,951	3,853	3,960	232	4.1%	107	2.8%
Virginia	86,181	88,389	50,590	51,041	2,208	2.6%	451	0.9%
Washington	81,947	83,267	53,412	52,545	1,320	1.6%	-867	-1.6%
West Virginia	57,530	58,024	43,830	47,380	494	0.9%	3,550	8.1%
Wisconsin	70,750	74,786	45,503	49,713	4,036	5.7%	4,210	9.3%
Wyoming	52,120	52,871	34,211	41,055	750	1.4%	6,844	20.0%

**Table 2. Annual NOx Emissions Change by Category between 2016v2 and 2016v3 base year (2016) and projection (2023).**

Category	Annual NOx Emissions (tons) - Sorted by Largest Descending 2023 Change					
	2016v2	2016v3	2023v2	2023v3	16v3-16v2	23v3-23v2
ptegu	1,319,734	1,318,074	594,744	888,700	-1,659	293,956
nonpt	687,946	741,415	696,372	727,245	53,469	30,873
np_oilgas	574,570	587,259	588,341	607,589	12,689	19,248
biogenics	983,247	1,001,873	983,247	1,001,873	18,625	18,625
rail	560,903	560,903	470,433	477,856	0	7,422
nonroad	1,100,099	1,100,099	732,292	737,193	0	4,901
cmv_c3	110,449	112,701	107,597	109,834	2,252	2,237
cmv_c1c2	161,969	163,598	115,960	117,171	1,630	1,211
np_solvents	0	34	0	36	34	36
lightning NOx	2,193,028	2,193,028	2,193,028	2,193,028	0	0
ptagfire	10,238	10,238	10,238	10,238	0	0
ptfire-rx	127,499	127,499	127,499	127,499	0	0
ptfire-wild	100,032	100,032	100,032	100,032	0	0
rwec	35,507	35,500	37,182	37,176	-6	-7
onroad	3,393,967	3,546,455	1,655,871	1,646,311	152,488	-9,560
pt_oilgas	370,112	375,050	405,043	394,719	4,938	-10,324
airports	126,535	123,664	145,590	134,839	-2,870	-10,751
ptnonipm	935,987	916,076	911,106	838,629	-19,912	-72,476
<b>CONUS Total Anthro Only</b>	<b>9,377,777</b>	<b>9,580,827</b>	<b>6,460,531</b>	<b>6,717,298</b>	<b>203,050</b>	<b>256,766</b>
<b>CONUS Total</b>	<b>10,598,793</b>	<b>10,820,469</b>	<b>7,681,548</b>	<b>7,956,940</b>	<b>221,676</b>	<b>275,392</b>

**Table 3. States with Lower % Reduction in Anthropogenic NOx Between 2016 and 2023 in v3 Compared to v2.**

State	Pollutant	Annual Anthropogenic NOx (tons)							
		2016v2	2016v3	2023v2	2023v3	23v2-16v2	23v2-16v2 %	23v3-16v3	23v3-16v3 %
Arizona	NOX	157,442	160,403	92,306	105,786	-65,136	-41%	-54,618	-34%
Arkansas	NOX	157,113	160,931	98,110	111,781	-59,003	-38%	-49,150	-31%
California	NOX	467,225	471,298	323,936	335,102	-143,289	-31%	-136,196	-29%
Georgia	NOX	283,897	290,245	166,882	189,737	-117,014	-41%	-100,507	-35%
Indiana	NOX	303,097	315,093	186,693	206,727	-116,404	-38%	-108,366	-34%
Iowa	NOX	150,893	164,680	110,700	121,205	-40,193	-27%	-43,475	-26%
Louisiana	NOX	317,703	319,603	239,650	247,654	-78,053	-25%	-71,950	-23%
Maine	NOX	46,141	50,670	33,984	38,050	-12,157	-26%	-12,620	-25%
Massachusetts	NOX	98,796	103,151	71,630	77,553	-27,167	-27%	-25,598	-25%
Mississippi	NOX	129,407	136,352	79,649	88,366	-49,758	-38%	-47,986	-35%
Missouri	NOX	273,859	278,452	192,068	195,785	-81,790	-30%	-82,667	-30%
Nebraska	NOX	127,662	138,900	101,049	109,994	-26,613	-21%	-28,906	-21%
Nevada	NOX	63,867	71,346	42,262	54,505	-21,605	-34%	-16,841	-24%
New Hampshire	NOX	27,197	28,893	18,960	20,906	-8,237	-30%	-7,988	-28%
New Mexico	NOX	185,435	187,172	154,452	173,306	-30,984	-17%	-13,866	-7%
North Carolina	NOX	222,147	224,411	137,801	155,593	-84,346	-38%	-68,819	-31%
North Dakota	NOX	145,091	171,161	134,080	167,053	-11,011	-8%	-4,109	-2%
South Dakota	NOX	40,574	45,260	26,692	30,051	-13,883	-34%	-15,209	-34%
Tennessee	NOX	202,374	206,046	128,407	133,857	-73,968	-37%	-72,189	-35%
Texas	NOX	972,637	1,006,973	725,102	788,171	-247,535	-25%	-218,802	-22%
Tribal Data	NOX	41,592	43,121	9,457	13,695	-32,135	-77%	-29,426	-68%
Utah	NOX	124,870	129,596	88,698	95,017	-36,172	-29%	-34,578	-27%
Vermont	NOX	14,502	15,222	10,600	11,172	-3,902	-27%	-4,050	-27%
West Virginia	NOX	138,084	139,128	108,727	116,095	-29,356	-21%	-23,033	-17%
Wisconsin	NOX	168,114	176,794	112,278	121,648	-55,836	-33%	-55,147	-31%
Wyoming	NOX	121,671	123,425	80,271	97,041	-41,400	-34%	-26,383	-21%

**Table 4. States with Greater % Reduction in Anthropogenic NOx Between 2016 and 2023 in v3 Compared to v2.**

State	Pollutant	Annual Anthropogenic NOx (tons)							
		2016v2	2016v3	2023v2	2023v3	23v2-16v2	23v2-16v2 %	23v3-16v3	23v3-16v3 %
Alabama	NOX	224,911	222,682	151,241	144,952	-73,669	-33%	-77,730	-35%
Colorado	NOX	177,964	196,039	126,659	125,259	-51,305	-29%	-70,780	-36%
Connecticut	NOX	44,664	45,005	31,749	30,445	-12,915	-29%	-14,560	-32%
Delaware	NOX	22,760	23,803	15,828	16,090	-6,932	-30%	-7,713	-32%
District of Columbia	NOX	5,203	4,709	4,052	3,267	-1,151	-22%	-1,442	-31%
Florida	NOX	380,574	383,285	225,077	222,330	-155,497	-41%	-160,954	-42%
Idaho	NOX	62,726	64,963	43,322	44,015	-19,403	-31%	-20,949	-32%
Illinois	NOX	338,045	340,996	243,247	231,232	-94,798	-28%	-109,764	-32%
Kansas	NOX	210,114	214,572	145,482	145,242	-64,632	-31%	-69,331	-32%
Kentucky	NOX	200,618	208,488	128,025	130,897	-72,593	-36%	-77,590	-37%
Maryland	NOX	103,261	104,804	64,660	63,258	-38,601	-37%	-41,546	-40%
Michigan	NOX	275,098	269,470	197,770	182,015	-77,328	-28%	-87,456	-32%
Minnesota	NOX	208,362	209,126	150,518	150,440	-57,844	-28%	-58,686	-28%
Montana	NOX	89,415	91,058	63,955	64,107	-25,460	-28%	-26,951	-30%
New Jersey	NOX	134,309	135,700	88,961	88,441	-45,348	-34%	-47,259	-35%
New York	NOX	238,668	246,372	178,005	176,426	-60,663	-25%	-69,946	-28%
Ohio	NOX	348,211	343,048	218,929	205,895	-129,283	-37%	-137,153	-40%
Oklahoma	NOX	276,728	264,936	210,931	199,623	-65,797	-24%	-65,312	-25%
Oregon	NOX	116,394	119,197	76,277	73,793	-40,117	-34%	-45,404	-38%
Pennsylvania	NOX	385,969	374,498	261,160	251,642	-124,809	-32%	-122,856	-33%
Rhode Island	NOX	16,481	17,068	11,306	11,268	-5,174	-31%	-5,800	-34%
South Carolina	NOX	148,448	148,022	103,362	102,115	-45,086	-30%	-45,906	-31%
Virginia	NOX	204,707	209,084	122,977	124,924	-81,730	-40%	-84,160	-40%
Washington	NOX	182,762	185,579	122,596	123,775	-60,165	-33%	-61,804	-33%

**Table 5. Change in largest contribution from each state to downwind nonattainment and maintenance-only receptors in 2023 between 2016v2 and 2016v3 modeling platform results.**

State	Proposed Rule (2016v2)		Final Rule (2016v3)		Change Final - Proposal	
	Largest	Largest	Largest	Largest	Largest	Largest
	Contribution to	Contribution to	Contribution to	Contribution to	Contribution to	Contribution to
	Downwind	Downwind	Downwind	Downwind	Downwind	Downwind
	Nonattainment	Maintenance	Nonattainment	Maintenance	Nonattainment	Maintenance
	Receptors	Receptors	Receptors	Receptors	Receptors	Receptors
Alabama	0.88	0.71	0.75	0.65	-0.13	-0.06
Arizona	0.40	0.21	0.54	1.69	0.14	1.48
Arkansas	1.00	1.39	0.94	1.21	-0.06	-0.18
California	34.24	7.44	35.27	6.31	1.03	-1.13
Colorado	0.07	0.20	0.14	0.18	0.07	-0.02
Connecticut	0.01	0.21	0.01	0.01	0.00	-0.20
Delaware	0.53	1.36	0.44	0.56	-0.09	-0.80
District of Columbia	0.04	0.07	0.03	0.04	-0.01	-0.03
Florida	0.16	0.15	0.50	0.54	0.34	0.39
Georgia	0.16	0.17	0.18	0.17	0.02	0.00
Idaho	0.55	0.57	0.42	0.41	-0.13	-0.16
Illinois	18.13	18.55	13.89	19.09	-4.24	0.54
Indiana	6.60	7.10	8.90	10.03	2.30	2.93
Iowa	0.64	0.58	0.67	0.90	0.03	0.32
Kansas	0.42	0.59	0.46	0.52	0.04	-0.07
Kentucky	0.83	0.88	0.84	0.79	0.01	-0.09
Louisiana	5.39	7.03	9.51	5.62	4.12	-1.41
Maine	0.01	0.01	0.02	0.01	0.01	0.00
Maryland	1.29	2.40	1.13	1.28	-0.16	-1.12
Massachusetts	0.30	0.30	0.33	0.15	0.03	-0.15
Michigan	1.27	1.67	1.59	1.56	0.32	-0.11
Minnesota	0.50	0.97	0.36	0.85	-0.14	-0.12
Mississippi	1.04	1.14	1.32	0.91	0.28	-0.23
Missouri	1.08	1.66	1.87	1.39	0.79	-0.27
Montana	0.08	0.11	0.08	0.10	0.00	-0.01
Nebraska	0.26	0.36	0.20	0.36	-0.06	0.00
Nevada	0.89	0.58	1.11	1.13	0.22	0.55
New Hampshire	0.10	0.06	0.10	0.02	0.00	-0.04
New Jersey	8.85	5.79	8.38	5.79	-0.47	0.00
New Mexico	0.30	0.13	0.36	1.59	0.06	1.46
New York	16.81	1.80	16.10	11.29	-0.71	9.49
North Carolina	0.61	0.33	0.45	0.66	-0.16	0.33
North Dakota	0.12	0.37	0.18	0.45	0.06	0.08
Ohio	1.94	1.88	2.05	1.98	0.11	0.10
Oklahoma	0.57	1.19	0.79	1.01	0.22	-0.18
Oregon	1.10	1.31	0.46	0.31	-0.64	-1.00
Pennsylvania	6.90	0.51	6.00	4.36	-0.90	3.85
Rhode Island	0.04	0.04	0.04	0.01	0.00	-0.03
South Carolina	0.19	0.07	0.16	0.18	-0.03	0.11
South Dakota	0.05	0.09	0.05	0.08	0.00	-0.01
Tennessee	0.60	0.94	0.60	0.68	0.00	-0.26
Texas	1.72	1.81	1.03	4.74	-0.69	2.93
Utah	1.37	0.10	1.29	0.98	-0.08	0.88
Vermont	0.02	0.02	0.02	0.01	0.00	-0.01
Virginia	1.77	1.63	1.16	1.76	-0.61	0.13
Washington	0.34	0.40	0.16	0.09	-0.18	-0.31
West Virginia	1.45	1.44	1.37	1.49	-0.08	0.05
Wisconsin	0.19	2.61	0.21	2.86	0.02	0.25
Wyoming	0.81	0.19	0.68	0.67	-0.13	0.48

**IX. EPA's failure to conduct new photochemical modeling of air quality improvements related to twenty-eight states is a fatal flaw.**

While EPA elected to use photochemical modeling in support of the 23 state final FIP, at no time has EPA rerun or published the results from photochemical modeling simulations including either fewer (11) or more (28) states. Instead, calculations made with the simplified Air Quality Assessment Tool (AQAT) were presented as "air quality results" for these alternate number of state cases. EPA justified the use of the AQAT stating that "[t]he use of AQAT and other simplified modeling tools to generate "appropriately reliable projections of air quality conditions and contributions" when there is limited time to conduct full-scale photochemical grid modeling. In this case, however, EPA would have had time to perform proper photochemical modeling if it had not been under a completely self-imposed schedule to promulgate the FIP, despite the fact that the CAA allows two years. In this case, EPA proposed the FIP less than 60 days after its SIP disapprovals. Surely in the allowable two years, EPA could have performed actual and appropriate photochemical modeling, but it chose not to do so.

EPA has clearly recognized that photochemical air quality modeling of ozone is a complex process and states in this rule that photochemical modeling would be the "optimal way to estimate the air quality impacts at each cost threshold level from EGU and non-EGU emissions reductions."<sup>6</sup> Instead, the agency chose to apply multiple layers of calibration factors to an historical modeling analysis conducted during the proposed rule phase to replicate the complexities of non-linear ozone chemistry for the final rule.

The final calibration (e.g., rate of ozone improvement compared to NOx emissions reduction) of the simplified AQAT fails to account for the emissions magnitude and distribution of emission sources from the final rule's updated modeling platform and projections (2016v3, which is different than the 2016v2 platform) and the resulting differing impact of air quality improvement as compared to the location within a state where upwind emission reductions are occurring or to the particular characteristics of the emission sources being controlled. In other words, the type and location of emission sources and their reductions makes a difference to downwind ozone formation. Having more or fewer states in the

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<sup>6</sup> Federal "Good Neighbor Plan" for the 2015 Ozone National Ambient Air Quality Standards Response to Public Comments on Proposed Rule [87 FR 20036, April 6, 2022] at page 909.



modeled scenarios certainly influenced the resulting downwind air quality within the modeling domain.

EPA's failure to perform photochemical modeling in support of both the final FIP and the additional states subject to this rule is a fatal flaw and results in technically unsupportable results.

**X. EPA's failure to include the most recent on-the-books/on-the-way control requirements renders its air quality analysis void.**

EPA's simulation of on-the-books/on-the-way controls used in the Step 1 and Step 2 transport framework process, comprised of promulgated rules and associated emission reductions at the time of the rulemaking, does not include downwind state delayed nonattainment controls. By omitting these emission reductions from the future year platforms, the burden for additional control has been inappropriately and illegally shifted to upwind states linked to these downwind locations. (See *EME Homer City*, 572 US 489).

Like the influence of the number of states included in the ultimate control strategy devised to support the regulation, individual state emission reductions associated with nonattainment control programs within those states ultimately influence downwind ozone concentrations and the relative contribution of upwind states to those downwind receptors. By omitting delayed downwind nonattainment control programs from the modeling projections, a greater burden has been placed on upwind states to control their emissions to offset these overdue programs, i.e., the upwind states are overcontrolled.

EPA's projections for 2023 and 2026 in the final rule were based on promulgated data as of approximately December 2022. Since that time, multiple additional regulations, on local, state, and national levels have been promulgated and are absent from being accounted for in the final FIP modeling projections. These additional regulations have an impact on both Step 1 and Step 2 of the transport framework in developing future year design values and state-to-state contribution linkages.

As noted in the discussion related to the failure to include delayed nonattainment program control, these latest on-the-books controls would influence the modeled downwind concentrations, potentially bringing many of these monitors into attainment with the ozone NAAQS and, potentially eliminating some downwind



monitors from being in nonattainment and the concomitant need for required additional control.

**XI. EPA’s source apportionment modeling only on a state basis – and not by source— results in inappropriate additional EGU and non-EGU control requirements that have limited or no significant impact on air quality.**

EPA’s ozone source apportionment modeling was generated using state-total emission contributions, not state-level source sector or individual source category modeling, and therefore does not adequately represent the non-linear contribution of source types, source locations, or source emission and speciation profiles in the downwind ozone concentration calculations used to determine the effectiveness of EGU and non-EGU controls.

The 30% NO<sub>x</sub> simulation cited by EPA and used to “calibrate” reductions in EPA’s use of the AQAT also fails to account for source location or individual source types within the EGU or non-EGU category. By failing to generate source apportionment or controlled source-specific photochemical modeling results, EPA’s findings fail to adequately capture the air quality changes associated with the specific sector and source controls required in the final rule.

In its ozone policy technical support document, EPA outlines these very limitations in the use of the AQAT for this purpose, stating that “[t]he relationship between NO<sub>x</sub> emissions and ozone concentrations is known to be non-linear when examined over large ranges of NO<sub>x</sub> emissions...” but adding that, “*[i]n this assessment tool, we are assuming a linear relationship between NO<sub>x</sub> emissions and ozone concentrations calibrated between two CAMx simulations.* A significant portion of the nonlinearity is accounted for by using the calibration factors and having the air quality estimates occur at levels of emissions between the 2026 base case and the other case used in the calibration (which were both modeled in CAMx) ...”<sup>7</sup> (emphasis supplied).

EPA assumes that the downwind air quality improvement is indifferent to the geographic location and to the physical characteristics of the emission source within the state where a particular ton was reduced. The location and characteristics of individual facilities do have significant impact on the downwind transport and

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<sup>7</sup> Technical Support Document (TSD) for the Proposed Federal Implementation Plan Addressing Regional Ozone Transport for the 2015 Ozone National Ambient Air Quality Standard Docket ID No. EPA-HQ-OAR-2021-0668, February 2022 at pages 32 and 33.

influence of emissions. Reduction in the emissions from these sources, as captured within a photochemical modeling simulation, is ignored in the AQAT results as these individual source specific reductions are not adequately simulated.

EPA also assumes that the emissions are reduced proportionally across the ozone-season and are not preferentially eliminated on particular days or at particular hours. Use of photochemical modeling to simulate these reductions at individual EGU and non-EGU facilities would have captured the daily and diurnal distribution of emissions and associated emission reductions, altering the downwind concentrations and design values and the relative contribution of upwind states to downwind receptors.

Additionally, EPA assumes that the air quality impact is indifferent to height of release or to the particular source sector from which it was reduced. For example, reducing one ton of NO<sub>x</sub> emissions from the power sector is assumed to have the same downwind ozone reduction as reducing one ton of NO<sub>x</sub> emissions from the non-EGU source sector or from mobile sources. The calibration scenario presumed an emissions reduction from all EGU and non-EGU source types, not just those identified for control in the rule, and therefore technically inaccurately combine reductions from low level and elevated sources, regulated and non-regulated sources, and sources with existing control and uncontrolled sources equally. The reality is that the AQAT cannot discern the impact of specific source emissions control as well as a photochemical modeling simulation would.

For the aforementioned reasons, MOG believes that use of AQAT instead of proper photochemical modeling is an insurmountable technical and thus terminal flaw in the EPA air quality analysis.

**XII. EPA has documented state-level emission budgets for 2026 in the final rule federal register and policy TSD that are not consistent with the state-level emission budgets in 2026 provided with the docketed version of the AQAT for several states.**

Differences found in Nevada, Texas, Utah, and Wisconsin state-level budgets and results from the various analyzed control strategies, make it is unclear whether EPA has adequately modeled resulting air quality improvements at downwind receptors consistent with the budgets published in the final rule. EPA's response to the issue is as follows:

“Some small differences are expected, as footnote 32 of the Ozone Transport Policy Analysis TSD says that “The AQAT estimates in the workbook are based on EGU emission estimates completed on Jan 20, 2023 and may not represent the final emission estimates used in the rule.” There were a handful of changes to unit level data, including emissions from new units, in the engineering analysis between the version used for the AQAT analysis and the final version that produced Table B-12.

In addition, as referenced in the notes for Table A-1 in the Ozone Transport Policy Analysis TSD, “In recognition of Utah’s lack of state jurisdiction over an existing EGU in the Uintah and Ouray Reservation, the effects of the rule for that facility are presented independently from Utah in this document and fall under the descriptor “tribal” or “tribal data.” In the case of Table B-12, the tribal data are included in the Utah emission value.”

MOG believes that the differences in state-level emission budgets in 2026 between state-level emission budgets for 2026 in the final rule federal register and policy TSD and the docketed version of the AQAT for Nevada, Texas, Utah, and Wisconsin state-level budgets are not simply “small differences” that are to be “expected.” These differences are significant and result in the imposition of unnecessary and inappropriate additional controls in those states, all of which compound the technical errors in the rule.

### **XIII. EPA has failed to properly consider grid reliability and the related impact on the economy.**

RTOs and similar organizations have also issued warnings of high prices and possible blackouts when the FIP was initially proposed by EPA. MISO, ERCOT, PJM, NERC, and SPPC made EPA aware of their specific concerns through public comments in 2022. However, EPA continues to neglect the feedback of these organization and further, has failed to consider these issues about grid reliability in a meaningful way – despite reliability being a paramount issue for all economic sectors as well as the American citizenry.

MOG shares the concerns expressed by RTO’s and others about electric reliability. MOG is particularly concerned that the EPA has failed to properly assess how its proposed rule will impact on electricity reliability. This is a particular concern given the marginal air quality improvement represented by EPA’s

rulemaking and the fundamental flaws in the manner in which the FIP and associated proposals (such as the one at issue here) have been developed.

MOG believes that it is essential that in assessing the final version of this proposed rule that EPA assure that its plan does not interfere with the reliability of the electric power grid. EPA must engage with RTOs to ensure that grid reliability is maintained and preserved in the implementation of each of its regulatory actions.

**XIV. Placing additional NO<sub>x</sub> controls on EGU and non EGU stationary sources will have no meaningful impact on air quality in downwind nonattainment and maintenance areas.**

Likely because of the insignificantly small air quality improvement calculated by EPA with respect to the 5-state controls, EPA choose not to print the results spreadsheet in the ozone policy Technical Support Document<sup>8</sup> and instead point the reader to the AQAT results<sup>9</sup> spreadsheet in the docket. As we have seen before, the complexity of the spreadsheet makes it unreasonably difficult for most individuals to be able to determine the final values. A summary of the results extracted from the supplemental AQAT results spreadsheet are presented in **Table 6**.

EPA lists nineteen (19) downwind monitors (seventeen with projection year data) linked to the supplemental five (5) states. Table 1 provides a list of these monitors with base year and modeled projection year average and maximum ozone design values, as well as the 2021 and 2022 fourth high and three-year average design values used in determining a violating maintenance monitor.

**Table 7** presents a summary of estimated design values for various scenarios and configurations for 2023 for violating and modeled monitor receptors.

In the AQAT results workbook, EPA also publishes a summary of the estimated air quality contributions for various scenarios and configurations for 2023 for various aggregations of receptors. **Table 8** presents the maximum contribution of each of the five states to any linked violating and modeled monitor receptors.

As can be seen in **Table 8**, the maximum contribution to any linked violating or modeled monitor receptors does not change compared to the 2023 base case in Kansas, New Mexico, and Tennessee with the FIP strategy case. The maximum

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<sup>8</sup> EPA-HQ-OAR-2023-0402-0022.

<sup>9</sup> EPA-HQ-OAR-2023-0402-0016.

contribution to any linked violating or modeled monitor receptors from Arizona and Iowa decreases by a nominal 0.01 ppb from the 2023 base case because of the FIP strategy case. Comparable results are shown in EPA's worksheet representing the maximum contribution to any Arizona linked violating or modeled monitor where a nominal 0.01 ppb improvement is seen compared to the 2026 base case. *See Table 9.*

**Table 6. Monitors linked to the supplemental five states.**

<b>Site ID</b>	<b>State</b>	<b>County</b>	<b>2016- Centered Avg</b>	<b>2016- Centered Max</b>	<b>2023gf Avg</b>	<b>2023gf Max</b>	<b>2021 DV</b>	<b>2022 DV</b>	<b>2021 4th</b>	<b>2022 4th</b>
80690011	Colorado	Larimer	75.7	77	70.9	72.1	77	77	85	73
170310001	Illinois	Cook	73.0	77	68.2	71.9	71	72	68	73
170310032	Illinois	Cook	72.3	75	67.3	69.8	75	75	77	72
260050003	Michigan	Allegan	73.7	75	66.2	67.4	75	75	78	73
320030043	Nevada	Clark	72.0	73	68.4	69.4	73	75	74	74
350011012	New Mexico	Bernalillo	66.7	69	63.8	66.0	72	73	76	74
350130008	New Mexico	Dona Ana	67.3	68	65.6	66.3	72	76	79	78
350130021	New Mexico	Dona Ana	72.7	74	70.8	72.1	80	81	86	80
350130022	New Mexico	Dona Ana	71.3	74	69.7	72.4	75	75	79	75
350151005	New Mexico	Eddy	69.7	74	69.7	74.1	77	77	80	79
350250008	New Mexico	Lea	67.7	70	69.8	72.2	66	66	68	72
480850005	Texas	Collin	74.3	75	65.4	66.0	75	74	81	73
481130075	Texas	Dallas	73.7	75	65.3	66.5	71	71	73	72
481211032	Texas	Denton	74.0	76	65.9	67.7	76	77	85	77
481410037	Texas	El Paso	71.3	73	69.8	71.4	75	-	73	-
484390075	Texas	Tarrant	71.0	72	63.8	64.7	75	76	76	77
484392003	Texas	Tarrant	73.3	74	65.2	65.9	72	72	74	72
550590019	Wisconsin	Kenosha	78.0	79	70.8	71.7	74	75	79	70
550590025	Wisconsin	Kenosha	73.7	77	67.6	70.7	72	73	72	71

**Table 7. Summary of estimated design values for various scenarios and configurations for 2023 for violating and modeled monitor receptors.**

Site ID	State	County	2023_st ep3_bas e	2023_st ep3_SC Ropt	2023_st ep3_SC Roptw CC	2023_s tep3_S NCRo pt	2023_st ep3_SN CRopt wCC	2023_s tep3_ newS CR	2023_st ep3_ba se_wI RA	2023_st ep3_ne wSCR_ wIRA
80690011	Colorado	Larimer	70.79	70.78	70.78	70.78	70.78	70.25	70.83	70.36
170310001	Illinois	Cook	68.13	68.11	68.11	68.11	68.11	67.92	68.14	67.95
170310032	Illinois	Cook	67.18	67.14	67.13	67.14	67.14	66.95	67.19	66.99
260050003	Michigan	Allegan	66.22	66.03	66.03	66.03	66.02	65.59	66.22	65.67
320030043	Nevada	Clark	68.19	68.17	68.16	68.16	68.16	67.98	68.22	68.05
350011012	New Mexico	Bernalillo	63.84	63.83	63.83	63.84	63.84	63.85	63.84	63.82
350130008	New Mexico	Dona Ana	65.62	65.61	65.61	65.61	65.61	65.41	65.62	65.44
350130021	New Mexico	Dona Ana	70.83	70.82	70.82	70.82	70.82	70.61	70.83	70.64
350130022	New Mexico	Dona Ana	69.73	69.72	69.72	69.72	69.72	69.51	69.73	69.54
350151005	New Mexico	Eddy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
350250008	New Mexico	Lea	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
480850005	Texas	Collin	65.53	65.50	65.49	65.50	65.49	65.08	65.52	65.11
481130075	Texas	Dallas	65.43	65.40	65.38	65.40	65.38	64.85	65.42	64.89
481211032	Texas	Denton	66.04	65.98	65.97	65.98	65.96	65.50	66.02	65.54
481410037	Texas	El Paso	69.82	69.82	69.81	69.81	69.81	69.57	69.82	69.60
484390075	Texas	Tarrant	63.91	63.88	63.86	63.88	63.86	63.41	63.90	63.45
484392003	Texas	Tarrant	65.31	65.29	65.27	65.28	65.26	64.76	65.30	64.80
550590019	Wisconsin	Kenosha	70.75	70.65	70.65	70.65	70.65	70.42	70.75	70.47
550590025	Wisconsin	Kenosha	67.60	67.51	67.51	67.51	67.51	67.31	67.60	67.34



**Table 8. Maximum contribution in 2023 of each of the five states to any linked violating or modeled monitor receptors.**

ST	2023_st ep3_ base	2023_st ep3_ SCRopt	2023_st ep3_ _SCRo ptwCC	2023_st ep3_ _SNCRo pt	2023_st ep3_ _SNCR optwC C	2023_st ep3_ newSC R	2023_st ep3_ base_ wIRA	2023_st ep3_ newSC R_wIR A
AZ	1.71	1.70	1.70	1.70	1.70	1.80	1.70	1.76
IA	1.13	1.13	1.13	1.13	1.12	1.02	1.13	1.03
KS	0.82	0.82	0.82	0.82	0.82	0.80	0.82	0.80
NM	1.59	1.59	1.59	1.59	1.59	1.58	1.59	1.58
TN	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85

**Table 9. Maximum contribution in 2026 of Arizona.**

ST	2026_st ep3_ base	2026_st ep3_ SCR_su pp	2026_st ep3_ SCRopt wCC _supp	2026_st ep3_ _SNCRo pt _supp	2026_st ep3_ _SNCRo pwCC _supp	2026_st ep3_ newSC R	2026_st ep3_ newSC Rwnon EGU	2026_st ep_ nonEG U1st _supp
AZ	0.88	0.88	0.88	0.88	0.88	0.84	0.83	0.87

## **XV. Conclusion**

Based on the comments, MOG takes the position that the proposed Supplemental Air Plan Actions: Interstate Transport of Air Pollution for the 2015 8-Hour Ozone National Ambient Air Quality Standards and Supplemental Federal “Good Neighbor Plan” Requirements for the 2015 8- Hour Ozone National Ambient Air Quality Standards is fatally flawed both legally and technically and should be withdrawn.