# Comments of the Power Generators Air Coalition on EPA's Proposed Rule Revising the "National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units"

## 90 Fed. Reg. 25,535 (June 17, 2025)
## Docket ID No. EPA-HQ-OAR-2018-0794

---

The Power Generators Air Coalition ("PGen") respectfully submits these comments to the U.S. Environmental Protection Agency ("EPA" or the "Agency") on its proposed rule entitled "National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units" ("Proposed Rule" or "Proposal").[1] This action proposes to repeal specific amendments to the Mercury and Air Toxics Standards ("MATS") rule promulgated on May 7, 2024. In 2012, EPA promulgated new national emission standards for hazardous air pollutants ("HAPs") from coal- and oil-fired electric steam generating units ("EGUs"). The 2024 amendments EPA proposes to repeal include a revised filterable particulate matter ("fPM") emissions standard, a revised fPM emission standard compliance demonstration requirement to use exclusively particulate matter continuous emissions monitoring systems ("PM CEMS"), and the revised mercury ("Hg") emissions standard for lignite-fired EGUs. PGen supports the repeal of these amendments.

PGen is an incorporated nonprofit 501(c)(6) organization whose members are diverse electric generating companies – public power, rural electric cooperatives, and investor-owned utilities – with a mix of solar, wind, hydroelectric, nuclear, and fossil generation. PGen is a collaborative effort of electric generators to share information and expertise in the interest of effectively managing air emissions to meet and exceed environmental laws and regulations and

[1] 90 Fed. Reg. 25,535 (June 17, 2025).

in the interest of informing sound regulation and public policy.[2] PGen as an organization does not participate in legislative lobbying or litigation. PGen and its members work to ensure that environmental regulations support a clean, safe, reliable, and affordable electric system for the nation.

PGen members own and operate EGUs that are directly regulated by the MATS rule. PGen is uniquely qualified to comment on aspects of the Proposal because its members have owned and operated EGUs for decades and are subject to various provisions of the Clean Air Act ("CAA" or the "Act"). PGen submitted extensive comments on the 2024 rulemaking that this Proposal seeks to repeal.[3] PGen members have committed substantial resources to meet and maintain compliance with MATS. PGen submits these comments to communicate the perspective of its members on EPA's Proposal.

## I. Background

Section 112 of the CAA[4] grants EPA authority to set emissions standards for HAPs for certain categories of stationary sources. The purpose of regulating HAPs is to prevent the "threat of adverse human health effects" or "adverse environmental effects" from HAP emissions.[5] When regulating HAP emissions under Section 112, EPA first sets standards based on what is achievable with available technology.[6] EPA is directed by statute to review its standards every

[2] Additional information on PGen and its members can be found at https://pgen.org/.

[3] *See* PGen Comments on EPA's Proposed Rule: NESHAP Coal- and Oil- Fired Electric Utility Steam Generating Units Review of the Residual Risk and Technology Review, Docket ID No. EPA-HQ-OAR-2018-0794-5994 (June 23, 2023) ("PGen 2023 Comments"). These comments are relevant to this rulemaking and are hereby incorporated by reference. They are not attached herein since they were filed in the same docket as this action.

[4] 42 U.S.C. § 7412.

[5] 42 U.S.C. § 7412(b)(2)-(3).

[6] 42 U.S.C. § 7412(d)(2) (requiring standard based on the maximum achievable control technology, or "MACT").

eight years thereafter to determine whether revisions to the standards are "necessary," taking into account, "developments in practices, processes, and control technologies."[7] At the first of those reviews, EPA must also evaluate residual risk to human health and the environment, and revise the standards if that "is required in order to provide an ample margin of safety to protect public health."[8] Together, this is known as the Residual Risk and Technology Review ("RTR").

EPA treats a health risk as "'presumptively acceptable'" for purposes of Section 112(f)(2) if "no individual would face an excess lifetime cancer risk of greater than 100-in-one million."[9] If risks are acceptable, EPA also evaluates whether there is an "ample margin of safety" by considering the number of persons subject to a greater than one-in-one million risk and other relevant factors, including costs, economic impacts, and technological feasibility.[10] The Administrator may delist a source category from regulation under Section 112 upon a determination that the quantities of HAP emitted by any source in that category do not "cause a lifetime risk of cancer greater than one in one million to the individual in the population who is most exposed" and do not exceed a level which is "adequate to protect public health with an ample margin of safety and no adverse environmental effect will result from emissions from any source."[11]

EPA promulgated the National Emissions Standards for Hazardous Air Pollutants ("NESHAP") for coal- and oil-fired EGUs on February 16, 2012.[12] These are known as the Mercury and Air Toxics Standards ("MATS"). The 2012 MATS established emissions limits for

---

[7] *Id.* at § 7412(d)(6).
[8] *Id.* at § 7412(f)(2).
[9] *NRDC v. EPA*, 529 F.3d 1077, 1080 (D.C. Cir. 2008).
[10] *Id*. at 1082.
[11] 42 U.S.C. § 7412(c)(9)(B)(i).
[12] 90 Fed. Reg. at 25,538.

Hg, acid gas HAPs, non-Hg HAP metals, and organic HAPs. Standards for fPM are a surrogate for non-Hg HAP metals.

In 2020, EPA satisfied its statutory directive to review residual risk and technological developments and finalized the RTR for MATS ("2020 MATS RTR").[13] In doing so, EPA found the residual risk to be well below statutory thresholds, and that the 2012 standards provided an "ample margin of safety to protect public health" and to prevent adverse environmental effects.[14] Notably, while the residual risk for the entire category was above one-in-one million (though well less than 100-in-one million threshold for ample margin of safety), the lifetime cancer risk of the person most exposed to coal-fired HAP emissions in the country was 0.344-in-one million—significantly lower than the one-in-a-million threshold that would justify delisting. Under the technology portion of the review, EPA conducted a thorough review and determined there to be no new developments in practices, processes, and control technologies in this well-established, mature industry to warrant considering revised standards under section 112(d)(6).[15]

A new administration shortly thereafter decided in 2023 to reconsider the 2020 RTR and to re-review the residual risk and technology for EGUs. EPA confirmed that the residual risk analysis conducted in 2020 was robust and demonstrated an ample margin of safety.[16] EPA reversed course on the technology review, however, claiming that technological developments

[13] 85 Fed. Reg. 31,286 (May 22, 2020).

[14] *See* 90 Fed. Reg. at 25,538-39.

[15] 85 Fed. Reg. at 31,318-19; *See also* 84 Fed. Reg. 2670, 2700 (Feb. 7, 2019) (evaluating technology developments for EGUs and proposing to determine that no developments justified revision under Section 112(d)(6)).

[16] 88 Fed. Reg. at 24,865 (proposal); 89 Fed. Reg. 38,508, 38,518 (final rule) (May 7, 2024) (stating "[a]s the EPA explained in the proposal, the EPA found in the 2020 RTR that risks from the Coal- and Oil-Fired EGU source category due to emissions of air toxics are acceptable and that the existing NESHAP provides an ample margin of safety to protect public health")

warranted revisions to the standards applicable to coal-fired EGUs.[17] This was despite finding no discernible changes in the PM or Hg control technology for EGUs[18]; evidence that the program and 2012 standards had, to date, been remarkably successful (data from 2019 showed that regulated EGUs reduced their mercury emissions by 86 percent, acid gas HAP emissions by 96 percent, and non-mercury metal HAP emissions by 81 percent[19]); and residual risk from coal-fired EGU HAP emissions was well below one-in-one million.[20] The 2024 MATS RTR final rule has been challenged by a number of states, industry organizations, and EGU owners and operators.[21]

EPA now proposes to reconsider and repeal the amendments promulgated in the 2024 MATS RTR.[22] EPA bases this proposal on determinations that the cost-effectiveness of the revised fPM standard is significantly higher than cost-effectiveness ratios EPA has rejected in the past,[23] the PM CEMS requirement is costly and unnecessary,[24] and the revised Hg emission limit for lignite-fired EGUs was based on insufficient data.[25] PGen supports each of these

[17] *See* 89 Fed. Reg. at 38,530.

[18] 88 Fed. Reg. at 24,862 ("Generally, commenters were unaware of new technologies, but indicated that current technologies are more widely used, more effective, and cheaper than at the time of the adoption of MATS.").

[19] 88 Fed. Reg. at 24,857.

[20] EPA, Residual Risk Assessment for the Coal- and Oil-Fired EGU Source Category in Support of the 2020 Risk and Technology Review Final Rule, at Table 2a (Sept. 2019) (Docket ID No. EPA-HQ-OAR-2018-0794-5786).

[21] *North Dakota v. EPA*, No. 24-1119 and consolidated cases (D.C. Cir.). The case was fully briefed and is now in abeyance pending this rulemaking. The objections to the 2024 MATS RTR are substantial and many. We attach the Petitioners Opening Brief (Attachment A) and Reply Brief (Attachment B) to these comments.

[22] 90 Fed. Reg. at 25,535.

[23] *Id.* at 25,540.

[24] *Id.* at 25,541.

[25] *Id.* at 25,543.

determinations. As discussed below, PGen also submits there are additional reasons for repealing the 2024 MATS RTR that EPA should adopt.

## I. EPA Has Ample Authority to Reconsider, Revise, or Repeal the 2024 MATS RTR.

As EPA notes in its proposed rule, the Agency is well within its authority to review and reconsider past regulations.[26] Generally, courts have found that an agency can reappraise a previous decision so long as it follows administrative procedural requirements, provides a reasoned basis for doing so, and does not jeopardize serious reliance interests.[27] Here, EPA is pursuing the proper rulemaking course. Additionally, EPA provides well-reasoned bases for repealing the 2024 Final Rule standards (and there are more well-reasoned bases than those in the proposal), and there are no serious reliance interests threatened by returning to the 2020 MATS RTR determination.

As discussed in more detail in Section IV, EPA justifies its position that the new fPM standard's cost effectiveness is inconsistent with prior technology review determinations.[28] The $10.5 million per ton of non-Hg HAP metals it would cost to achieve a 0.010 lb/MMBtu fPM limit is indeed more than the cost effectiveness rejected for the Petroleum Refinery Sector technology review ($10 million per ton of total non-Hg HAP metals reduced) and the Integrated Iron and Steel Manufacturing Facilities technology review ($7 million per ton of total non-Hg metals reduced). There are no RTRs that found costs even remotely comparable to those EPA

[26] We also note that the 2024 MATS RTR similarly reversed course following a change in administration.

[27] See *FDA* v. *Wages & White Lion Invs., L.L.C.,* 145 S. Ct. 898, 917 (2025) (finding that agencies may change their policy so long as they provide a reasoned basis for the new policy, acknowledge the change, and consider serious reliance interests); *Nat'l Ass'n of Home Builders* v. *EPA,* 682 F.3d 1032, 1043 (D.C. Cir. 2012).

[28] 90 Fed. Reg. at 25,541.

found reasonable in the 2024 MATS RTR.[29] In other words, this Proposed Rule is consistent with previous agency RTR cost effectiveness determinations, and the 2024 MATS RTR is not. Consistency is one of the hallmarks of reasoned decisionmaking.

In the current proposal, EPA justifies repealing the provisions requiring PM CEMS as the only compliance demonstration methodology for fPM under MATS and reinstating other methods (such as quarterly stack tests) on the basis that the increased cost of PM CEMS does not justify its purported benefits.[30] Such an assessment clearly provides a reasoned justification for EPA's determination.[31]

Finally, EPA proposes to revoke the reduced lignite-Hg standard from 4.0 lb/TBtu to 1.2 lb/TBtu based on insufficient data demonstrating the revised standard is achievable.[32] As further discussed in section VI, this provides a reasoned basis for EPA's proposed action.

Finally, EPA's action does not threaten any serious reliance interests. The compliance date for the 2024 MATS RTR is almost two years from now.[33] EPA's action returns the standards to those with which regulated parties complied for over a decade prior to the 2024 MATS RTR.

---

[29] Nor did EPA or any commenter identify any such RTRs. *See generally* 88 Fed. Reg. at 24,871 (instead relying on the rationale that costs "represent a very small fraction of typical capital and total expenditures for the power sector").

[30] 90 Fed. Reg. at 25,542.

[31] *See Michigan v. EPA*, 576 U.S. 743, 753 (faulting EPA for failing to "consider whether the costs of its decision outweighed the benefits").

[32] 90 Fed. Reg. at 25,543.

[33] Further, the President has issued proclamations postponing under CAA section 112(i)(4) the MATS RTR compliance date by an additional two years for several coal-fired EGUs. *See* Proclamation 10914 of April 8, 2025: Regulatory Relief for Certain Stationary Sources To Promote American Energy, 90 Fed. Reg. 16,777 (Apr. 21, 2025); Proclamation 10956 of July 17, 2025, Regulatory Relief for Certain Stationary Sources To Further Promote American Energy, 90 Fed. Reg. 34,583 (July 23, 2025).

EPA is therefore well within its authority to reconsider and repeal the 2024 standards.

## II. EPA Should Reaffirm Its 2020 Determination that There Have Been No Technology Developments to Justify Revision of Any MATS Standards Under Section 112(d)(6).

EPA may revise the MATS standards under section 112(d)(6) if it can identify developments in practices, processes, and control technologies that justify the revisions.[34] While EPA conceded that it found none in 2020, EPA still revised the standards in the 2024 MATS RTR on the grounds that affected facilities were generally producing emissions below the standard and at lower-than-expected costs.[35] EPA claimed these observation constituted "developments" warranting reduced emissions limits.[36] As PGen's 2023 comments[37] noted, this is wrong. Overcompliance and lower-than-estimated costs for compliance are inconsistent with the types of "development" found in the prior technology review rulemakings that EPA itself cited. EPA pointed to the Coke Oven Batteries RTR,[38] the Ferroalloy Production RTR,[39] and the Wool Fiberglass Manufacturing RTR[40] to support its position. All three, however, identified changes in processes, practices, or control technologies that warranted revised standards.[41] In the 2024 MATS rule, EPA did not identify any new developments in processes, practices, or control technologies.

---

[34] 42 U.S.C. § 7412(d)(6).

[35] 88 Fed. Reg. at 24,857.

[36] Id.

[37] PGen 2023 Comments at 15.

[38] National Emission Standards for Coke Oven Batteries, 69 Fed. Reg. 48,338 (proposed Aug. 9, 2004).

[39] National Emission Standards for Hazardous Air Pollutants: Ferroalloys Production, 79 Fed. Reg. 60,238 (Oct. 6, 2014).

[40] National Emission Standards for Hazardous Air Pollutants for Wool Fiberglass Manufacturing; Rotary Spin Lines Technology Review, 82 Fed. Reg. 40,970 (Aug. 29, 2017).

[41] *See* PGen 2023 Comments at 10-11.

Petitioners' brief in the D.C. Circuit challenge to the 2024 MATS RTR further elaborates on this issue. The Petitioners explain that meeting the MATS standards with a compliance margin is not a "development" under Section 112(d)(6) but rather a prudent operational feature to ensure routine emissions fluctuations do not, at any point, exceed a HAP emission standard.[42] In other words, plants must set their targets below the HAP emission standard in order to comply with a Section 112 rule, and they must build a compliance margin into their operations to ensure that the source can meet the emissions standard 100% of the time. Allowing EPA to generally point to that compliance margin as evidence of a "development" without identifying any concrete progress in technology would give EPA unfettered discretion to keep ratcheting down any NESHAP regardless of whether the standard is constantly achievable – or achievable at all – by sources in the industry.[43]

Second, as Petitioners explain, achieving the standard at a lower cost than EPA expected in the original MACT rulemaking is not a development under Section 112(d)(6). To interpret it as a development is inconsistent with the plain meaning of "development"[44]– i.e., with the best interpretation of the language[45] – as well as precedent.[46]

Third, the purported improvements that EPA identified are not developments within the meaning of Section 112(d)(6). Bag filter durability has nothing to do with a standard that must be

[42] *North Dakota v. EPA*, Pet. Br. at 46-47.

[43] Id.

[44] *Am. Heritage Dictionary* (5th ed. 2011), *Development* ("A significant event, occurrence, or change").

[45] See Loper Bright Enters. v. Raimondo, 144 S. Ct. 2,244, 2,273 (2024).

[46] *See North Dakota v. EPA*, Pet. Br. at 48-49 (discussing both judicial and regulatory precedent).

met continuously. Adding bromine to ACI to control mercury emissions has been in use, including at lignite-fired EGUs, since well before MATS was promulgated in 2012.[47]

Finally, EPA should abandon the unreasonable interpretation of *National Association for Surface Finishing*,[48] which the 2024 MATS RTR cites to justify its capacious interpretation of the term "development."[49] As an initial matter, the court in that case specifically noted that the petitioner trade association *did not challenge* EPA's broad interpretation of the term "developments" under Section 112(d)(6).[50] *Surface Finishing* also relied upon the now-defunct "familiar deferential standard announced in *Chevron*."[51] And, in *Surface Finishing*, EPA had in fact identified several new actual advances in technologies in support of its determination that there had been "developments" that warranted a reduction.[52]

In short, while EPA's action here provides ample reasons for repealing the 2024 MATS RTR, we urge EPA to examine all of the bases used to support that action, including the predicate determination that control technology "developments" justify revision of the MATS standards. Not only would such a review provide further support for EPA's action here; it would also provide valuable guidance for future RTR rulemakings.

---

[47] See North Dakota v. EPA, Pet. Br. at 50.

[48] 795 F.3d 1 (D.C. Cir. 2015) (hereinafter "*Surface Finishing*").

[49] 89 Fed. Reg. at 38,521. See additional arguments at *North Dakota v. EPA*, Pet. Br. at 51-53.

[50] Surface Finishing, 795 F.3d at 8.

[51] *Id.* at 7.

[52] *Id.* at 11 (identifying emissions elimination devices, HEPA filters, enclosing tank hoods and fume suppressants as such developments).

## III. The 2024 Amendments Should Be Repealed Because the Residual Risk from Coal-Fired EGUs Is Negligible (i.e., It Is Less than the Risk Threshold for Delisting).

As discussed above, and as acknowledged repeatedly by EPA (in the 2020 MATS RTR, the 2024 MATS RTR, and this Proposal), the residual risk from HAP emissions from coal-fired EGUs is extremely small. In fact, in EPA's risk assessment, the lifetime cancer risk of the person most exposed to coal-fired HAP emissions in the country was 0.344-in-one million. Similarly, the hazard index and hazard quotient for Hg emitted by coal-fired EGUs, including all lignite-fired EGUs, are less than one. Both measures are significantly lower than the thresholds that would justify delisting.[53] In other words, the residual risk is less than the threshold Congress determined is so small that HAP regulation from these sources is not needed at all.

### A. EPA Should Clarify that the Residual Risk Evaluated Under Section 112(f)(2) Is an Important Factor That Must Be Considered in Whether Technology Developments Justify Reducing the Standard.

As an initial matter, considering the results of the residual risk assessment under Section 112(f)(2) in making a technology review determination under Section 112(d)(6) is consistent with previous agency action. It stands to reason, as EPA has previously explained, that when the existing standards are found to "provide an ample margin of safety to protect public health and prevent adverse environmental effects, one can reasonably question whether further reviews of technological capability are 'necessary.'"[54]

More fundamentally, the Supreme Court has made it clear "that reasonable regulation ordinarily requires paying attention to the advantages *and* the disadvantages of agency decisions."[55] Here, the benefit of lowering a NESHAP is to reduce the risk from HAP emissions

[53] 42 U.S.C. § 7412(c)(9)(B).

[54] 69 Fed. Reg. 48,338, 48,351 (Aug. 9, 2004)); *see also* 71 Fed. Reg. 34,422, 34,437 (Jun. 14, 2006)).

[55] *Michigan*, 576 U.S. at 753.

to human health and the environment. Accordingly, the starting point in determining whether to revise a NESHAP should be an analysis of whether any meaningful residual risk remains, so that EPA can evaluate whether and by how much that risk may be reduced by any revised standards under consideration. After all, whether a revised standard would reduce that risk is necessarily an important consideration in the Agency's evaluation of "whether the costs of its decision [to revise and reduce the standards further under Section 112(d)(6)] outweighed the benefits."[56]

### B. EPA's 2024 Amendments of the MATS Standards Under Section 112(d)(6) Is Not Reasonably Justified When the Residual Risk After Implementation of the Existing Standards Is Negligibly Small.

If EPA applies the principles discussed above, it would be clear that it was *un*reasonable for the 2024 MATS RTR to lower the MATS standards for coal-fired EGUs under Section 112(d)(6), when the residual risk under Section 112(f)(2) is not just protective of public health and the environment with an "ample margin of safety," it is small enough to justify delisting altogether. When the starting point for risk is what Congress defined as a negligible risk, any reduction of that risk and the resulting benefit are necessarily negligibly small. It is hard to imagine how such an almost non-existent benefit can justify any cost, much less costs in the millions of, if not over a billion, dollars.

## IV. EPA Should Repeal the 2024 Filterable Particulate Matter (and non-Hg Metal HAP) Standards.

### A. EPA Has Provided a Reasonable Basis for Repealing the 2024 fPM Standard.

In the 2024 MATS RTR, EPA revised the fPM standard for existing coal-fired EGUs from 0.030 pounds per million British thermal units ("lb/MMBtu") to 0.010 lb/MMBtu. EPA likewise "proportionally lowered the individual and total non-Hg HAP metal emissions limits"

[56] *See id.* at 750; see also id. at 752 ("One would not say that it is even rational … to impose billions of dollars in economic costs in return for a few dollars in health or environmental benefits.").

for which fPM serves as a surrogate. EPA's uniform, historic practice is to consider cost effectiveness as part of its [Section 112(d)(6)] review.[57] EPA acknowledged in the 2024 rulemaking that the "cost-effectiveness values for [the 2024 MATS RTR for fPM] are higher than cost-effectiveness values that the EPA concluded were not cost-effective . . . [in] prior rules."[58] It nonetheless forged ahead and revised the standard. EPA here reasonably proposes to follow the Agency's own precedent regarding cost-effectiveness and to repeal the 2024 fPM standard because it is not cost-effective.

In the 2024 MATS RTR, EPA found that revising the fPM standard would cost $10.5 million per ton of non-Hg HAP metals reduced and $34,500/ton of fPM.[59] EPA acknowledged that commenters (including PGen)[60] identified several instances where EPA rejected similar costs as unjustifiable in RTR rulemakings for other industries.[61] As the Proposed Rule explains, EPA had previously rejected as cost-ineffective a potential revision to the fPM standard for the petroleum refinery sector on the basis that the revision would have cost $10 million per ton of total non-Hg HAP metals reduced.[62] EPA likewise rejected as cost-ineffective potential revisions to the non-Hg HAP metal standard for the iron and steel manufacturing industry on the basis that a $7 million per ton reduction cost was excessive. The costs rejected in those prior rulemakings are directly in line with the costs of the fPM standard revision for the power sector.

[57] See, e.g., Ass'n of Battery Recyclers, Inc. v. EPA, 716 F.3d 667, 674 (D.C. Cir. 2013).
[58] 89 Fed. Reg. at 38523.
[59] 90 Fed. Reg. at 25,541.
[60] PGen 2023 Comments at 17-19.
[61] 90 Fed. Reg. at 25,541.
[62] *Id.*

EPA further notes that costs at individual facilities were as much as $16 million per ton of non-Hg HAP metal removed, far exceeding the average costs for the industry as a whole.[63] Further illustrating that these costs are excessive, EPA notes that it previously determined costs of $16 million per ton of non-Hg HAP metals removed were cost-ineffective for the taconite iron ore processing industry.[64]

PGen supports EPA's proposal to follow its own precedent and reject the 2024 fPM standard on the basis of cost-effectiveness. Agency action consistent with long-standing precedent requires little justification beyond that. And EPA provided additional reasons for rejecting the 2024 Rule, beyond its inconsistency with long-standing precedent. That is quintessential reasoned decisionmaking.[65]

### B. EPA Should Also Acknowledge (and Rely on) Additional Bases for Rejecting the 2024 fPM Standard.

As mentioned above, PGen respectfully submits that EPA should examine additional bases for objecting to the 2024 MATS RTR. These include the 2024 MATS RTR ignoring the much higher cost for the technology than EPA purported would be needed, resulting in even more extreme cost-effectiveness values than the Action even acknowledged.[66] But, as discussed below, there are even more important issues, which *this* EPA should grapple with.

---

[63] *Id*. (noting that the Colstrip Power Plant would have incurred costs of at least $16 million per ton of non-Hg HAP metal removed).

[64] *Id*.

[65] *See Williams Gas Processing-Gulf Coast Co., L.P. v. FERC*, 475 F.3d 319, 322 (D.C. Cir. 2006) (vacating agency action where "FERC neither explained its action as consistent with precedent nor justified it as a reasoned and permissible shift in policy"); Nat'l Ass'n of Home Builders, 682 F.3d at1037 (noting "agency action representing a policy change [generally need not] be justified by reasons more substantial than those required to adopt a policy in first instance") (internal quotations and citation omitted).

[66] *See* PGen 2023 Comments at 17 (explaining an industry study that considered costs incurred in four real-world electrostatic precipitator builds)

1. The 2024 MATS RTR's reliance on "considering cost in various ways" to explain its inconsistent acceptance of exorbitantly high cost-effectiveness values for the fPM standard should be rejected.

Having recognized that the cost-effectiveness values for the 2024 fPM standard were inconsistent with a long history of agency action, the 2024 MATS RTR sought to justify the inconsistency by "considering cost" via a grab-bag of alternative cost metrics, such as "typical capital and total expenditures for the power sector," "total power sector sales," and "total PM upgrade control costs and emissions of the coal fleet."[67] EPA should not be fooled by this sleight of hand. It may be, as the Proposal states, that "[a]s the EPA noted in the 2024 MATS RTR, the EPA considers costs in various ways, depending on the rule and affected sector. For example, the EPA has considered, in previous CAA section 112 rulemakings, cost effectiveness, the total capital costs of measures, annual costs, and the costs compared to total revenues (*e.g.,* cost-to-revenue ratios)."[68] But the claim that the 2024 MATS RTR's approach is consistent with historic practice is wrong.[69]

*Every* rulemaking cited in the 2024 rulemaking either found cost-effectiveness to be within the range of values EPA had accepted historically, before considering other cost

[67] 89 Fed. Reg. at 38532-33.

[68] 90 Fed. Reg. 25,541.

[69] *Cf*. 89 Fed. Reg. at 38532 n.52.

metrics,[70] or considered such other metrics to analyze the potential cost impact of a standard on a specific facility, not the industry sector as a whole.[71]

The "various ways" for considering cost that EPA sought to use in the 2024 MATS RTR to ignore the obvious conclusion of the cost-effectiveness analysis depart from long-standing precedent on cost considerations in an RTR. EPA's approach here is remarkably similar to the various ways EPA used in the 2016 supplemental finding and its 2023 reaffirmance on whether, considering cost (as the Supreme Court directed EPA to do in *Michigan*), it is "appropriate and necessary" to regulate HAPs from EGUs under Section 112. There too, faced with meager alleged benefits compared to staggeringly high costs of the regulation, EPA resorted to a standardless "totality-of-the-circumstances" approach for considering sector-wide costs.[72] For example, for the vast majority of industries, and certainly for the power industry, what import could a comparison of the costs of a regulation to total, industry-wide revenues possibly have? At most that asks the question: can the industry as a whole afford the regulation, in the abstract?

---

[70] 87 Fed. Reg. 27002, 27008 (May 6, 2022); 87 Fed. Reg. 1616, 1635 (Jan. 11, 2022); 80 Fed. Reg. 37366, 37381 (Jun. 30, 2015); 80 Fed. Reg. 14248, 14254-56 (Mar. 18, 2015); 77 Fed. Reg. 58220, 58226-28 (Sept. 19, 2012); *see also* 77 Fed. Reg. 49490, 49523 (Aug. 16, 2012) (most of this rule, cited by EPA, was not based on Section 112(d)(6), *see, e.g., id*. at 49501; but regardless, EPA relied on cost effectiveness for the one change that was made under Section 112(d)(6)).

[71] *See* 80 Fed. Reg. 50386, 50398 (Aug. 19, 2015) (deciding to not adopt a standard where its cost-to-revenue impact of a specific facility is too high, explaining, "While these costs are small for the industry, they may be significant for the company and particularly significant for the facility").

[72] Supplemental Finding That It Is Appropriate and Necessary To Regulate Hazardous Air Pollutants From Coal- and Oil-Fired Electric Utility Steam Generating Units, 81 Fed. Reg. 24,420, 24,431 (Apr. 25, 2016); National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units-Revocation of the 2020 Reconsideration and Affirmation of the Appropriate and Necessary Supplemental Finding, 88 Fed. Reg. 13,956, 13,957 (Mar. 6, 2023) ("[o]ur preferred methodology is to consider *all* of the impacts of the regulation using a totality-of-the-circumstances approach rooted in the *Michigan* court's direction to "pay[] attention to the advantages *and* disadvantages of [our] decision[].")

The utility sector is a large industry, and the American economy is probably the largest in the world. EPA would be hard-pressed to find the American economy and the utility sector as a whole cannot afford the cost of virtually any regulatory action, especially when such action is viewed in isolation.[73] This avoids the crucial question that must be asked in every rulemaking: whether "the costs of [the Agency's] decision outweighed the benefits."[74]

EPA should correct the misconception created by the Proposal on this point, and also explicitly reject EPA's previous reliance on this unsupported and meritless approach to consideration of sector-wide cost.

2. The 2024 MATS RTR's technical analysis for revising the fPM standard is deeply flawed because it is based on a truncated and unrepresentative set of data.

The technical foundation underlying the 2024 fPM standard was deeply flawed and did not provide a reasoned basis for changing the standard. EPA's rationale for revising the fPM standard in the 2024 MATS RTR hinged on an analysis replete with errors and unexplained and arbitrary selections and omissions. It also relied on assumptions that ran counter to the empirical data before the Agency.[75]

For example, in the 2023 proposal, EPA relied on data comprising only two calendar quarters of emissions in 2017 and 2019 for just a handful of units.[76] EPA had compliance data

[73] This is not to say that such a consideration of cost may not be relevant if the Agency is looking at particular facilities. When looking at a particular facility, that a revised standard may require a capital expenditure for control equipment that far exceeds future revenues may be an indication that the revised standard is likely to result in the shutdown of the facility.

[74] *See Michigan*, 576 U.S. at 750; *see also id.* at 752 ("One would not say that it is even rational … to impose billions of dollars in economic costs in return for a few dollars in health or environmental benefits.").

[75] *See, e.g.*, PGen 2023 Comments at 12-16; *North Dakota v. EPA*, Pet. Br. at 65-72.

[76] See EPA, 2023 Technology Review for the Coal- and Oil-Fired EGU source Category, at 2 (Docket ID. No: EPA-HQ-OAR-2018-0794).

for every quarter that EGUs have operated since 2017, yet it ignored those data and provided no reason for looking only at the truncated set of emission data it chose. The broader set of data that EPA failed to consider established wide variability in unit performance and cast serious doubt on the assumption that a lower fPM standard was achievable or cost-effective for most units.[77]

In response to comments addressing these issues, EPA changed its approach entirely, adopting an even more unreasonable approach: EPA assumed in the 2024 final rule that any unit that ever emitted less than the standard for any period of time would be able to meet that lower limit continuously under any conditions and without new significant expenditures.[78] EPA offered no rationale for this revised and equally unreasonable methodology. EPA had a duty to explain its rationale, and it did not.[79] The agency's reliance on cherry-picked data in the face of substantial evidence to the contrary was arbitrary and capricious and is an additional reason to rescind the revised standard.[80]

In addition, in revising the fPM standard EPA failed to provide for a compliance margin, even though that has been standard practice in EPA rulemakings.[81] It is a simple fact of the electric generating industry that no prudent operator runs a unit without a compliance margin. Prior to its revision of the fPM limit, EPA routinely recognized that compliance margins are

[77] *See* PGen 2023 Comments at 14-15 (discussing consultant's study of broader set of available data and data for Coronado Generating Station in particular).

[78] See North Dakota v. EPA, Pet. Br. at 68.

[79] *See U.S. Sugar Corp. v. EPA*, 830 F.3d 579, 650 (D.C. Cir. 2016) ("EPA had a duty here to examine and justify the 'key assumptions' underlying its decision, and it failed to do so") (quoting *Appalachian Power*, 135 F.3d at 818).

[80] *See Nat. Res. Def. Council v. EPA*, 808 F.3d 556, 574 (D.C. Cir. 2015).

[81] *See, e.g.*, PGen 2023 Comments at 17; *North Dakota v. EPA*, Pet. Br. at 69-72.

necessary and took them into account when evaluating standards.[82] Had EPA properly taken the need for a compliance margin into account, the costs of its rule would have been greater. Indeed, a mere 20% compliance margin, which is likely too small, would have (1) increased the revised fPM limit's cost by approximately 70%, and (2) nearly doubled the number of units that would need to upgrade controls to comply with the limit, also at great cost.[83] Failure to consider this issue at the time of its RTR rulemaking was a failure to consider an important aspect of the problem. EPA should correct that failure in this rulemaking.

## V. EPA Should Repeal the 2024 PM CEMS Requirements.

### A. EPA Has Provided a Reasonable Basis for Repealing the 2024 PM CEMS Requirements.

In its 2024 MATS RTR, EPA rejected its previous policy of allowing sources to choose among equally effective approaches for demonstrating compliance with the MATS fPM standard—including reliance on quarterly stack testing, PM CPMS, or PM CEMS—to instead require the use of PM CEMS in all circumstances.[84] EPA claimed in the 2023 proposal that the cost of PM CEMS was lower than the cost of quarterly stack testing but that, nonetheless, "not all [indeed, only a minority of about one third] EGU owners or operators chose the most cost-effective means of demonstrating compliance with the fPM emission limits."[85] A technical commenter, with decades of experience in monitoring and measurement in the utility industry,

[82] *See, e.g.*, 77 Fed. Reg. 58,220, 58,231 (Sept. 19, 2012) ("when developing standards [under Section 112], we take into account the uncertainty associated with measuring emissions and we assume that plants operate with a compliance buffer to minimize the likelihood of exceeding the standard.").

[83] See North Dakota v. EPA, Pet. Br. at 71.

[84] *See* 90 Fed. Reg. at 25,541.

[85] 88 Fed. Reg. at 24,872.

thoroughly debunked that claim (as did others).[86] In the final 2024 rule, EPA all but abandoned this claim, asserting that even though more costly, the use of PM CEMS was justified because it increased transparency.[87]

In the Proposed Rule, EPA explains that repealing the PM CEMS requirements would result in a cost savings of $2.8 million per year.[88] Moreover, there is no evidence that the use of quarterly stack testing reduced the assurance that EGUs meet the fPM standards.[89]

As EPA further notes, EPA has authority under CAA section 114 to allow multiple demonstration methodologies. Allowing multiple compliance demonstration methodologies "provides greater flexibility to owners and operators and reduces the compliance burden, while still assuring compliance with the fPM emission standard."[90]

In short, for these reasons and others in the Proposal, EPA provided a reasonable justification for repealing the 2024 PM CEMS-only requirements.

PGen thus supports repealing the 2024 PM CEMS-only requirements. PGen also supports, for the reasons stated in the Proposal, EPA's proposal to retain the updated fPM measurement requirements of allowing either an increased minimum volume per run or the collection of a minimum mass per run.[91] Since EPA is proposing to repeal the exceedingly low 2024 fPM standard, however, there is no reason for EPA to retain the minimum sample volume

---

[86] Ralph L. Roberson, MEMORANDUM, TECHNICAL COMMENTS ON EPA'S PROPOSED RULE: MERCURY AND AIR TOXICS STANDARDS RISKS AND TECHNOLOGY REVIEW, at 5 (2023) (Attachment C to PGen 2023 comments) ("PM CEMS Technical Memo") (describing this EPA quote to be "as insulting as it is incorrect").

[87] *See* 90 Fed. Reg. at 25,541.

[88] *Id*.

[89] *Id.* at 25,542 (explaining that EGUs typically monitor control technology parameters to ensure they are operating properly and consistent with how they operated during stack testing).

[90] 90 Fed. Reg. at 25,542.

[91] Id.

of 4 dry standard cubic meters (dscm) per run. PGen believes EPA should revert to the original 1 dscm per run requirement as set by the 2012 MATS rule.

Finally, PGen supports EPA's proposal to reinstate the low emitting EGU (LEE) program for fPM and non-Hg metals, which reduces the stack testing frequency for sources that have demonstrated that their emissions are less than 50 percent of the corresponding emission limit for 3 consecutive years.[92] This approach makes sense, saves cost, and even may incentivize EGUs to keep their emissions well below the standard.

### B. EPA Should Also Acknowledge (and Rely on) Additional Bases for Rejecting the 2024 PM CEMS Requirements.

In addition to the rationales provided in the Proposed Rule, EPA should also recognize that this is a control technology review under Section 112(d)(6) to determine whether it is necessary to revise the applicable *standard*. PM CEMS is not an emissions standard, and claiming authority under Section 112(d)(6) to revise the monitoring techniques for the standard is questionable.

EPA should also acknowledge the serious technical shortcomings of using PM CEMS engendered by an extremely low fPM standard.[93] While these technical problems would have been exacerbated by the lower fPM standard adopted in the 2024 MATS RTR, it is also a concern for some units – depending on configuration of the unit and its stack – even at the current level of the standard. For example, the certification of PM CEMS in certain wet scrubbed

[92] *Id.* As EPA further proposes, "Sources that had previously demonstrated that they qualify for LEE status would not have to re-demonstrate that qualification." *Id.* There is no reason for requiring new demonstrations.

[93] *See* PGen 2023 Comments at 22-25 (describing insights from technical analyses); *see also* PM CEMS Technical Memo at 3 ("Anyone who believes he or she can regulate and control PM emissions from a coal-fired EGU that precisely [to enable correlation of the PM CEMS] has never set foot in such a facility.").

operations would require the detuning of the ESPs to achieve a compliance curve. This results in out of spec gypsum, deeming it unsuitable for beneficial reuse, therefore resulting in significant amounts of wasted product. The detuning of ESPs could result in high fly ash content in gypsum slurry that impact scrubber modules, resulting in unnecessary SO2 emissions. This further supports EPA's proposal to preserve sources' flexibility to choose among equally effective approaches for demonstrating compliance with the MATS fPM standard, including quarterly stack testing, PM CPMS, or PM CEMS.

## VI. EPA Should Repeal the Mercury Standard for Lignite-Fired EGUs.

In its 2012 MATS rulemaking, EPA established a "MACT floor" standard of 1.2 lb/TBtu mercury for most coal-fired EGUs, but adopted a separate, *beyond the floor* MACT standard of 4.0 lb/TBtu for lignite-fired EGUs because of the composition differences between lignite coals and other (bituminous and sub-bituminous coals).[94] In its 2024 MATS RTR, without any change in available technology (or the composition of lignite and other coals, for that matter) EPA reversed course and concluded that the differences between lignite and other types of coal did not, in fact, support a beyond-the-floor limit of 4.0, but instead demanded the limit be lowered to match the standard for all other coal-fired units at 1.2 lb/TBtu as well.[95]

In this Proposed Rule, EPA proposes to repeal that revision and to reestablish the 4.0 lb/TBtu standard for lignite-fired boilers.[96] EPA explains that the 2024 revision was "based on

[94] *See* 90 Fed. Reg. at 25,543.
[95] *Id*.
[96] *Id*.

insufficient available data demonstrating that lignite units can meet the lower limit over the range of boiler types and variable compositions of fuels used at lignite-fired EGUs."[97] PGen agrees.[98]

EPA in the Proposal notes that the 2024 MATS RTR had previously relied on the emission rate achieved at only two units at the Twin Oaks facility in Texas to establish the feasibility of its revised 1.2 lb/TBtu standard, while the evidence showed that 11 of 12 lignite facilities that EPA reviewed emitted at rates well above the 1.2/lb/TBtu standard.[99] Additionally, the Proposed Rule explains that the Twin Oaks facility on which the 2024 MATS RTR had previously relied is one of the newest lignite fired facilities in the country and uses specialized equipment not present at other units which affects its Hg emissions.[100] As such, Twin Oaks is a particularly ill-suited model for the nation's lignite-fired units, and its emissions performance cannot reasonably serve as the basis for a revised standard that applies to all lignite-fired units.

The 2024 MATS RTR had also justified its revised mercury standard for lignite-fired units on the assumption that such units could meet the limit by "injecting better performing powdered sorbents using existing sorbent injection systems without the need for equipment modifications or additions."[101] EPA now properly recognizes that the record establishes that modifications to control systems would likely be required, and that the Agency had not considered the costs associated with such modifications.[102] Additional costs, with no meaningful

---

[97] *Id*.

[98] *See* PGen 2023 Comments at 29-32 (describing test data and analytical flaws in EPA's considerations); *North Dakota v. EPA*, Pet. Br. at 72-81.

[99] 90 Fed. Reg. at 25,543.

[100] *Id*.

[101] *Id*.

[102] *Id*.

public health benefit, likewise cannot support a revision of the standard. Accordingly, EPA properly proposes to reestablish the 4.0 lb/TBtu limit.

EPA also now acknowledges that the 2024 Final Action did not investigate the implications of the complex composition of lignite coal on the feasibility of its revised standard and instead erroneously concluded that lignite and other types of coal shared characteristics meant they could achieve the same standard of performance.[103] However, while both lignite and subbituminous coals typically have low halogens, and both lignite and bituminous coals typically have high sulfur, only lignite has both of these characteristics at the same time, which makes mercury removal far more difficult than for either bituminous or subbituminous coal. Lignite also has far greater variability, increasing the need for a larger compliance margin. The 2024 MATS RTR did not take these factors into account when it revised the lignite standard.[104]

For all of these reasons, EPA has properly concluded that its revised 1.2 lb/TBtu limit was improperly established and that it is appropriate to revert to the 4.0 lb/TBtu that the agency reasonably established in an unchallenged beyond the floor MACT analysis, consistent with the requirements of section 112.

Dated: August 11, 2025

/s/ Makram B. Jaber
Makram B. Jaber
Allison D. Wood
McGuireWoods LLP
888 16th Street, N.W., Suite 500
Washington, D.C. 20006
(202) 857-2416
mjaber@mcguirewoods.com
awood@mcguirewoods.com
*Counsel for the Power Generators Air Coalition*

[103] *Id.*

[104] See, e.g., North Dakota v. EPA, Pet. Br. at 78-79.