Ladies & Gentlemen:

We are writing on behalf of the members of Unions for Jobs & Environmental Progress ("UJEP"), an ad hoc association of energy-related labor unions. Our member unions represent workers in electric power, transportation, coal mining, construction, and other energy-related industries. UJEP members’ jobs and economic wellbeing will be affected by U.S. EPA’s decisions on the ongoing reconsideration of the Mercury and Air Toxics Standards (MATS) issued in 2012.

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UJEP is an independent ad hoc association of labor unions involved in energy production and use, transportation, engineering, and construction. Our members are: International Association of Bridge, Structural, Ornamental and Reinforcing Iron Workers Union; International Brotherhood of Boilermakers, Iron Ship Builders, Blacksmiths, Forgers and Helpers; International Brotherhood of Electrical Workers; International Brotherhood of Teamsters; SMART Transportation Division; Transportation • Communications International Union, IAM; United Association of Journeymen and Apprentices of the Plumbing and Pipefitting Industry of the United States and Canada, and United Mine Workers of America. For more information about us, visit www.ujep4jobs.org.
Background

UJEP members participated actively in the MATS regulatory proceeding due to our concerns that the proposed standards would lead to the widespread closure of smaller and older coal-based power plants. These concerns were well founded. DOE/EIA estimate that some 40,000 Megawatts of coal generation capacity closed in 2015-16 in response to the final rule's compliance requirements.\(^1\) Additional coal-based capacity was shuttered in this time period due to lower natural gas prices, in combination with the mounting increases in compliance costs of the MATS rule and other EPA regulations. These plants, and the thousands of jobs in electric generation, mining, transportation, and maintenance lost as a consequence of their closures, will not return. These job losses are only partially offset by the jobs that have been created for the installation and operation of pollution controls needed to comply with MATS.

The most important issue addressed in this proposed reconsideration is whether EPA should retain or invalidate its prior determinations that it is "appropriate and necessary" to regulate mercury and other hazardous air pollutants (HAPs) from coal- and oil-based electric generating units (EGUs) under Section 112 of the Clean Air Act (CAA or Act).\(^2\) EPA is proposing to retain the MATS emission standards while reversing these prior determinations on the grounds that the agency improperly considered the "co-benefits" from the reduction of emissions other than mercury. For the reasons discussed below, our recommendation is that EPA should retain the MATS emission standards as promulgated in 2012, but refrain from any revision to the Agency's prior appropriate and necessary determinations, including those issued in 2016 in response to the Supreme Court's decision in Michigan v. EPA.\(^3\)

UJEP also is providing comments on another important element of EPA's proposed MATS rulemaking – the residual risk and technology reviews that the Agency must perform pursuant to sections 112(d)(6) and (f) of the CAA. As discussed below, we strongly agree with EPA's proposed assessment that no new HAP emission controls for the EGU source category are needed to ensure the protection of human health and the environment given that the current MATS emission limits have dramatically reduced the potential risks from the EGU source category to levels that clearly provide an ample

\(^1\) See, DOE/EIA 2016 Annual Energy Outlook Early Release - Annotated Summary of Two Cases at 27.
\(^2\) EPA published its first “appropriate and necessary” finding on December 20, 2000. 65 Fed. Reg. 79,825. EPA reaffirmed that finding in 2012, in conjunction with its issuance of the final Mercury and Air Toxics Standards. 77 Fed. Reg. 9304 (Feb. 16, 2012). After the Supreme Court held in Michigan v. EPA, 576 U.S. ___, 135 S. Ct. 2699 (2015), that EPA erred by failing to consider costs in its 2012 appropriate-and-necessary finding, EPA issued a Supplemental Finding in 2016, in which the Agency considered costs and again reaffirmed its earlier determinations that it is both appropriate and necessary to regulate power plant HAP emissions under Section 112.
margin of safety and prevent an adverse environmental effect. Similarly, we agree with the conclusions of EPA’s technology review that further HAP emissions controls are not necessary or appropriate pursuant to CAA section 112(d)(6). As discussed below, the control technologies that were evaluated when establishing the original standards in the MATS Rule remain the most robust and effective for limiting HAP emissions from the coal- and oil-fired EGU source category.

Overview of Cost-Benefit Issue

EPA bases its proposed reversal of the appropriate and necessary findings on its conclusion that it is inappropriate to consider co-benefits – the health and environmental benefits resulting from reductions in emissions of non-hazardous pollutants such as particulate matter that result from the installation of pollution controls to reduce the emissions of HAP. By excluding the value of these co-benefits from its analysis, EPA concludes that the costs of complying with MATS (estimated at $7.4 to $9.6 billion annually) far exceed the direct mercury-related health benefit of MATS (estimated at $4 million to $6 million annually). In the final MATS rule, EPA estimated the discounted total health benefits of compliance at $37 to $90 billion, of which $36 to $89 billion were due to reductions of fine particulate matter (PM$_{2.5}$).4

Notwithstanding its proposed reversal of the appropriate-and-necessary finding, EPA also proposes to retain the Mercury and Air Toxics Standards (MATS) that the Agency promulgated in 2012. EPA makes this proposal based on the D.C. Circuit’s holding in New Jersey v. EPA5 that, once listed pursuant to Section 112(c)(1), EPA may not remove EGUs from the list of categories to be regulated under Section 112(d) except through the de-listing process set forth in Section 112(c)(9).6 EPA has not pursued this delisting process.

We agree that the agency should retain the MATS standards that have been in effect since 2015. If EPA intends to retain MATS, there is little reason to reconsider or reverse the 2016 Supplemental Finding. Indeed, a reversal of the appropriate-and-necessary finding may be considered arbitrary and capricious if it were based on the

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5 517 F.3d 574 (D.C. Cir. 2008).
6 See 84 Fed. Reg. 2674, citing New Jersey, 517 F.3d at 582-83 (“[In Section 112(c)(9),] Congress ... unambiguously limit[ed] EPA’s discretion to remove sources, including EGUs, from the Section 112(c)(1) list once they have been added to it.”). Under Section 112(c)(9), EPA may delete a source category from the list of categories to be regulated under Section 112 if, and only if, the Administrator makes one or more of the following determinations: (1) in the case of HAP emitted by sources in the category that may result in cancer in humans, that no source in the category emits such HAP in quantities that may cause a lifetime risk of cancer greater than one in one million to the most-exposed individual; or (2) in the case of HAP that may result in adverse health effects other than cancer or adverse environmental effects, that emissions from no source in the category or subcategory exceed a level adequate to protect public health with an adequate margin of safety and no adverse environmental effect will result from emissions from any source. 42 U.S.C. §§ 7412(c)(9)(B)(i) and (ii). Notably, EPA has never indicated that it believes it has a basis to delist EGUs under either of these prongs of Section 112(c)(9).
exclusion of non-HAP co-benefits. A final rule adopting EPA’s proposed approach would invite further litigation over whether MATS itself may be retained without an affirmative appropriate-and-necessary finding.

These concerns appear justified because EPA is seeking comment on two alternative interpretations of the impact of reversing the 2016 Supplemental Finding. The adoption of either of these interpretations could result in the invalidation of MATS itself, the loss of thousands of jobs in pollution control operation and maintenance, the abandonment of tens of billions of dollars of investments in control equipment, as well as substantial increases in emissions of both hazardous and non-hazardous air pollutants.

First, EPA asks whether it could conclude that the New Jersey decision does not apply because its current proposed action is in furtherance of its response to the Supreme Court’s holding in Michigan v. EPA that EPA must consider costs in making its appropriate-and-necessary determination. Under this theory, New Jersey’s prohibition against the Agency “error-correcting” its way out of Section 112 would not limit EPA’s authority to remove EGUs from the Section 112(c)(1) list and rescind MATS.

Under EPA’s second proposed interpretation, EPA asks whether it would have the authority to - or might even be required to - rescind MATS after reversing its prior appropriate-and-necessary determination because an affirmative appropriate-and-necessary determination is a statutory prerequisite to regulating EGUs for HAP emissions. In fact, opponents of the MATS rule would very likely try to argue the Agency is under an affirmative obligation to delist the EGU source category and thereby invalidate the MATS standards if the EPA determines it is no longer cost-effective to regulate EGUs in response to the Supreme Court’s ruling in Michigan.

We do not find compelling reasons to accept either of these interpretations for the reasons discussed below.

**Excluding Consideration of Co-Benefits is Legally Flawed**

EPA’s proposed reversal of the 2016 Supplemental Finding is based entirely on its conclusion that it was “inappropriate” for the Agency to consider co-benefits from non-HAP emission reductions in determining whether it is “appropriate and necessary” to regulate EGUs under Section 112 of the CAA. The D.C. Circuit may well find EPA’s refusal to consider co-benefits unlawful for the following two reasons. First, neither the statute nor the case law, including Michigan, upon which EPA relies, compels such a result. Second, the Agency’s reversal may well be arbitrary and capricious because reversing the finding would require that the Agency ignore all non-HAP benefits from regulating EGUs under Section 112, while fully considering all costs of regulating EGUs under Section 112.

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EPA does not cite any statutory language or case law that requires it to ignore co-benefits when assessing whether it is appropriate and necessary to regulate EGUs under Section of the CAA. Section 112(n)(1)(A) of the Act is entirely silent on the point of which costs and benefits EPA must consider, and how it must consider them. EPA acknowledges that the 2016 Supplemental Finding pointed to statutory requirements that EPA “consider co-benefit reduction of HAP resulting from other CAA programs [as] highlighting Congress’ understanding that programs targeted at reducing non-HAP pollutants can and do result in the reduction of HAP emissions.”

EPA also acknowledged in 2016 that “the Senate Report on CAA section 112(d)(2) recognized that maximum achievable control technology (MACT) standards would have the collateral benefit of controlling criteria pollutants.” In the Proposed Rule, EPA dismisses these statutory provisions and congressional statements out of hand, stating that they “provide[] no support for the proposition that any such co-benefits should be the Agency’s primary consideration when making a finding under CAA section 112(n)(1)(A).” 84 Fed. Reg. at 2676.

EPA also asserts that “if the HAP-related benefits are not at least moderately commensurate with the cost of HAP controls, then no amount of co-benefits can offset this imbalance for purposes of a determination that it is appropriate to regulate under CAA section 112(n)(1)(A).” EPA’s basis for this assertion is the Supreme Court’s statement in Michigan that “One would not say that it is even rational, never mind 'appropriate,' to impose billions of dollars in economic costs in return for a few dollars in health or environmental benefits.”

However, health or environmental co-benefits are nevertheless benefits, and the Supreme Court’s Michigan decision did not address whether such health or environmental co-benefits may or may not be considered in assessing whether it is appropriate and necessary to regulate EGU HAP emissions under Section 112(n)(1)(A). Put simply, the question is whether EPA may intentionally ignore entire categories of health and environmental benefits that reasonably can be expected from compliance with a complex multi-pollutant regulation such as the MATS rule.

We note in this regard EPA’s decisions in the final MATS rule to include compliance flexibility measures for its acid gas (HCl) standards to include sulfur dioxide, as a surrogate for acid gas controls, and filterable particulate matter as a surrogate for the control of numerous heavy metals such as lead, arsenic and selenium. The inclusion of these flexibility measures for other hazardous air pollutants covered by the

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8 EPA correctly notes that Section 112(n)(1)(B) requires EPA to conduct a study that “consider[s] the rate and mass of [EGU HAP] emissions, the health and environmental effects of such emissions, technologies which are available to control such emissions, and the costs of such technologies,” and Section 112(n)(1)(A) requires EPA to regulate EGUs under Section 112 “if the Administrator finds such regulation is appropriate and necessary after considering the results of the study required by [Section 112(n)(1)(B)].”

9 Michigan, 135 S. Ct. at 2707.

rule expanded the projected impact of the rule on conventional pollutants, as indicated by the model projections EPA included in the final rule:


EPA in turn estimated that substantial air quality benefits would result from compliance with the multiple emission standards incorporated in the final rule:

The EPA anticipates significant public health and environmental benefits from the rule as a direct result of the substantial reduction in the emissions of several pollutants, including SO₂, Hg, acid gases and fine particles and metals.

The EPA anticipates significant emission reductions under the final rule from coal-fired EGUs, which are of particular interest due to their share of total power sector emissions. In 2015, annual HCl emissions are projected to be reduced by 88 percent, Hg emissions reduced by 75 percent, and PM₂.₅ emissions reduced by 19 percent from coal-fired EGUs greater than 25 MW. In addition, the EPA projects SO₂ emission reductions of 41 percent, and annual CO₂ reductions of 1 percent from coal fired EGUs greater than 25 MW by 2015, relative to the base case.

Given the scope of the multiple emissions covered by the final MATS rule, and the inclusion of non-HAP emissions (SO₂ and PM₂.₅) as surrogates for other HAPs, we view the debate over MATS co-benefits as being artificially constrained by consideration only of the monetized health benefits associated with mercury reductions relative to the overall costs of this multi-pollutant rule.

UJEP recommends that EPA undertake a separate rulemaking on how the Agency performs cost-benefit analyses of new requirements adopted in future rulemakings under the CAA. This subsequent rulemaking, among other things, should establish guidelines that—

- Require the Agency to consider only the monetized benefits of the particular air pollutants subject to future regulation under the new rule when performing the formal cost-benefit analyses of that rule; and

- Place appropriate limitations on when and how the Agency may consider co-benefit reductions of air pollutants that are not subject to regulation under a future rule being developed – such as the co-benefit reductions of PM₂.₅ that are
achieved as a result of imposing new control requirements on HAPs for sources regulated under section 112 of the CAA.

The establishment of such guidelines under a separate rulemaking may be a more effective forum for addressing these types of cost-benefit issues generally under the CAA given that such a rulemaking would be establishing formal Agency policy that would apply beyond the context of how the Agency should perform cost-benefit analyses of an air toxics regulation under section 112(d) rulemaking pursuant to section 112(n)(1)(A).

**Ignoring Co-benefits May be Arbitrary and Capricious.**

Even if it may be argued that the statute is ambiguous and that EPA therefore might interpret Section 112(n)(1)(A) to allow exclusion of consideration of co-benefits, the D.C. Circuit may well view such an interpretation as unreasonable and the exclusion of co-benefits as arbitrary and capricious. As the Supreme Court held in *State Farm*:

> [U]nder the “arbitrary and capricious” standard ... the agency must examine the relevant data and articulate a satisfactory explanation for its action including a rational connection between the facts found and the choice made. In reviewing that explanation, [the reviewing court] must consider whether the decision was based on a consideration of the relevant factors and whether there was a clear error of judgment. Normally, an agency rule would be arbitrary and capricious if the agency has relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.

Here, considering only the monetized mercury-related health benefits of EGU regulation under Section 112 – benefits that are relatively insignificant when compared with the overall cost of implementing the MATS rule – requires that EPA ignore the many other health and environmental benefits resulting directly and indirectly from the MATS rule. For example, the MATS rulemaking record contains documentation on the non-monetized health benefits from significant HAP emission reductions resulting from

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11 EPA is pursuing a separate rulemaking proceeding focused on the appropriate use of co-benefits impacts in its rulemaking and regulatory impact analyses. “Increasing Consistency and Transparency in Considering Costs and Benefits in the Rulemaking Process.” (83 FR 114; June 13, 2018) (soliciting public comment on whether and how the agency should revise the way it weighs costs and benefits in making its regulatory decisions under the CAA and other federal environmental statutes). This proceeding is an appropriate venue for the consideration of what limits should be placed on consideration of co-benefits in its cost-benefit analyses under federal environmental statutes, such as the consideration of non-HAP co-benefits in the context of a multi-pollutant regulation such as MATS, directly impacting both HAP and non-HAP emissions under Section 112 of the CAA.

12 463 U.S. at 43 (internal quotations and citations omitted).
MATS that EPA identified, but was unable to monetize or otherwise quantify for formal inclusion in its cost-benefit analysis. In addition, the establishment of criteria pollutant surrogates for the other two HAPs regulated by the rule - acid gases and heavy metals - has generated large reductions in these pollutants with substantial air quality and health benefits. EPA’s narrow cost-benefit assessment ignores these benefits as well.

In sum, imposing this artificial limitation on the cost-benefit analysis ignores the many other benefits of MATS regulation, such as the reduced number of deaths, cases of asthma, and other adverse health and environmental effects that are the co-benefits from the reductions in particulate matter, SO₂ and other non-HAP emissions that the regulation will also yield. Given that EPA is, at the same time, proposing to consider the entirety of the costs of MATS in determining that it is not appropriate and necessary to regulate EGUs under Section 112, there is a substantial risk that the D.C. Circuit would find EPA’s decision to exclude consideration of co-benefits to be arbitrary and capricious under State Farm. This in turn could lead the Court to a holding that, notwithstanding any ambiguity in Section 112(n)(1)(A), it is not reasonable to read the statute as allowing exclusion of co-benefits (or other collateral benefits from the reduction of surrogate emissions) in determining whether it is appropriate and necessary to regulate EGUs.

Finally, EPA may argue that the 2016 Supplemental Finding was in error because it improperly included consideration of co-benefits. But this would return EPA back to the same position it was in 2005 – arguing that it can undo its prior Section 112(n)(1)(A) determination through the Agency’s inherent authority to correct its own errors. That authority, however, was expressly repudiated in the context of Section 112 by the D.C. Circuit’s decision in New Jersey. In the present circumstances, as in 2005, EPA can only proceed to remove EGUs from regulation under Section 112 through the rigorous Section 112(c)(9) delisting process, which EPA has not pursued likely due to its inability to meet the criteria for delisting.

EPA’s Residual Risk Conclusion is Sound

EPA is under an obligation to undertake a residual risk review under section 112(f) of the CAA. In particular, the statute directs EPA to complete “a residual risk” rulemaking within eight years after promulgation of the initial MATS rule. In this subsequent rulemaking, EPA must tighten the current technology-based HAP standards for affected EGUs “if promulgation of such [revised] standards is required in order to provide an ample margin of safety to protect public health . . . or to prevent, taking into consideration costs, energy, safety, and other relevant factors, an adverse environmental effect.” Given that the final MATS standards were adopted in April 2012, the Agency is under a statutory obligation to complete the residual risk review required by Section 112(f) of the Act by no later than April 2020.

UJEP agrees with EPA’s determination in the proposed rule that risk levels from the EGU source category are acceptable and fully meet the statutory requirement to

ensure HAP emissions from the source category are controlled to levels that provide an ample margin of safety and prevent an adverse environmental effect. EPA explains that looking at both actual and allowable emissions for the EGU source category, the cancer risks (inhalation and ingestion) to the individual most exposed are below 100-in-one million, which is considered to be the presumptive level of human health and environment protection.⁴ And for threshold pollutants, the allowable and actual levels are below the hazard indexes for those pollutants.⁵

Accordingly, EPA considered the emission limits in the MATS Rule and determined that since the risks from affected sources within the EGU source category are extremely low for both cancer health effects and non-cancer health effects, any risk reductions from further available control options would have no or very minimal health benefits.⁶ And, as noted in the discussion below, no additional control measures were identified in the technology review for reducing HAP emissions from affected coal- and oil-fired EGUs in the source category. Given these factors, UJEP agrees that the current MATS requirements clearly meet the statutory requirements under CAA section 112(f)(2) of providing an ample margin of safety. In addition, EPA conducted a multi-level screening process to determine whether there is a potential adverse environmental effect resulting from the HAP emissions from the EGU source category and found that no such adverse effect was likely to occur.⁷ We also support this finding and agree that EPA used the correct methodology in reaching this conclusion that no further controls are necessary to address residual risks under section 112(f)(2).

**EPA’s Technology Review Supports No Further HAP Controls**

UJEP supports EPA’s proposed approach for implementing its obligations to perform the technology review required under CAA section 112(d)(6). As noted above, EPA is required to review and evaluate developments in practices, processes and control technologies that have occurred since the technology standards in the MATS rule were established. In particular, Section 112(d)(6) of the Act requires that EPA undertake this review every eight years.⁸

With regard to the information covered when undertaking the technology review, EPA examined information from EPA’s comprehensive emissions control data base – referred to as the “Emission Collection and Monitoring Plan System” (ECMPS) – as well as a wide range of other supporting information that provide an accurate indicator of the current capabilities of all available emissions control technologies for limiting HAP emissions from affected coal- and oil-fired EGUs. This other supporting information includes the data and other documentation that was used to develop the MATS Rule and earlier rulemaking efforts for the EGU source category, such as information found in the “beyond-the-floor” memoranda, and response-to-comments summaries

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⁴ 84 Fed. Reg. at 2700.
⁵ 84 Fed. Reg. at 2700.
⁶ 84 Fed. Reg. at 2700.
⁷ 84 Fed. Reg. at 2698.
supporting those EGU rulemakings under section 112 of the CAA.\textsuperscript{19}

This comprehensive review clearly confirms that EPA has based its technology review on both the most up-to-date information on the performance of all available control technologies and techniques that is contained in ECMPS, as well as an extensive array of past information that EPA gathered about control technologies and techniques in establishing the MATS Rule and other predecessor rulemakings. In addition to these sources directly applicable to EGUs, EPA also examined and analyzed other combustion source categories to evaluate whether there are potentially available other emissions control technologies that could be applicable and/or transferable to affected coal- and oil-fired EGUs.\textsuperscript{20} And finally, looking beyond information directly held by the Agency, EPA performed an extensive literature review encompassing technical journals, and information published by industry and government organizations.\textsuperscript{21} Given the wide range of technical information sources that EPA considered in performing its technology review, EPA’s assessment was comprehensive and thorough and therefore more than meets its technology-review requirements under section 112(d)(6) of the Act.\textsuperscript{22}

EPA’s technology review properly confirms that the control technologies that were evaluated when establishing the original standards in the MATS Rule remain the most robust and effective for limiting HAP emissions from the coal- and oil-fired EGU source category.\textsuperscript{23} There have been no additional commercially deployed technologies that could be used to achieve further reductions in HAP emissions from affected sources in the EGU source category.

The current controls for emissions of non-mercury metals (using PM as a surrogate) in the form of electrostatic precipitators and fabric filters, acid gas controls in the form of wet scrubbers and dry scrubbers, and “activated carbon injection” controls for mercury have very high removal efficiencies. Similarly, the work practices adopted in place for organic HAPs—such as periodic burner tune-ups and other best practices—are still justified due to emissions of these pollutants remain at the “non-detect” level for the applicable EPA test methods. Given the effectiveness of the aforementioned control technologies, it is no surprise that when comparing actual annual HAP emissions in 2017 to annual HAP emissions prior to promulgation of the MATS Rule, there is a

\textsuperscript{19} 84 Fed. Reg. at 2686.  
\textsuperscript{20} 84 Fed. Reg. at 2686.  
\textsuperscript{21} 84 Fed. Reg. at 2686.  
\textsuperscript{22} In addition to the information sources reviewed for the section 112(d)(6) analysis, EPA has taken an expansive definition of what is a “development” in emission control technology. In particular, this expansive interpretation has resulted in a comprehensive technology review that covers the universe of technologies that could potentially be available to the EGU source category. As evidenced by this expansive examination, EPA’s assessment of developments in the applicable control technologies for affected EGUs during the requisite technology review was very inclusive and resulted in a full evaluation of all possible control technology developments. See, 84 Fed. Reg. at 2687.  
\textsuperscript{23} 84 Fed. Reg. at 2700.
96 percent reduction in total HAP emissions from the source category.\textsuperscript{24}

**Conclusion**

EPA’s proposed reversal of its 2016 Supplemental Finding that it is appropriate and necessary to regulate EGUs under Section 112 invites legal peril. The Agency’s decision to exclude co-benefits from consideration is not supported in the statute or the case law and has a substantial chance of being found to be arbitrary and capricious. In view of EPA’s announced intent to retain the MATS emission limitations, there is little reason to reconsider or reverse the 2016 Supplemental Finding.

UJEP supports EPA’s proposed decision to retain the current MATS emission limitations without change. For the reasons explained above, no new controls for the EGU source category are needed to ensure the protection of human health and the environment given that the current MATS emission limits have dramatically reduced the potential risks from the EGU source category to levels that provide an ample margin of safety and prevent an adverse environmental effect. Similarly, EPA’s technology review has correctly determined that the control technologies that were evaluated when establishing the original standards in the MATS Rule remain the most robust and effective for limiting HAP emissions from the coal- and oil-fired EGU source category.

Thank you for your consideration of these comments.

Sincerely,

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\textsuperscript{24} 84 Fed. Reg. at 2689.