Comments of the Attorneys General of Massachusetts, California, Connecticut, Delaware, Illinois, Iowa, Maine, Maryland, Michigan, Minnesota, Nevada, New Jersey, New Mexico, New York, North Carolina, Oregon, Rhode Island, Vermont, Virginia, Washington, and the District of Columbia; the Maryland Department of the Environment; the City Solicitor of Baltimore; the Corporation Counsels of Chicago and New York City; the County Attorney of the County of Erie, NY; and the County Counsel for the County of Santa Clara, CA

on

the Environmental Protection Agency's Proposed "National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units—Reconsideration of Supplemental Finding and Residual Risk and Technology Review," 84 Fed. Reg. 2670 (Feb. 7, 2019), Docket ID No. EPA-HQ-OAR-2018-0794

April 17, 2019

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EXECUTIVE SUMMARY

The Attorneys General of Massachusetts, California, Connecticut, Delaware, Illinois, Iowa, Maine, Maryland, Michigan, Minnesota, Nevada, New Jersey, New Mexico, New York, North Carolina, Oregon, Rhode Island, Vermont, Virginia, Washington, and the District of Columbia; the Maryland Department of the Environment; the City Solicitor of Baltimore; the Corporation Counsels of Chicago and New York City; the County Attorney of the County of Erie, NY; and the County Counsel for the County of Santa Clara, CA (together "States and Local Governments") respectfully submit these comments on the Environmental Protection Agency's ("EPA") proposal entitled "National Emission Standards for Hazardous Air Pollutants: Coaland Oil-Fired Electric Utility Steam Generating Units—Reconsideration of Supplemental Finding and Residual Risk and Technology Review," 84 Fed. Reg. 2670 (Feb. 7, 2019) ("Proposal"). Specifically, these comments address EPA's proposed action to revise its 2016 supplemental finding, 81 Fed. Reg. 24,420 (Apr. 25, 2016) ("Supplemental Finding"). EPA issued the Supplemental Finding in response to the Supreme Court's decision in *Michigan v*. EPA, 135 S. Ct. 2699 (2015), which required EPA to take costs into account when evaluating whether it is "appropriate" to regulate coal- and oil-fired electric generating units ("EGUs" or "power plants") under section 112 of the Clean Air Act, 42 U.S.C. § 7412. See 84 Fed. Reg. at 2672–80. As these comments explain, the States and Local Governments oppose the Proposal and urge EPA to withdraw it because it is unlawful, lacks a reasoned basis, and threatens enormous public health harms.

In 1990, Congress amended the Clean Air Act to require EPA to regulate emissions of hazardous air pollutants or "HAPs" from power plants were it to find, after studying the public health hazards of those emissions, that it is "appropriate and necessary" to do so. 42 U.S.C. § 7412(n)(1)(A). To date, EPA has affirmed that regulation is appropriate and necessary no less than three times. Nearly twenty years ago, EPA first found that power plants must be regulated under section 112, based on an extensive record reflecting over a decade of scientific research and data on actual power-plant emissions. 65 Fed. Reg. 79,825 (Dec. 20, 2000). Accordingly, EPA listed power plants as a source category subject to regulation under section 112. *Id.* at 79,830; *see* 42 U.S.C. § 7412(c)(1). EPA reaffirmed its appropriate and necessary finding in 2012, relying on a growing body of scientific evidence. 77 Fed. Reg. 9304 (Feb. 16, 2012). And in 2016, pursuant to the *Michigan* decision, EPA further considered the costs of regulating power-plant hazardous air pollution under section 112 and promulgated its Supplemental Finding, once again confirming that regulating power-plant hazardous air pollution is appropriate and necessary.

EPA was correct in those findings, and it remains appropriate and necessary today to control power-plant hazardous air emissions under section 112. Fossil fuel-fired power plants are the Nation's largest source of hazardous air pollution, including acid gases, mercury, and

¹ The Proposal also solicits comment on the results of EPA's residual risk and technology review of the emission standards required under section 112 of the Clean Air Act (*see* 84 Fed. Reg. at 2680–2700), and EPA's proposal to establish a subcategory for acid gas emissions from existing power plants firing bituminous coal refuse (*see id.* at 2700–03).

other toxic metals such as arsenic, chromium, and nickel. *See* 77 Fed. Reg. at 9310. Those pollutants pose severe risks to human health and are especially harmful to certain highly exposed and sensitive populations, including children and subsistence fishing communities. *See id.* at 9347, 9441. Power-plant mercury emissions, in particular, are a major contributor to ubiquitous mercury contamination of U.S. waterways, which, as of 2011, necessitated fish consumption advisories in all fifty States. *See* Section I.A, *infra*. Overwhelming record evidence demonstrates that the public health and environmental benefits of reducing power-plant emissions are vast, and by comparison, the costs of available emission controls are a bargain. *See* Sections I and V.D.1, *infra*.

In April 2015—nearly twenty-five years after passage of the 1990 Clean Air Act Amendments, and nearly fifteen years after EPA made its initial appropriate and necessary finding—power plants were finally required to comply with national, technology-based emission limits, commonly known as the Mercury and Air Toxics Standards or "MATS" Rule, 77 Fed. Reg. 9304 (Feb. 16, 2012). Today, regulated power plants are in full compliance with the standards, achieving a ninety-six percent reduction in power-plant hazardous air pollution emissions—including an eighty-six percent reduction in power-plant mercury emissions. 84 Fed. Reg. at 2689 tbl.4. Those reductions have generated, and continue to generate, significant public health, environmental, and economic benefits for the States and Local Governments—and at a fraction of the predicted cost. *See* Sections I.C and V.D.1, *infra*. Because power-plant mercury emissions traverse state borders, the national mercury emission limits provided by the MATS Rule are a critical buttress to state-level mercury emission control regimes. *See* Section I.B, *infra*.

EPA now claims authority to reverse its thrice-confirmed appropriate and necessary finding and determine instead that it is not appropriate and necessary to regulate power plants under section 112. 84 Fed. Reg. at 2672. Based on a misreading of *Michigan*, EPA rejects its routinely used cost-analysis metrics, which demonstrated the cost-reasonableness of the MATS Rule. EPA proposes to change course in spite of the MATS Rule's proven public health benefits and the States and Local Governments' reliance on the Rule, and over the strenuous objection of the electric power sector, which has made significant investments to comply with the Rule. *See* Sections I and VI.B, *infra*. Indeed, EPA appears to ignore the near-unanimous opposition to the Proposal from regulated industry, trade groups, and public health and environmental organizations alike.

EPA suggests its Proposal would not affect the MATS Rule; but in the same breath, EPA solicits comment on "alternative interpretations" of the effect of its proposed revised finding, including whether EPA would be *obligated* to rescind the MATS Rule upon finalizing a reversal of the appropriate and necessary finding. 84 Fed. Reg. at 2678–79. A leading opponent of the MATS Rule—and one of the very few strong supporters of EPA's Proposal—has already indicated in comments to EPA its view that reversing the appropriate and necessary finding would render the Rule legally vulnerable. Yet, EPA wholly fails to consider that the Proposal,

² Public Hearing Comments of Cody Nett, Asst. General Counsel for Murray Energy Corp., on "Reconsideration of Supplemental Finding and Residual Risk and Technology Review for Coal- and Oil-Fired Utility Steam

if finalized, would place critical public health protections at risk and would generate tremendous uncertainty and costs for the States and Local Governments and the electric power sector. *See* Section VI, *infra*.

As detailed in these comments, EPA's proposed revised finding is unlawful and *ultra vires*, and must be withdrawn. It contradicts the text, structure, and purposes of the Clean Air Act, as well as the Supreme Court's directive in *Michigan* and the D.C. Circuit Court of Appeals decision in *New Jersey v. EPA*, 517 F.3d 574 (2008).

The Clean Air Act prohibits EPA from reconsidering its appropriate and necessary finding, which necessitates listing power plants as a source category, unless EPA can satisfy the delisting criteria established by Congress under section 112(c)(9), 42 U.S.C. § 7412(c)(9). Section 112(c)(9) limits EPA's discretion to reconsider its determination to regulate power plants by requiring EPA first to demonstrate that emissions of hazardous air pollutants from every regulated power plant are below certain health and environmental risk thresholds. *See* Section IV, *infra*. EPA is not proposing to delist power plants here—and indeed, EPA's proposed residual risk and technology review, 84 Fed. Reg. at 2680–2700, as well as extensive record evidence on the continuing health and environmental harms of power-plant hazardous air emissions, demonstrates that EPA could not make the required showing. Once the appropriate and necessary finding is finalized, absent EPA's lawful conformance with the delisting procedures mandated by Congress—or a court-ordered vacatur or remand of the finding, which has not occurred—the finding remains valid. EPA's proposed reversal is thus an improper attempt by EPA to evade clear statutory limitations placed on its authority by Congress. *See* Section IV.C, *infra*.

Even if EPA had authority to reconsider its appropriate and necessary finding—and it does not—EPA's proposed finding that the costs of regulation "grossly outweigh" the hazardous air pollution benefits, 84 Fed. Reg. at 2676, would be arbitrary and capricious and unlawful for multiple reasons. For example:

- EPA abandons the reasonable approach to considering costs and benefits it employed in the Supplemental Finding without explaining "good reasons for the new policy" it proposes, as required under *FCC v. Fox*, 556 U.S. 502, 513–15 (2009) (*see* Section V, *infra*);
- EPA disregards the purposes of the Clean Air Act, the Supreme Court's directive in *Michigan*, and federal guidelines on benefit-cost analysis by failing to consider the

Generating Units" 2 (Mar. 18, 2019), Doc. ID No. EPA-HQ-OAR-2018-0794-0523 [Murray Energy Comments] (arguing that EPA "must also take the only logical and defensible next step by rescinding MATS altogether").

³ Indeed, the D.C. Circuit refused to vacate the MATS Rule on remand from *Michigan* in large part on the grounds that to do so would result in harm to public health. *See White Stallion Energy Ctr., LLC v. EPA*, No. 12-1100 ("*White Stallion II*") (D.C. Cir. Dec. 15, 2015) (order remanding the proceeding to EPA without vacatur of the MATS Rule), Doc. ID No. EPA-HQ-OAR-2009-0234-20567.

benefits of preventing the premature deaths of thousands of Americans each year from harmful air pollutant emissions (see Section V.C.1, infra);

- EPA arbitrarily ignores substantial categories of unquantified benefits from reducing mercury and air toxics, in contravention of EPA's statutory mandate to protect public health and the environment from hazardous air pollution (*see* Section V.C.2, *infra*);
- EPA blinds itself to relevant facts, ignoring data regarding the actual costs and benefits of controlling power-plant hazardous air pollution and instead proposing to rely on a stale and incomplete record that EPA knows is obsolete and not reflective of facts on the ground (*see* Section V.D, *infra*);
- EPA fails to consider the significant economic, environmental, and public health implications of its proposed revised finding—including the potential tremendous costs to the States and Local Governments of dismantling power-plant emissions standards, which is a distinct risk of EPA's proposed reversal (*see* Section VI.A, *infra*); and
- EPA fails to meet its higher burden to provide a "more detailed justification" for its proposed reversal given the "serious reliance interests" of power companies and ratepayers engendered by EPA's appropriate and necessary finding, *Fox*, 556 U.S. at 515 (*see* Section VI.B, *infra*).

In addition, EPA has tainted this rulemaking process by failing to address apparent ethical violations resulting from EPA Administrator Wheeler's and Assistant Administrator Wehrum's participation in the rulemaking. Because Messrs. Wheeler and Wehrum advocated on behalf of industry to repeal or revise the MATS Rule prior to joining EPA, their participation in this rulemaking may violate the Ethics Pledge they each signed upon their appointment to EPA. See Section VII, infra. EPA also has unreasonably denied requests for additional public hearings in geographic areas of the country most at risk from harmful emissions of mercury and other hazardous air pollutants from power plants. See Section III, infra.

Therefore, for all the reasons set forth herein, EPA should withdraw its proposed revised finding, and instead leave undisturbed its original finding, first made in 2000 and affirmed in 2012 and 2016, that it is appropriate and necessary to regulate hazardous air pollution from power plants.

DISCUSSION

I. Background

A. Power-Plant Mercury and Air Toxics Emissions Harm the States and Local Governments.

Power plants are the dominant source of hazardous air pollution in the Nation, annually emitting hundreds of thousands of tons, in the aggregate, of mercury and other air toxics. 77 Fed. Reg. at 9311; *Exhibit A*, Robert E. Unsworth et al., Industrial Economics, Inc., *The Economic Benefits of the Mercury and Air Toxics Standards (MATS) Rule to the Commercial and Recreational Fishery Sectors of Northeast and Midwest States* 4 (2019) ("IEc Report"). Exposure to power-plant hazardous air pollutants can cause a wide range of human health problems, negatively impact the nervous system, and increase the risk of pulmonary and cardiovascular disease. Hazardous air pollutants can be toxic at very low concentrations; for instance, EPA's reference dose for methylmercury—the estimate of the daily exposure that is "likely to be without an appreciable risk of deleterious effects during a lifetime"—is only 0.1 micrograms per kilogram per day. *See* 77 Fed. Reg. at 9351–52. Many power-plant hazardous air pollutants are particularly harmful to certain highly exposed and sensitive populations, such as children and subsistence fishing communities. *See id.* at 9347, 9441; 76 Fed. Reg. at 25,018.

Of particular concern to the States and Local Governments is the mercury emitted by power plants—which contributed half of all U.S. mercury emissions before the MATS Rule took effect. 76 Fed. Reg. at 25,002. Mercury emitted by power plants falls back to the earth, where microorganisms convert it to methylmercury, a potent neurotoxin. Methylmercury moves up the food chain in marine and freshwater ecosystems, increasing in concentration as larger predators consume contaminated prey. MacIntosh et al., *supra* note 5, at 16; IEc Report at 5. The primary route of methylmercury exposure for humans is eating mercury-contaminated fish. 76 Fed. Reg. at 25,000. Seafood accounted for an estimated eighty-two percent of the U.S. population's methylmercury intake between 2010 and 2012. When EPA issued its 2000 appropriate and necessary finding, it found that seven percent of U.S. women of childbearing age

⁴ See also Cleaner Power Plants, EPA (Mar. 4, 2019), https://www.epa.gov/mats/cleaner-power-plants.

⁵ David L. MacIntosh et al., *Environmental Health & Engineering, Emissions of Hazardous Air Pollutants from Coal-Fired Power Plants* 5, 35 (2011), https://www.lung.org/assets/documents/healthy-air/emissions-of-hazardous-air.pdf.

⁶ See also EPA, Regulatory Impact Analysis for the Final Mercury and Air Toxics Standards 7-40 to 7-41 (2011), Doc. ID No. EPA–HQ–OAR–2009–0234–20131 [MATS RIA].

⁷ See Philippe Grandjean et al., Adverse Effects of Methylmercury: Environmental Health Research Implications, 118(8) Envtl. Health Perspectives 1137, 1140–41 (2010), https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2920086/pdf/ehp-0901757.pdf; Envtl. Health & Engineering, Inc., Emissions of Hazardous Air Pollutants from Coal-Fired Power Plants 16 (2011).

⁸ Elsie M. Sunderland, Miling Li, & Kurt Bullard, *Decadal Changes in the Edible Supply of Seafood and Methylmercury Exposure in the United States*, 126(1) Envtl. Health Perspectives 017006-1, 017006-2 (2018), https://ehp.niehs.nih.gov/doi/pdf/10.1289/EHP2644.

were exposed to mercury levels exceeding EPA's reference dose. 65 Fed. Reg. at 79,829–30. Nearly a decade later, Minnesota researchers found that ten percent of tested infants born to mothers residing in Minnesota's Lake Superior Basin exceeded the reference dose. Tellingly, the seasonal exposure pattern observed in that study—greater mercury levels in infants born during summer months—suggested a fish-consumption exposure pathway.

Acute or long-term exposure to methylmercury can lead to numerous deleterious health effects. See *Exhibit B*, Barbara Morin & Paul J. Miller, Northeast States for Coordinated Air Use Management, *It Remains "Appropriate and Necessary" to Regulate Toxic Air Emissions from Coal- and Oil-fired Electric Generating Units* 15–17 (2019) ("NESCAUM Report"). In adults, mercury exposure is linked to an increased risk of diabetes ¹⁰ and autoimmune dysfunction, ¹¹ and is strongly correlated to adverse and potentially fatal cardiovascular effects. ¹² Children *in utero* and in early developmental stages are particularly susceptible to mercury exposure, ¹³ which can cause permanent neurological damage. 76 Fed. Reg. at 25,018. ¹⁴ Research estimates that the societal costs of mercury-related decreased IQ in the United States total billions of dollars per year. ¹⁵

The near-ubiquitous mercury contamination of U.S. waters poses a significant threat to public health. As of 2011, all fifty states had mercury-related fish consumption advisories in place. ¹⁶ As recently as 2018, over 4,000 fish advisories "affect[ed] almost half of the nation's

⁹ Patricia McCann, Minn. Dept. of Health Div. of Envtl. Health, *Mercury Levels in Blood from Newborns in the Lake Superior Basin* 10, 15 tbl.2 (2011),

https://www.health.state.mn.us/communities/environment/fish/docs/glnpo.pdf; Mercury in Newborns in the Lake Superior Basin, Minn. Dept. of Health,

https://www.health.state.mn.us/communities/environment/fish/techinfo/newbornhglsp.html.

¹⁰ K. He et al., *Mercury Exposure in Young Adulthood and Incidence of Diabetes Later in Life: The CARDIA Trace Element Study*, 36(6) Diabetes Care 1584, 1587 (2013), https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3661833/pdf/1584.pdf.

¹¹ Jennifer F. Nyland et al., *Biomarkers of Methylmercury Exposure Immunotoxicity among Fish Consumers in Amazonian Brazil*, 119(12) Envtl. Health Perspectives 1733, 1736–37 (2011), https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3261989/pdf/ehp.1103741.pdf.

¹² Giuseppe Genchi et al., *Mercury Exposure and Heart Diseases*, 14(1) Int'l J. Envtl. Research & Pub. Health 1, 8–9 (2017), https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5295325/pdf/ijerph-14-00074.pdf.

¹³ Stephanie Bose-O'Reilly et al., *Mercury Exposure and Children's Health*, 40(8) Current Problems in Pediatric & Adolescent Health Care 186, 186 (2010), https://doi.org/10.1016/j.cppeds.2010.07.002.

¹⁴ See also Public Health & Environment, World Health Org., Exposure to Mercury: A Major Public Health Concern 3 (2007), https://www.who.int/ipcs/features/mercury.pdf (neurological symptoms of prenatal methylmercury exposure can include intellectual disability, "seizures, vision and hearing loss, delayed development, language disorders and memory loss").

¹⁵ Philippe Grandjean & Martine Bellanger, *Calculation of the disease burden associated with environmental chemical exposures: application of toxicological information in health economic estimation*, 16(123) Envtl. Health 1, 4 (2017), https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5715994/pdf/12940_2017_Article_340.pdf; Amanda Giang & Noelle E. Selin, *Benefits of mercury controls for the United States*, 113(2) Proceedings of the Nat'l Acad. of Sci. 286, 288 (2016), https://www.pnas.org/content/pnas/113/2/286.full.pdf.

¹⁶ EPA, 2011 National Listing of Fish Advisories 4 (2013), https://www.epa.gov/sites/production/files/2015-06/documents/technical-factsheet-2011.pdf; see also IEc Report at 6–10 (describing fish consumption advisories and

lake acreage, river miles, and coastlines."¹⁷ Bolstering these advisories, a 2009 study found that 48.8% of the sampled fish population of 36,422 U.S. lakes had mercury tissue concentrations exceeding human health criteria. ¹⁸ In some states, all or nearly all waters are unsafe for fish consumption due to mercury contamination. And nearly 73,000 river and stream miles and 8,508,000 acres of lakes, reservoirs, and ponds nationwide are impaired under Clean Water Act section 303(d), 33 U.S.C. § 1313(d), due to mercury contamination. ¹⁹ In thirteen states— Connecticut, Florida, Maine, Massachusetts, Michigan, Minnesota, New Hampshire, New Jersey, New York, North Carolina, Rhode Island, South Dakota, and Vermont—mercury contamination has become significant enough to require the development of state- or region-wide "total maximum daily loads" or "TMDLs" to meet Clean Water Act water quality standards. ²⁰ See 33 U.S.C. § 1313(d)(1) (requiring development of TMDLs for impaired waters). Numerous other states have developed waterbody-specific mercury TMDLs within their borders. ²¹ As precipitation and air temperatures increase due to climate change, mercury deposition resulting from power-plant emissions may increase, as well. ²² Thus, areas such as the Northeast that are

other actions taken by states, the federal government, and non-governmental actors to limit public exposure to mercury in fish and shellfish).

¹⁷ Valoree S. Gagnon et al., Great Lakes Research Center, *Eliminating the Need for Fish Consumption Advisories in the Great Lakes Region* 3 (2018), https://www.mtu.edu/social-sciences/docs/res-fishconsumption-policybrief-030718.pdf.

¹⁸ Ki-Hyun Kim et al., *A Review on the Distribution of Hg in the Environment and Its Human Health Impacts*, J. Hazardous Materials 306, 379 (2016), https://www.ncbi.nlm.nih.gov/pubmed/26826963.

¹⁹ National Causes of Impairment, National Summary of Impaired Waters and TMDL Information, EPA, https://iaspub.epa.gov/tmdl_waters10/attains_nation_cy.control#causes (last visited Apr. 17, 2019).

²⁰ See Northeast Regional Mercury Total Maximum Daily Load vi (2007), http://ofmpub.epa.gov/waters10/attains impaired waters.show tmdl document?p tmdl doc blobs id=74831 [Northeast TMDL]; Fla. Dept. of Envtl. Prot., Mercury TMDL for the State of Florida (2013), https://floridadep.gov/sites/default/files/Mercury-TMDL.pdf; Mich. Dept. of Envtl. Quality & EPA, Statewide Michigan Mercury TMDL: Public Review Draft (2013), https://www.micingan.gov/documents/deq/wrd-swas-hgtmdl-draft_415360_7.pdf; Minn. Pollution Control Agency, Minnesota Statewide Mercury Total Maximum Daily Load (2007), https://www.pca.state.mn.us/index.php/view-document.html?gid=8507 [Minnesota TMDL]; N.J. Dept. of Envtl. Prot., Total Maximum Daily Load for Mercury Impairments Based on Concentration in Fish Tissue Caused Mainly by Air Deposition to Address 122 HUC 14s Statewide (2009), https://www.nj.gov/dep/wms/bears/docs/TMDL%20HG%20document%20final%20version%209-8-09 formated%20for%20web%20posting%20js.pdf [New Jersey TMDL]; N.C. Dept. of Envtl. Quality, North Carolina Mercury TMDL (2012), https://portal.ncdenr.org/c/document_library/get_file?uuid=aecb3619-c246-4b49-bfd8-fd5541775110&groupId=38364 [North Carolina TMDL]; S.D. Dept. of Env't and Nat. Res., South Dakota Mercury Total Maximum Daily Load (Revised Dec. 2016), https://denr.sd.gov/dfta/wp/tmdl/tmdl statewidemercury.pdf [South Dakota TMDL].

²¹ See TMDL Pollutant Group: Mercury, EPA, https://iaspub.epa.gov/tmdl waters10/attains impaired waters.tmdls?p pollutant group id=693 (last visited Apr. 17, 2019) (noting that twenty-eight states have at least one mercury TMDL and some states have dozens).

²² See Zhuyun Ye, Huiting Mao, & Charles T. Driscoll, *Primary Effects of Changes in Meteorology vs. Anthropogenic Emissions on Mercury Wet Deposition: A Modeling Study*, 198 Atmospheric Env't 215 (2019), https://doi.org/10.1016/j.atmosenv.2018.10.052 (finding precipitation amount was a dominant factor driving mercury deposition in New York State).

already experiencing heavier storms are likely to face greater challenges in addressing mercury contamination.

Mercury contamination not only harms the residents of the States and Local Governments through consumption of contaminated fish but also limits their ability to enjoy the benefits of recreational fisheries. For example, power-plant mercury emissions "are a significant contributor to total mercury levels in fish and shellfish in the Northeast and Midwest states," leading to fish consumption advisories and other warnings about the risks of mercury contamination. IEc Report at 2–3. Such advisories and warnings in fact change recreational and subsistence fishing behavior as well as consumption patterns for commercially harvested fish and shellfish. *Id.* at 3, 10–13. For instance, research found that the decline in economic value for recreational fishing trips due to the presence of a fish consumption advisory at one New York fishing location was \$34.34 per fishing day at that location alone. *Id.* at 15 Ex.4. Other research found that New York State property values within one mile of a lake subject to a mercury-related fish consumption advisory decrease by an average of six to seven percent. *Id.* at 23–24.

Overall, the impacts of power-plant mercury pollution to the States and Local Governments' recreational and commercial fisheries and tourism industries are enormous. *Id.* at 3–4, 14–23. In the twelve Northeast and Midwest states considered in the IEc Report, recreational fishing contributes more than \$7.5 billion per year to those states' economic welfare. *Id.* at 3. In total, "the \$12.0 billion in annual recreational fishing expenditures and the \$1.6 billion in annual commercial fish landings for these 12 states result in a regional economic contribution of 276,696 full-time and part-time jobs, \$8.7 billion in earnings, \$17.2 billion in value added, and \$28.1 billion in output." *Id.* at 22. Even smalls changes to recreator and consumer behavior associated with contamination from power-plant mercury emissions thus "could result in substantial economic impacts to related economic industries at the state or regional level." *Id.* at 22–23. And "[t]he magnitude of economic impacts increases as contamination worsens and [fish consumption advisories] become more restrictive." *Id.* at 3.

B. Nationwide Emissions Standards Are Essential to Address the Harmful Cross-Border Impacts of Power-Plant Mercury and Air Toxics Emissions.

The States and Local Governments have long sought to reduce the dangers that power-plant emissions—particularly mercury—pose to our residents and natural resources. Many of the undersigned states have taken regulatory action to reduce emissions of mercury and other hazardous air pollution from power plants within their borders. At least fourteen states have promulgated limits on mercury emissions from power plants. In most of those states, power plants were obligated under state law to control mercury emissions by the MATS Rule's April 2015 compliance date.²³ Nearly every state with power-plant mercury emission standards has

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²³ In fact, power plants in Connecticut, Massachusetts, and New Jersey were complying with those states' mercury standards three to four years before EPA's proposal of the MATS Rule in 2011. Conn. Gen. Stat. § 22a-199 (compliance by July 1, 2008); 310 Mass. Code Regs. § 7.29 (first phase compliance by Jan. 1, 2008); N.J. Admin. Code § 7:27-27.7 (compliance by Dec. 15, 2007); *see also* 5 Colo. Code Regs. § 1001-8:B.VIII (first phase compliance by Jan. 1, 2012); Del. Admin. Code, tit. 7, § 1146-6 (first phase compliance by Jan. 1, 2009); Ill. Admin. Code tit. 35, § 225.230 (compliance by July 1, 2009); Md. Code Regs. tit. 26, § 11.27.03.D (first phase compliance

required more health-protective limits than the MATS Rule.²⁴ Other states have required power plants to install mercury-monitoring equipment or evaluate the feasibility of mercury controls.

State requirements, however, have not solved, and cannot solve, the problem of interstate hazardous air pollution. Mercury can travel hundreds of miles from the smokestack. See 77 Fed. Reg. at 9444. Thirty percent of Minnesota's mercury deposition, for example, originates from out-of-state domestic sources. 25 And a significant portion of Northeast mercury deposition originates from uncontrolled power plants located in other states. See NESCAUM Report at 7. Unless those out-of-state power-plant emissions are addressed, Northeast waters will not meet federal water quality standards. See Northeast TMDL, supra note 20, at 44 (concluding that EPA action to "implement significant reductions from upwind out-of-region sources, primarily coal-fired power plants" is necessary to return fish methylmercury concentrations to safe levels). Also, mercury-contaminated fish are bought and sold in interstate commerce, and individuals that consume store-bought fish thus suffer the downstream effects of power-plant toxic emissions even though they may reside far from the source of the emissions. For example, recent statistics from the California Department of Public Health show blood-mercury levels far exceeding levels of concern among members of Asian/Pacific Island communities in the San Francisco Bay Area, which have high rates of store-bought fish consumption relative to the general population.²⁶ Nationally-uniform standards are essential to protect the States and Local Governments' residents, natural resources, and economies from the dangerous quantities of mercury and other hazardous air pollution that out-of-state power plants emit.

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by Jan. 1, 2010); Minn. R. 7011.0561 (first phase compliance by Jan. 1, 2018); Mont. Admin. R. 17.8.771 (compliance by Jan. 1, 2010); N.H. Rev. Stat. Ann. § 125-O:11-18 (compliance by July 1, 2013); N.Y. Comp. Codes R. & Regs. tit. 6, § 246.6 (first phase compliance by Jan. 1, 2010); Or. Admin. R. 340-228-0606 (compliance by July 1, 2012); Wis. Admin. Code NR § 446.13 (compliance by Apr. 16, 2016); *see also* Mich. Admin. Code r. 336.2503(1)(a)-(b) (2009) (compliance by Jan. 1, 2015), *modified by* Mich. Admin. Code r. 336.2502a (2013) (exempting covered power plants "for which [MATS] is an applicable requirement relative to emissions of mercury" and, if the Rule ceases to be an applicable requirement, extending compliance date to the sooner of three months from the date of inapplicability or April 16, 2015).

²⁴ The MATS Rule imposes a mercury emission standard of 1.2 lb/TBtu or 0.013 lb/GW-hr. *See* 77 Fed. Reg. at 9367 tbl.3. Most state rate-based standards are set at 0.6 lb/TBtu or 0.008 lb/GW-hr. *See* Conn. Gen. Stat. § 22a-199(b)(1) (0.6 lb/TBtu); Del. Admin. Code, tit. 7, § 1146-6.2 (0.6 lb/TBtu); Ill. Admin. Code tit. 35, § 225.230(a)(1)(A) (0.008 lb/GW-hr); 310 Mass. Code Regs. § 7.29(5)(a)(3)(f) (0.0025 lb/GW-hr); Mich. Admin. Code r. 336.2503(1)(b) (0.008 lb/TBtu); Minn. R. 7011.0561 (0.008 lb/TBtu); Mont. Admin. R. 17.8.771(1)(b)(ii) (0.9 lb/TBtu); N.J. Admin. Code § 7:27-27.7(a) (3.00 mg/MWh (equivalent to 0.66 lb/TBtu); N.Y. Comp. Codes R. & Regs. tit. 6, § 246.6(a) (0.6 lb/TBtu); Or. Admin. R. 340-228-0606(1) (0.6 lb/TBtu); Wis. Admin. Code NR § 446.13(1) (0.008 lb/GW-hr).

²⁵ Minnesota TMDL, *supra* note 20, at 20–21, 45 (stating that federal regulation of those sources, such as power plants, holds most promise for reaching Minnesota's TMDL goals); *see also* New Jersey TMDL, *supra* note 20, at 31 (noting that twenty-six percent of New Jersey's air deposition mercury load originates from five surrounding states); North Carolina TMDL, *supra* note 20, at 6 (noting that fifteen percent of North Carolina's total mercury deposition originates from out-of-state regional sources).

²⁶ Lauren Baehner, *Metal Levels in Asian/Pacific Island Community Exposures (ACE) Project*, BioMonitoring California Scientific Guidance Panel Meeting (Nov. 8, 2018), https://biomonitoring.ca.gov/events/biomonitoring-california-scientific-guidance-panel-meeting-november-2018.

Consequently, many of the States and Local Governments have engaged in advocacy to compel, support, and defend federal regulation of hazardous air pollution from power plants under the Clean Air Act. That effort has spanned nearly two decades, from EPA's 2000 finding that regulation of power plants is appropriate and necessary, 65 Fed. Reg. 79,825 (Dec. 20, 2000); to EPA's 2005 reversal of that determination, which many of the undersigned states successfully challenged in *New Jersey v. EPA*, 517 F.3d 574 (D.C. Cir. 2008); to its 2012 reaffirmation of the original 2000 finding and issuance of the MATS Rule, 77 Fed. Reg. 9304 (Feb. 16, 2012); and litigation of the MATS Rule before the D.C. Circuit and the Supreme Courts, culminating in the decision in *Michigan. See White Stallion Energy Ctr., LLC v. EPA* ("White Stallion I"), 748 F.3d 1222 (D.C. Cir. 2014), rev'd sub nom. Michigan v. EPA, 135 S. Ct. 2699 (2015).

Following *Michigan*, many of the States and Local Governments continued to defend and support nationwide emission standards, successfully arguing for remand without vacatur of the MATS Rule, and submitting comments to EPA in support of its Supplemental Finding.²⁷ Several States and Local Governments subsequently intervened in support of EPA in D.C. Circuit litigation challenging the Supplemental Finding, *Murray Energy Corp. v. EPA*, No. 16-1127. EPA's Proposal now jeopardizes continued implementation of the critically important emission controls for which those States and Local Governments have long advocated. And by the same token, the Proposal would undermine EPA's own efforts in developing and implementing the MATS Rule. As described in these comments, the Proposal is an outrageous and wasteful action that is neither compelled nor even supported by legal, scientific, or economic principles.

C. The States and Local Governments Are Benefiting from the MATS Rule.

Since the MATS Rule took effect in 2012, the electric power sector has invested billions of dollars in air pollution controls to meet the Rule's 2015 compliance date.²⁸ Today, all regulated power plants are in compliance. Compliance has generated, and continues to generate, massive reductions in hazardous air pollutant emissions that are essential to protecting public health and the environment and leveling the regulatory playing field across the country.

²⁷ See Comments of Massachusetts Attorney General Maura Healey et al. on EPA's Proposed Supplemental Finding (Jan. 15, 2016), Doc. ID No. EPA-HQ-OAR-2009-0234-20551.

²⁸ Letter from Edison Electric Inst. et al. to William L. Wehrum, Assistant Admin'r, Off. of Air & Radiation, EPA 2 (Mar. 26, 2019), Doc. ID No. EPA-HQ-OAR-2018-0794-0577 [Industry Comments] (stating that the electric power sector has invested \$18 billion *total* to comply with the MATS Rule since the Rule took effect); Declaration of James E. Staudt ¶ 5, attached to Comments of Calpine Corp. et al. on EPA's Proposed Supplemental Finding (Dec. 1, 2015), Doc. ID No. EPA-HQ-OAR-2009-0234-20549 [Staudt Declaration] (stating that annual compliance costs were approximately \$2 billion through 2016); *see also* Letter from Brian Leen, President & Chief Exec. Off'r, ADA Carbon Solutions, to Peter Tsirigotis, Director, Off. of Air Quality Planning & Standards, EPA 5 (June 29, 2018), Doc. ID No. EPA-HQ-OAR-2018-0794-0794 [Carbon Industry Comments] (stating that the activated carbon industry has invested over \$750 million to supply power plants with control technologies to comply with the MATS Rule).

Power-plant mercury emissions, for example, declined eighty-six percent between 2006 and 2017, mainly as a result of the MATS Rule and other emission-control policies. See 84 Fed. Reg. at 2689 tbl.4. Research confirms that the MATS Rule "has reduced mercury loadings to aquatic systems, in turn leading to a reduction in mercury levels in fish and shellfish." IEc Report at 3, 5–6. For instance, studies have found that decreased mercury emissions corresponded with declines in mercury contamination in waterbodies and freshwater and saltwater fish species, including Atlantic Bluefin tuna, ²⁹ mid-Atlantic bluefish, ³⁰ and largemouth bass and yellow perch in Massachusetts. 31 See NESCAUM Report at 13–14. Declines in mercury fish-tissue concentrations have been observed across the aquatic food chain, including among important commercial and recreational fish species, benefiting human and wildlife health. See id. at 14.32 In addition, pollution-control technologies installed for MATS Rule compliance have also reduced harmful emissions of other regulated pollutants such as sulfur dioxide and particulate matter. For instance, between December 2014 and April 2016, dry sorbet injection systems were installed on 15 gigawatts of coal capacity, and flue gas desulfurization systems (also known as scrubbers) were installed on 12 gigawatts of coal capacity.³³ During 2015, those plants burned eighteen percent less coal than in 2014 and reduced their sulfur dioxide emissions by forty-nine percent.³⁴

The economic value to the States and Local Governments of continued emission reductions under the MATS Rule is enormous. Research confirms the MATS Rule saves tens of thousands of people from premature death each year.³⁵ A 2016 study projected that the total economy-wide benefits associated with the continued implementation of the MATS Rule through 2050 would amount to at least \$43 billion considering benefits from reducing mercury emissions alone. *See* Giang & Selin (2016), *supra* note 15, at 288. And as the IEc Report found, "it is reasonable to conclude that the Rule may generate recreational and commercial fishing

²⁹ Cheng-Shiuan Lee et al., *Declining Mercury Concentrations in Bluefin Tuna Reflect Reduced Emissions to the North Atlantic Ocean*, 50(23) Science & Tech. 12,825, 12,829–30 (2016), https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5161346/.

³⁰ Cross et al., *Decadal Declines of Mercury in Adult Bluefish* (1972-2011) from the Mid-Atlantic Coast of the U.S.A., 49 Envtl. Sci. Tech. 9064–72 (2015); see also Brian Bienkowski, *Cleaner Bluefish Suggest Coal Rules Work*, Scientific American (July 20, 2015), http://www.scientificamerican.com/article/cleaner-bluefish-suggest-coal-rules-work/.

³¹ M.S. Hutcheson et al., *Temporal and Spatial Trends in Freshwater Fish Tissue Mercury Concentrations Associated with Mercury Emissions Reductions*, 48 Envtl. Sci. Tech. 2193 (2014), https://www.ncbi.nlm.nih.gov/pubmed/24494622.

³² See also Lee et al. (2016), supra note 29, at 12,829–30; Christopher D. Knightes et al., Application of Ecosystem-Scale Fate and Bioaccumulation Models to Predict Fish Mercury Response Times to Changes in Atmospheric Deposition, 28(4) Sci. & Tech. 881, 881–88 (2009), https://doi.org/10.1897/08-242R.1.

³³ U.S. Energy Information Admin., *EIA Electricity Generator Data Show Power Industry Response to EPA Mercury Limits*, Today in Energy (July 7, 2016), https://www.eia.gov/todayinenergy/detail.php?id=26972.

³⁴ U.S. Energy Information Admin., *Sulfur Dioxide Emissions from U.S. Power Plants Have Fallen Faster Than Coal Generation*, Today in Energy (Feb. 3, 2017), https://www.eia.gov/todayinenergy/detail.php?id=29812.

³⁵ Vivian E. Thomson, Kelsey Huelsman, & Dominique Ong, *Coal-fired power plant regulatory rollback in the United States: Implications for local and regional public health*, 123 Energy Pol'y 558, 559 (2018), https://www.sciencedirect.com/science/article/pii/S030142151830627X.

benefits in excess of \$1 billion *annually*." IEc Report at 4; *see also infra* Section V.D.1. In sum, the MATS Rule is providing enormous continuing health, environmental, and economic benefits to the States and Local Governments.

II. Applicable Legal Standard

Under the Clean Air Act, a reviewing court will invalidate EPA action found to be "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law," or "in excess of statutory jurisdiction, authority, limitations, or short of statutory right." 42 U.S.C. § 7607(b), (d).

An EPA action is arbitrary and capricious and unlawful if the agency fails to "examine the relevant data and articulate a satisfactory explanation for its action including a rational connection between the facts found and the choice made." Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983) (internal quotation marks and citation omitted). Courts will invalidate actions where EPA has "failed to consider an important aspect of the problem" before it. Id. Those principles apply with equal force when EPA revises or repeals existing policies. Although EPA need not show that a new policy is "better" than the policy it replaced, it must demonstrate that "it is permissible under the statute, that there are good reasons for it, and that the agency believes it to be better." Fox, 556 U.S. at 513–15 (emphases omitted). Further, EPA must "provide a more detailed justification than what would suffice for a new policy created on a blank slate" when "its new policy rests upon factual findings that contradict those which underlay its prior policy; or when its prior policy has engendered serious reliance interests that must be taken into account." Id. at 515; see also Encino Motorcars, LLC v. Navarro, 136 S. Ct. 2117, 2126 (2016). "Unexplained inconsistency" between a policy and its repeal is "a reason for holding an [agency's] interpretation to be an arbitrary and capricious change." National Cable & Telecomms. Ass'n v. Brand X Internet Servs., 545 U.S. 967, 981 (2005).

Courts typically review EPA's interpretation of the Clean Air Act under the two-step framework articulated in *Chevron U.S.A., Inc. v. EPA*, 467 U.S. 837 (1984). At *Chevron* step one, courts evaluate, using the "traditional tools of statutory construction," *id.* at 843 n.9, whether the Act "unambiguously forecloses the agency's interpretation." *Nat'l Cable & Telecomms. Ass'n v. FCC*, 567 F.3d 659, 663 (D.C. Cir. 2009). "If the intent of Congress is clear, that is the end of the matter; for the court, as well as the agency, must give effect to the unambiguously expressed intent of Congress." *Chevron*, 467 U.S. at 842–43. But "if the statute is silent or ambiguous with respect to the specific issue," *id.* at 843, courts will look, at step two, to "whether [the agency] has reasonably explained how the permissible interpretation it chose is rationally related to the goals of the statute." *Good Fortune Shipping SA v. Comm'r of Internal Revenue Serv.*, 897 F.3d 256, 261 (D.C. Cir. 2018) (internal quotation marks omitted). The reasonableness of EPA's chosen construction depends, in part, "on the construction's fit with the statutory language, as well as its conformity to statutory purposes." *Goldstein v. SEC*, 451 F.3d 873, 881 (D.C. Cir. 2006) (internal quotation omitted). In interpreting the Clean Air Act, "EPA may not construe the statute in a way that completely nullifies textually applicable

provisions meant to limit its discretion." Whitman v. Am. Trucking Ass'ns, 531 U.S. 457, 485 (2001).

III. EPA Did Not Allow Adequate Public Participation in the Rulemaking Process.

EPA has failed to provide sufficient opportunity for public participation in its rulemaking process. Despite requests from many of the undersigned States and Local Governments and dozens of public health and environmental organizations for additional public hearings on the Proposal, ³⁶ EPA has held only *one* public hearing, in Washington, D.C. *See* 84 Fed. Reg. 6739 (Feb. 28, 2019). Given the risks to public health and the environment posed by the Proposal—and the complex, region-specific issues it raises—EPA should hold multiple hearings in geographic areas of the country most vulnerable to mercury and air toxics pollution from the power sector. EPA's refusal to hold additional hearings is particularly unfair to communities in the Great Lakes and Northeast regions, where mercury pollution, particularly from out-of-region sources, continues to be a serious environmental and public health problem.

Considering the severe impacts our States and Local Governments are experiencing from mercury and hazardous air emissions, and the potential significant consequences of the Proposal, as described in these comments, a single hearing is inadequate to afford the public a meaningful opportunity to comment. During the 2011 proposal phase for the MATS Rule, EPA held three hearings in Chicago, Philadelphia, and Atlanta. Residents of our States and Local Governments should at least be afforded equivalent opportunities to evaluate and weigh in on EPA's current Proposal as they were in 2011.

IV. The Proposed Revised Finding is Unlawful and *Ultra Vires* Because EPA Has No Authority to Reconsider Whether Regulation of Power-Plant Hazardous Air Pollution is Appropriate and Necessary (C-1).

Beyond a footnote summarizing general administrative law principles, EPA fails to explain the legal basis for its claimed authority to revise and withdraw its appropriate and necessary finding. *See* 84 Fed. Reg. at 2674 n.3. Such cursory discussion does not satisfy EPA's duty to notify the public of "the major legal interpretations and policy considerations underlying the proposed rule." 42 U.S.C. § 7607(d)(3). But as far as EPA's interpretation of its authority can be surmised from the Proposal, that interpretation is wrong. Although EPA may have authority to reconsider past decisions to the extent permitted by law, and the Clean Air Act generally provides EPA with broad rulemaking authority, section 112 limits the discretion the agency typically would have to reconsider its position.

³⁶ See, e.g., Letter to Andrew Wheeler, Admin'r, EPA, from the Attorneys General of Massachusetts, Connecticut, Delaware, Illinois, Iowa, Maine, Maryland, Minnesota, Nevada, New Jersey, New York, North Carolina, Oregon, Rhode Island, Vermont, Virginia, and Washington, and the Cities of Chicago and New York Requesting Additional Public Hearings (Mar. 18, 2019), Doc. ID. EPA-HQ-OAR-2018-0794-0509; Letter to Andrew Wheeler, Acting Admin'r, EPA, from Alliance for the Great Lakes et al. Requesting Additional Public Hearings (Feb. 27, 2019), Doc. ID. EPA-HQ-OAR-2018-0794-0261.

The Clean Air Act's plain text, structure, and legislative history confirm that Congress intended EPA to make a single threshold decision about whether regulation of power-plant hazardous air pollution is appropriate and necessary. Once emission standards are in place, Congress sought to protect against agency capture and economic disruption by restricting the conditions under which EPA could unwind those standards. As the D.C. Circuit made clear in *New Jersey*, absent a court order, once EPA makes its appropriate and necessary finding and lists power plants, the only way for EPA to reverse course is by making the risk-based determinations required by section 112(c)(9) to demonstrate that no power plant poses an unacceptably high risk to human health or the environment. 517 F.3d at 583. But EPA cannot do so here. *See, e.g.*, 84 Fed. Reg. at 2679, 2697.

Even if the statutory text were ambiguous, EPA's theory that it could somehow revise or withdraw the appropriate and necessary finding without following section 112(c)(9)'s health-protective procedures would be irrational in light of the statute's structure and purposes. *See Whitman*, 531 U.S. at 485 ("EPA may not construe the statute in a way that completely nullifies textually applicable provisions meant to limit its discretion."); *Goldstein*, 451 F.3d at 881 (reasonableness of agency's statutory construction depends, in part, on its "fit with the statutory language" and "conformity to statutory purposes" (internal quotation marks omitted)). For the same reasons, EPA's alternative theories under which it could (or even must) rescind the MATS Rule without following the section 112(c)(9) procedures are also wrong. EPA's Proposal is therefore unlawful and *ultra vires* and should be withdrawn.

A. The Clean Air Act Prohibits EPA from Reconsidering its Appropriate and Necessary Finding Unless It Follows Health-Protective Statutory Procedures.

1. Statutory Text, Context, and Structure Plainly Prohibit the Proposed Revised Finding.

The plain language of section 112 unambiguously prohibits EPA from reconsidering its appropriate and necessary finding outside of the procedures defined in section 112(c)(9).³⁷ Enacted as part of the 1990 Clean Air Act Amendments, section 112(n)(1)(A) gave EPA only limited authority to make a one-time finding as to whether power plants should be regulated under section 112, based on a one-time public health study due, and in fact completed, decades ago.³⁸ It mandates that EPA "shall perform a study of the hazards to public health reasonably anticipated to occur as a result of emissions by [power plants]" and report the results of that study to Congress by 1993; and it requires that EPA "shall regulate [power plants] under this

³⁷ In addition, a reviewing court, subject to applicable judicial review procedures, may order EPA to revisit an appropriate and necessary finding by remanding the finding to the agency, as the D.C. Circuit did in 2015 on remand following *Michigan*. *White Stallion II* (D.C. Cir. Dec. 15, 2015) (order remanding the proceeding to EPA without vacatur of the MATS Rule), Doc. ID No. EPA-HQ-OAR-2009-0234-20567; *accord New Jersey*, 517 F.3d at 583 (confirming that "section 112(c)(9)'s delisting process or court-sanctioned vacatur" are the only avenues by which EPA could reconsider regulation of power plants under section 112). As discussed in Section IV.B, *infra*, this Proposal is not a continuation of the *White Stallion II* court's remand.

³⁸ See EPA, Off. of Air Quality Planning & Standards, Study of Hazardous Air Pollutant Emissions from Electric Utility Steam Generating Units – Final Report to Congress (1998), Doc. ID No. EPA–HQ–OAR–2009–0234–3052.

section, if the Administrator finds such regulation is appropriate and necessary after considering the results of the study." 42 U.S.C. § 7412(n)(1)(A). "Once the appropriate and necessary finding is made, EGUs are subject to section 112 in the same manner as other sources." 77 Fed. Reg. at 9330. Thus, upon finding that it is appropriate and necessary to regulate power-plant hazardous air emissions, as EPA did in 2000, and reaffirmed in 2012 and 2016, the agency no longer had discretion to exercise; section 112(n)(1)(A) requires that EPA "shall regulate" power plants. *See Chevron*, 467 U.S. at 843–44 (agencies have discretion "only when Congress has left a gap for the agency to fill"); *Ethyl Corp. v. EPA*, 51 F.3d 1053, 1060 (D.C. Cir. 1995) ("level of specificity" in Clean Air Act provision "effectively closes any gap the Agency seeks to find and fill").

If EPA later believes its initial determination was made in error, the regulatory off-ramp Congress provided EPA is section 112(c)(9), "Deletions from the list." Under that provision, EPA "may delete any source category from the list" of categories regulated under section 112 if EPA can demonstrate that no source in that category poses an unacceptable risk to human health or the environment. Specifically, EPA would have to make two determinations: first, "that no source in the category" emits hazardous air pollution "in quantities which may cause a lifetime risk of cancer greater than one in one million" to the most exposed individual, and second, "that emissions from no source . . . 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." 42 U.S.C. § 7412(c)(9)(B)(i)–(ii). As the D.C. Circuit has confirmed, section 112(c)(9)'s "comprehensive delisting process" unambiguously applies to *all* listed sources, including power plants. *New Jersey*, 517 F.3d at 582–83.

That reading of the text is the only reading consistent with statutory context and structure. See Util. Air Regulatory Grp. v. EPA, 573 U.S. 302, 320 (2014) ("[T]he words of a statute must be read in their context and with a view to their place in the overall statutory scheme." (internal quotation marks omitted)). When Congress first passed the Clean Air Act, it found that growth in air pollution had "resulted in mounting dangers to the public health and welfare," 42 U.S.C. § 7401(a)(2), and declared that the purposes of Title I are to "protect and enhance the quality of the Nation's air resources so as to promote the public health and welfare and the productive capacity of its population," id. § 7401(b)(1); see also Air All. Houston v. EPA, 906 F.3d 1049, 1061–62 (D.C. Cir. 2018) (Congress enacted the Clean Air Act "to encourage and promote 'pollution prevention." (citing 42 U.S.C. § 7401(c))). Congress added section 112 to the Act in 1970 to further those purposes. See Pub. L. No. 91-604, § 4(a), 84 Stat. 1676, 1685 (1970). But decades later, EPA had established emission standards for only seven hazardous air pollutants, and many of the largest sources of toxic pollution, including power plants, were still unregulated. New Jersey, 517 F.3d at 578–79.

Congress thus intended in the 1990 Clean Air Act Amendments to remedy "the slow pace of EPA's regulation." *Id.* at 578; *see also* 77 Fed. Reg. at 9327. Motivated by its goal of rapid regulation of hazardous air pollution, Congress "altered section 112 by eliminating much of EPA's discretion in the process." *New Jersey*, 517 F.3d at 578; *see also Nat'l Lime Ass'n v. EPA*, 233 F.3d 625, 634 (D.C. Cir. 2000) (Congress created a strict framework for regulating hazardous air pollution "precisely because it believed EPA had failed to regulate enough

[pollutants] under previous air toxics provisions"). For instance, Congress directly listed 189 hazardous air pollutants, including mercury, 42 U.S.C. § 7412(b)(1), gave EPA one year to list all source categories that emitted the listed pollutants, *id.* § 7412(c)(1), and directed EPA promptly to establish emissions standards for those categories, *id.* § 7412(e). Congress also dispensed with the risk-based approach to establishing emission standards, instead requiring the technology-based "Maximum Achievable Control Technology" or "MACT" standard, mandating that EPA consider public health risks that may remain even after applying MACT standards, and directing EPA to establish more stringent standards as required to protect public health. *Id.* § 7412(d)(2)–(3), (f)(1)–(2). Congress also deliberately "restricted the opportunities for EPA and others to intervene in the regulation of HAP sources" by establishing the section 112(c)(9) criteria for removing a listed source category and barring judicial review of listing decisions until EPA promulgated emission standards for the source category. *New Jersey*, 517 F.3d at 578 (citing 42 U.S.C. § 7412(c)(9), (e)(4)).

If Congress had wanted to provide EPA with broad discretion to revisit or "correct[] flaws" in its initial appropriate and necessary determination, 84 Fed. Reg. at 2670, it would have explicitly provided for that, as it did in other sections of the Clean Air Act, and would not have expressly limited it. *See*, *e.g.*, 42 U.S.C. § 7409(d)(1) (requiring EPA periodically to revise national ambient air quality standards (NAAQS) according to specific deadlines); *id.* § 7410(k)(6) (allowing EPA to revise its prior approval or disapproval of a state plan submission whenever it determines the action "was in error"); *id.* § 7411(b)(1)(A) (mandating that EPA "shall" revise "from time to time" its list of stationary source categories subject to emission performance standards). No such provision is present in section 112(n), however. *See Russello v. United States*, 464 U.S. 16, 23 (1983) ("Where Congress includes particular language in one section of a statute but omits it in another . . . Congress acts intentionally and purposely in the disparate inclusion or exclusion." (citation omitted)).

In other words, section 112(n)(1)(A) gave EPA limited discretion to activate a one-way switch to "turn on" regulation of power plants after completing and considering its public health study. Once EPA turns on that switch, as it did in its 2000 finding that regulation of power-plant emissions is appropriate and necessary, it must regulate power plants under section 112.³⁹ See 42 U.S.C. § 7412(n)(1)(A). The entirety of section 112 evinces Congress' intent to achieve rapid and strict regulation of hazardous air pollution—keeping the switch turned on—as Congress knew from experience that private parties and even EPA might attempt to intervene in the regulatory scheme to the detriment of Congress' public health goals. Thus, once power plants are so regulated, Congress provided only one statutorily mandated avenue to turn the switch off and reverse course: the section 112(c)(9) procedures. EPA's proposed revised finding is therefore unambiguously foreclosed. See Chevron, 467 U.S. at 842–43. Cf. League of Conservation Voters v. Trump, No. 3:17-cv-00101-SLG (D. Alaska Mar. 29, 2019) (order on motions for summary judgment) (finding, upon considering statutory text and context, that the

³⁹ EPA's action listing a source category imposes no direct obligation on any source and is not subject to judicial review, 42 U.S.C. § 7412(e), but it requires EPA to promulgate emission standards for regulated hazardous air pollutants emitted by sources in the listed category, *id.* § 7412(d)(1).

Outer Continental Shelf Lands Act does not authorize the President to revoke prior Presidential actions withdrawing areas of the Outer Continental Shelf from leasing).

2. Legislative History Confirms That Congress Strictly Limited EPA's Discretion to Reconsider Whether Regulation of Power-Plant Hazardous Air Pollution Is "Appropriate."

EPA has failed to point to any evidence in the legislative history of the Clean Air Act indicating that Congress intended to grant EPA discretion to upend settled expectations and reverse its appropriate and necessary finding. In fact, the legislative history suggests the opposite: in the 1990 Clean Air Act Amendments, Congress sought to restrict EPA's intervention in a tight statutory scheme designed to regulate power-plant hazardous air pollution promptly upon a science-based finding by the Administrator that such regulation is appropriate and necessary.

By 1990, Congress viewed EPA's failure to regulate hazardous air pollutants as a "history of abuse and abdication," S. Rep. No. 101-228 (1989), 1990 U.S.C.C.A.N. 3385, 3561. *See also id.* at 3389 (identifying that "very little ha[d] been done since the passage of the 1970 Act to identify and control hazardous air pollutants"). Congress therefore intended its amendments to section 112 to "entirely restructure the existing law, so that toxics might be adequately regulated by the Federal Government." *Id.* at 3513.

With the 1990 Clean Air Act Amendments, Congress also established the Acid Rain Program, a cap-and-trade program for power-plant emissions of sulfur dioxide and nitrogen oxides. Pub. L. No. 101-549, 104 Stat. 2399 (1990). Mindful that power-plant hazardous air pollution could be reduced if plants installed pollution controls to comply with the Acid Rain Program and other requirements of the Clean Air Act, Congress sought to provide a mechanism to account for the effect of those programs on hazardous air pollution. *See*, *e.g.*, 136 Cong. Rec. 35,075 (1990) (statement of Rep. Michael Oxley); *id.* 36,062 (statement of Sen. David Durenberger). Instead of requiring immediate regulation, Congress mandated that EPA first study threats to public health from power-plant hazardous air pollution remaining after implementation of other Clean Air Act programs, thereby giving power plants a three-year reprieve. *See* 42 U.S.C. § 7412(n)(1)(A); 76 Fed. Reg. at 24,978; S. Rep. No. 101-228, 1990 U.S.C.C.A.N. at 3794.

The additional time afforded to complete the public health study required under section 112(n)(1)(A), and the requirement that the decision to regulate be based on the results of that study, reflected a compromise: Congress wanted to understand what effect, if any, the Acid Rain Program and other Clean Air Act programs would have on emissions of hazardous air pollutants from power plants. 76 Fed. Reg. at 24,978. Congress' approach reflects its intent that EPA would make a one-time determination as to whether power-plant hazardous air pollution remained a serious public health problem after implementing the Acid Rain Program and other Clean Air Act programs, and, if so, that EPA would swiftly address that problem through technology-based regulations under section 112. See 136 Cong. Rec. 35,075 (statement of Rep. Michael Oxley) (noting that EPA may regulate power plants "after taking into account

compliance with all provisions of the act"). Thus, legislative history provides further evidence that EPA's Proposal is foreclosed and should be withdrawn.

3. Even if Section 112 Were Ambiguous, EPA's Theory That It Could Somehow Reconsider the Appropriate and Necessary Finding Without Following the Required Statutory Procedures Would Be Unreasonable.

Even if section 112 did not unambiguously foreclose the proposed approach, which it does, EPA's suggestion that it somehow retains discretion or "inherent authority" to revise its finding about the appropriateness of regulating a major source of hazardous air pollution would be unreasonable. *See* 84 Fed. Reg. at 2674 n.3.

"EPA may not construe the statute in a way that completely nullifies textually applicable provisions meant to limit its discretion." New Jersey, 517 F.3d at 583 (quoting Whitman, 531 U.S. at 485). But EPA's claim of broad reconsideration authority does just that, effectively seeking to annul the criteria for deregulation established by Congress in section 112(c)(9). Courts have struck down similar attempts by agencies to evade statutory limits on their authority. For instance, in Ivy Sports Medicine, LLC v. Burwell, 767 F.3d 81 (D.C. Cir. 2014) (Kavanaugh, J., op.), the court evaluated a Food and Drug Administration ("FDA") order reclassifying a medical device following FDA's finding of errors in its initial review of the device. Instead of following the reclassification procedures in the Food, Drug, and Cosmetic Act, however, FDA relied on its "inherent reconsideration authority" to order the device immediately off the market. Id. at 82. The D.C. Circuit held that the FDA's order was invalid because "it would be unreasonable under this statutory scheme to infer that FDA retains inherent authority to shortcircuit or end-run the carefully prescribed statutory reclassification process." *Id.* at 87. EPA's Proposal is invalid for the same reason. "In short, because [EPA] concededly could have used Section [112(c)(9)] to [deregulate power plants], it [can]not rely on a claimed inherent reconsideration authority to short-circuit that statutory process and revoke its prior [appropriate and necessary] determination to achieve that same result." Id.; see also New Jersey, 517 F.3d at 583 ("Congress . . . undoubtedly can limit an agency's discretion to reverse itself"); American Methyl, 749 F.2d at 835 ("when Congress has provided a mechanism capable of rectifying mistaken action . . . it is not reasonable to infer authority to reconsider agency action"). 41

To now reverse the appropriate and necessary finding and interpret that reversal as having no impact on EPA's regulatory program would further drain section 112(n)(1)(A) of meaning and make a mockery of Congress' intent in enacting it. And to the extent that the

⁴⁰ See HTH Corp. v. NLRB, 823 F.3d 668, 679 (D.C. Cir. 2016) ("inherent" powers are more accurately called "statutorily implicit" powers because an agency can exercise its power "only if some provision or provisions of [a statute] explicitly or implicitly grant it power to do so" (citation omitted)).

⁴¹ *Cf. Air All. Houston*, 906 F.3d at 1061 (EPA "may not circumvent specific statutory limits on its actions by relying on separate, general rulemaking authority"); *Humane Soc'y of United States v. Zinke*, 865 F.3d 585, 601–02 (D.C. Cir. 2017) (segmentation of a species listed under the Endangered Species Act is unlawful where, *inter alia*, Fish and Wildlife Service failed to analyze the effect of segmentation on the remnant's status, as omitting such analysis would turn segmentation into "a backdoor route to the *de facto* delisting of already-listed species, in open defiance of the Endangered Species Act's specifically enumerated requirements for delisting").

proposed revised finding is intended to render the MATS Rule vulnerable to legal attack or subsequent administrative rescission (as EPA plainly contemplates in the Proposal, *see* 84 Fed. Reg. at 2679), EPA's novel interpretation would give way to the dissolution of emission standards even though section 112(c)(9)'s health-protective criteria for deregulation are not satisfied. To argue otherwise is to render Congress's scheme as a whole a nullity. "EPA's interpretation of its [reconsideration] authority is not reasonable because it has no stopping point." *Air All. Houston*, 906 F.3d at 1066.

The proposed revised finding is also unreasonable because it would make no sense to interpret the Clean Air Act as providing a loophole for EPA to reevaluate whether regulation of the electric power sector—the largest source of hazardous air pollution that endangers human health—is warranted "on a continuing basis," as EPA proposes, while EPA can reconsider its regulation of other types of sources only in accordance with the stringent section 112(c)(9) criteria. *See* 84 Fed. Reg. at 2674 n.3 (quoting *Brand X*, 545 U.S. at 981). Also, section 112(n)(1)(A) states that EPA shall determine whether regulation of power plants is appropriate and necessary considering hazards to public health that remain "after imposition of the requirements of [the Clean Air Act]." It would be illogical and circular for EPA to have authority to reconsider whether regulation is appropriate *after* EPA has established emission standards controlling power-plant hazardous air emissions and thereby reduced threats to public health.

And whatever the outer boundaries of EPA's inherent authority are, it is patently unreasonable to read into the Clean Air Act authority for EPA to reverse its appropriate and necessary finding now. 42 Power plants are in full compliance with the MATS Rule, and the Rule has been controlling hazardous air pollution effectively and at reasonable cost for nearly half of a decade. See NESCAUM Report at 11. EPA suggests that a change in Presidential administration "is a perfectly reasonable basis for [EPA's] reappraisal" of its appropriate and necessary finding. 84 Fed. Reg. at 2674 n.3 (quoting State Farm, 463 U.S. at 59 (Rehnquist, J., concurring in part and dissenting in part)). But agencies cannot rule by fiat, upsetting longstanding regulatory programs on the basis of political whims and acting without a reasoned basis. See, e.g., Chapman v. El Paso Natural Gas Co., 204 F.2d 46, 53–54 (D.C. Cir. 1953) ("[A] decision may not be repudiated for the sole purpose of applying some quirk or change in administrative policy."); Upjohn Co. v. Penn. R. Co., 381 F.2d 4, 5 (6th Cir. 1967) (invalidating Interstate Commerce Commission's reversal of determination entered three years prior where the agency's sole basis for the reversal was that it had "adopted a different policy"). That is particularly so where, as here "considerable funds have been expended in justifiable reliance upon the earlier [determination]." Chapman, 204 F.2d at 54. Indeed, the electric power sector has urged that "EPA should take no action that would jeopardize [power companies']

⁴² See, e.g., Ivy Sports, 767 F.3d at 86 (agencies' "authority to revisit their prior decisions" must be exercised "in a timely fashion"); American Methyl Corp., 749 F.2d at 835 (agencies' power to correct mistakes through reconsideration is limited to "the period available for taking an appeal"); Mazaleski v. Treusdell, 562 F.2d 701, 720 (D.C. Cir. 1977) (agency has power "to reconsider and change a decision if it does so within a reasonable period of time" (internal quotation marks omitted)).

investments [to comply with the MATS Rule] or the underlying rule." *See* Industry Comments, *supra* note 28, at 2.

The D.C. Circuit stressed the importance of such considerations in *American Methyl*, where it held that EPA had no "inherent authority" to revoke a waiver to market a new gasoline blend without complying with the procedural safeguards in section 211(c) of the Clean Air Act, 42 U.S.C. § 7545(c). 749 F.2d at 829–30, 840. The court emphasized that in "upholding Congress's disinclination to grant EPA an unguided and open-ended power to revoke" its prior determination, the court's holding "protect[s] the legitimate expectations" of regulated entities, "comports with basic fairness," and "encourages investment." *Id.* at 839–40. Otherwise, "[l]ike the sword suspended by a hair above the courtier Damocles, the Administrator's claimed revocation authority would pose an ever-present threat" to regulated industry. *Id.* at 840. Such extraordinary risk, as would flow from EPA's proposed interpretation here, does not reflect a reasonable "balancing of the environmental, economic, and administrative goals of the [Clean Air Act]," *New York v. EPA*, 413 F.3d 3, 37 (D.C. Cir. 2005).

Moreover, it would be illogical for EPA to have authority to revise or withdraw its appropriate and necessary finding independent of removing power plants from the list of regulated sources and rescinding emission standards (which it cannot do as a factual matter—see Section IV.C, infra). See 42 U.S.C. § 7601(a)(1) (authorizing regulations necessary to carry out functions under the Clean Air Act). A revised finding that has no effect on EPA's regulatory program, and no public benefit, is a waste of agency resources and inherently irrational. Cf. Air All. Houston, 906 F.3d at 1068 (finding rule irrational where EPA tried to "have it both ways" by claiming that rule is necessary to prevent harms to regulated industry but also "does nothing more than maintain the status quo"). Given "the carefully designed regime Congress envisioned in the 1990 Amendments," EPA cannot reasonably interpret the statute to contemplate such a futile exercise. Id. at 1065.

4. The D.C. Circuit's Decision in *New Jersey* Confirms That EPA Lacks Inherent Authority to Reconsider the Appropriate and Necessary Finding (C-3).

EPA's proposed revised finding is *déjà vu* for those of the undersigned states that fought successfully to invalidate EPA's action reversing its appropriate and necessary finding more than a decade ago, 70 Fed. Reg. 15,994 (Mar. 29, 2005) ("2005 Rule"). As in the Proposal, the 2005 Rule "revis[ed]" EPA's determination that regulation of power plants is appropriate and necessary while failing entirely to make the stringent public health and environmental findings required by section 112(c)(9); however, the 2005 Rule also went a step further than the Proposal and purported to remove power plants from the section 112 source category list. *Id.* at 15,994, 16,029–33. Many of the States and Local Governments challenged those actions as violating section 112. The D.C. Circuit agreed and vacated the 2005 Rule in its entirety. *New Jersey*, 517 F.3d at 582–84. EPA fails to meaningfully distinguish its current proposed revised finding from the revised finding vacated in *New Jersey*—and indeed, it cannot do so.

EPA's Proposal misconstrues *New Jersey*, suggesting that the court endorsed EPA's claimed authority to reevaluate its appropriate and necessary finding but stopped short of allowing EPA to delist power plants outside of the section 112(c)(9) procedures. *See* 84 Fed. Reg. at 2674 n.3. That reading is wrong. EPA claimed in the 2005 Rule, as it suggests now in the Proposal, that "nothing [in section 112] precludes [EPA] from revising [its] appropriate and necessary finding if [it] determine[s] either that the finding was in error . . . , or that the finding is incorrect given new information." 70 Fed. Reg. at 16,002; *see also* EPA Br. 21–24, July 23, 2007, *New Jersey v. EPA*, No. 05-1097 (D.C. Cir.) ("EPA 2005 Brief") (arguing that "EPA may revise a section 112(n)(1)(A) determination without applying the delisting criteria"). The *New Jersey* court completely rejected EPA's inherent authority theory—including EPA's claimed authority to reconsider its appropriate and necessary finding:

An agency can normally change its position and reverse a decision, and prior to EPA's listing of EGUs under section 112(c)(1), nothing in the CAA would have prevented it from reversing its determination about whether it was "appropriate and necessary" to do so. Congress, however, undoubtedly can limit an agency's discretion to reverse itself, and in section 112(c)(9) Congress did just that, unambiguously limiting EPA's discretion to remove sources, including EGUs, from the section 112(c)(1) list once they have been added to it. This precludes EPA's inherent authority claim

New Jersey, 517 F.3d at 582–83; see also id. at 581 (stating that because EPA's interpretation of section 112 was unlawful, the court need not reach the question of whether EPA's revised appropriate and necessary determination was arbitrary and capricious); id. at 582 (EPA's argument that the statutory delisting process does not apply once EPA reverses its appropriate and necessary finding "deploys the logic of the Queen of Hearts, substituting EPA's desires for the plain text of section 112(c)(9)").

EPA also argued that it must have authority to "correct its own mistake" by revising the appropriate and necessary finding to avoid "an anomalous result" where a court would have power to vacate the appropriate and necessary finding even though EPA could not reverse it. EPA 2005 Brief at 32. The *New Jersey* court dispensed with this notion:

Congress was not preoccupied with what EPA considers "anomalous," but rather with the fact that EPA had failed for decades to regulate HAP sufficiently. . . . EPA's disbelief that it would be prevented from correcting its own listing "errors" except through section 112(c)(9)'s delisting process or court-sanctioned vacatur cannot overcome the plain text enacted by Congress.

517 F.3d. at 583.

Although the language of the *New Jersey* court's reasoning often focuses on EPA's delisting of power plants and not its revision of the appropriate and necessary finding specifically, this is a consequence of EPA's focusing its argument on its contention that "the delisting criteria at section 112(c)(9) do not apply to EPA action under section 112(n)(1)(A),"

EPA 2005 Brief at 33, and therefore, a revised finding "*ipso facto* must result in removal of power plants from the section 112(c) list," *id.* at 26. The court understood the delisting action to be linked to EPA's theory that it could revise its finding, and rejected it root and branch. *See New Jersey*, 517 F.3d at 582–83. EPA's strained theories of authority are no more lawful now.

B. The Clean Air Act Bars EPA's Alternative Theories Under Which It Could Rescind Emission Standards Without Following Statutory Delisting Procedures (C-4, C-5, C-6, C-7, C-8, C-9, C-10).

EPA seeks comment on two alternative theories under which it could (or even must) "reasonably conclude that the D.C. Circuit's holding in *New Jersey v. EPA* does not limit the Agency's authority to rescind the MATS rule" without following the section 112(c)(9) procedures: first, that the proposed revised finding is a continuation of EPA's response to *Michigan*, and second, that *New Jersey* does not prohibit EPA from rescinding the MATS Rule so long as power plants remain a listed source category under section 112(c). *See* 84 Fed. Reg. at 2679. Both are wrong. *See New Jersey*, 517 F.3d at 578.

Under EPA's first alternative theory, the proposed revised finding "is a continuation of the Agency's response to the Supreme Court's remand" following *Michigan*, and "*New Jersey* does not limit the effect of an action made in response to a Supreme Court decision finding the original action flawed, nor does it limit the Agency's ability to revise its response to a Supreme Court decision." 84 Fed. Reg. at 2679. Each of those premises is wrong.

First, the proposed revised finding is not a continuation of EPA's response to the *Michigan* Court's remand. EPA's response to *Michigan* concluded in 2016 with its finalization of the Supplemental Finding after public notice and comment. *See* 81 Fed. Reg. at 24,420 ("EPA is taking this final action in response to . . . *Michigan v. EPA*"). The Supplemental Finding is the subject of separate ongoing litigation before the D.C. Circuit, *Murray Energy Corp. v. EPA*, No. 16-1127 (filed Apr. 25, 2016) (currently in abeyance). The *Murray Energy* court has not remanded the Supplemental Finding to EPA, and thus, it remains valid. EPA has no authority to reconsider it here.

Second, even if the proposed revised finding were "taken in response to a Supreme Court decision," there is no rational basis for the notion that neither the *New Jersey* decision nor the Clean Air Act requirements the decision describes would apply to EPA's actions, and EPA offers none. *See* 84 Fed. Reg. at 2679. That EPA's appropriate and necessary finding was not reviewed in *New Jersey* does not limit the validity of the court's interpretation of the plain text of section 112; nor does it limit the applicability of the court's holding that EPA lacks authority to delist power plants without following the section 112(c)(9) procedures. *Michigan* interprets the Clean Air Act, it in no way supersedes it. EPA cites no caselaw or legal principles indicating that EPA is immune from otherwise valid and applicable law when responding to a Supreme Court decision—especially *New Jersey*, a decision that rejected EPA's previous similar action in violation of the Clean Air Act.

Third, EPA does not have unlimited authority to revise its response to a Supreme Court decision. EPA is "a creature of statute" and has "only those authorities conferred upon it by Congress." *Michigan v. EPA*, 268 F.3d 1075, 1081 (D.C. Cir. 2001); *see also Louisiana Pub. Serv. Comm'n v. FCC*, 476 U.S. 355, 357 (1986). The federal courts may review EPA action to ensure the agency "stayed within the bounds of its statutory authority," *City of Arlington, Tex. v. FCC*, 569 U.S. 290, 297 (2013); however, they cannot, in their review, put new arrows in the agency's quiver of authority. *See Marbury v. Madison*, 5 U.S. 137, 177 (1803) (the federal courts' duty is "to say what the law is"). Following *Michigan*, the D.C. Circuit's remand of the proceeding to EPA did not grant EPA any special discretion to evade the limits Congress placed on its authority in section 112. Any suggestion to the contrary by EPA conflicts with the foundational principle of separation of powers and must fail.

EPA's second alternative theory is similarly without merit. EPA posits it might have authority to reverse its appropriate and necessary finding and rescind the MATS Rule even if power plants were to remain listed under section 112(c). 84 Fed. Reg. at 2679. According to EPA, although *New Jersey* held that EPA may not delist a source category without following the section 112(c)(9) procedures, "the decision did not address the question whether, in the absence of a valid appropriate and necessary finding, the EPA must regulate EGUs." *Id.* Such parsing cannot withstand scrutiny. The plain text and structure of section 112 make clear that the only pathway to repeal the MATS Rule is through delisting under the section 112(c)(9) procedures. *See* Section IV.A.1, *supra*. So long as power plants remain listed, EPA "shall" enforce emissions standards for those sources. 42 U.S.C. § 7412(d)(1). There is no gap in the regulation of power plants under section 112 for EPA to exercise the discretion it imagines. *See Chevron*, 467 U.S. at 843–44. Furthermore, whether there is "a valid appropriate and necessary finding" is for a court, not EPA, to determine. 84 Fed. Reg. at 2679. As discussed above, EPA has no discretion to reevaluate the "validity" of its appropriate and necessary finding. Thus, EPA's second alternative interpretation also would be contrary to the Clean Air Act and unlawful.

In addition, any final rule resulting from this Proposal that purported to delist power plants or rescind the MATS Rule would violate the Clean Air Act's notice requirement. Section 307(d)(3) of the Act requires EPA to publish notice of a proposed rulemaking, which "shall be accompanied by a statement of its basis and purpose." 42 U.S.C. § 7607(d)(3). To satisfy that requirement, a final rule need not be identical to a proposed rule, but it must be a "logical outgrowth." *See Portland Cement Ass'n v. EPA*, 665 F.3d 177, 189 (D.C. Cir. 2011). A logical outgrowth does "not include [an agency's] decision to repudiate its proposed interpretation and adopt its inverse." *Envtl. Integrity Project v. EPA*, 425 F.3d 992, 998 (D.C. Cir. 2005). EPA has assured the public repeatedly that adoption of the proposed revised finding would not repeal the MATS Rule or remove coal- and oil-fired power plants from the list of source categories regulated under section 112.⁴³ Given those assurances, EPA could not now adopt the opposite of

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⁴³ See, e.g., 84 Fed. Reg. at 2678–79 (assuring that the MATS Rule and the section 112(c)(1) listing status of power plants "would be unaffected by final action on this proposal"); *id.* at 2672 ("[F]inalizing this action will not remove the Coal- and Oil-Fired EGU source category from the CAA section 112(c)(1) list, nor will finalizing this action affect the existing CAA section 112(d) emissions standards promulgated in 2012 that regulate HAP emissions from coal- and oil-fired EGUs."); *id.* at 2703 ("Because the EPA is not proposing any amendments to the MATS rule, there would not be any cost, environmental, or economic impacts as a result of this proposed action."); *Hearing*

its Proposal by finalizing a rule that rescinds emission standards. *Envtl. Integrity*, 425 F.3d at 998; *see also Allina Health Servs. v. Sibelius*, 904 F. Supp. 2d 75, 90 (D.D.C. 2002) (adopting "the exact opposite interpretation" from the one proposed is "problematic"), *upheld in pertinent part*, *Allina Health Servs. v. Sibelius*, 746 F.3d 1102, 1109–10 (D.C. Cir. 2014). Before any final action rescinding the MATS Rule, EPA must formally and unequivocally propose to take such action.

C. EPA Cannot Make the Statutory Findings Required to Repeal Emissions Standards for Power-Plant Hazardous Air Pollution.

EPA presumably resorts to the logical contortions in its Proposal because the agency is well aware it cannot satisfy the delisting requirements of section 112(c)(9). EPA effectively admits as much. *See* 84 Fed Reg. at 2679–80 (EPA is not conducting a delisting analysis in its Proposal). Even with the MATS Rule in place, the Proposal illustrates that some power plants emit hazardous air pollution "in quantities which may cause a lifetime risk of cancer greater than one in one million" to the most exposed individual, 42 U.S.C. § 7412(c)(9)(B)(i). *See* 84 Fed. Reg. at 2697 tbl.5, 2699 (presenting inhalation risk assessment results that show *current* estimated maximum individual cancer risk is 9-in-1 million and about 193,000 people are estimated to have cancer risks above 1-in-1 million). And the record strongly indicates that deregulating power plants would result in significant "adverse environmental effect[s]," 42 U.S.C. § 7412(c)(9)(B)(ii). *See* Section I, *supra*. In this context, and in the absence of any good countervailing explanation from EPA, EPA's efforts to circumvent section 112(c)(9)'s requirements cannot reasonably be interpreted as anything other than a purposeful attempt to "substitute[e] EPA's desires for the plain text of section 112(c)(9)." *New Jersey*, 517 F.3d at 582.

1. The Health Risks Posed by Power-Plant Hazardous Air Emissions Do Not Meet Statutory Requirements for Delisting.

Even with the MATS Rule in effect, the cancer risk posed by some power plants' emissions exceeds the stringent, health-protective limit Congress established as the first statutory prerequisite for deregulation. See 42 U.S.C. § 7412(c)(9)(B)(i). As EPA concedes, "the proposed results of [the residual risk and technology review] indicate that with the MATS rule in place, the estimated inhalation cancer risk to the individual most exposed to actual emissions from the source category is 9-in-1 million." 84 Fed. Reg. at 2679; see also id. at 2697 tbl.5, 2699. The proposed residual risk and technology review identifies four units in Puerto Rico with emissions that pose a cancer risk equal to or greater than 1-in-1 million. Id. at 2699. And it finds that "emissions from the source category expose approximately 193,000 people to a cancer risk at or above 1-in-1 million." See id. Thus, EPA could not meet the first statutory

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on the Nomination of Andrew Wheeler to be Administrator of the Environmental Protection Agency, Before the S. Comm. on Env't and Pub. Works, 116th Cong. 10 (2019) (statement of Andrew Wheeler, Acting EPA Administrator) [Wheeler Nomination Statement] ("EPA is not proposing to remove, or delist, electric generating units from the list of source categories subject to regulation under Section 112.... The proposed Reconsideration... would have no effect on mercury emissions reduction levels required under the existing MATS rule.").

prerequisite for delisting even with the MATS Rule in effect, let alone in the absence of regulation.

The proposed residual risk and technology review does not capture the full extent of the cancer risk power-plant hazardous air emissions would pose if the MATS Rule were repealed. EPA has, however, twice evaluated whether power plants could be removed from the list of regulated source categories in accordance with section 112(c)(9)(B)(i). On both occasions, EPA concluded that delisting would result in excessive cancer risk. In 2011, EPA denied a petition from an industry trade group, the Utility Air Regulatory Group ("UARG"), asking EPA to delist coal-fired power plants. See 84 Fed. Reg. at 2679–80. UARG asserted the maximum cancer risk from coal-fired power plants was below the statutory criterion of 1-in-1-million. See id. at 2680. EPA pointed out, however, that the multi-pathway-risk model UARG relied on indicated that "adult anglers would face cancer risks of 4 in a million" absent regulation. 77 Fed. Reg. at 9365. Given that excessive cancer risk (as well as EPA's finding that coal-fired power plants could not be delisted separately from the broader source category), EPA concluded that coal-fired power plants could not be removed from the section 112(c) list of source categories. 44 That same year, EPA also conducted an independent assessment of whether the delisting criteria could be met. and determined, for the second time, that it did not have authority to delist power plants.⁴⁵ Delisting would be no more appropriate today.

2. The Environmental Risks Posed by Power-Plant Hazardous Air Emissions Do Not Meet Statutory Requirements for Delisting.

Even if no power plant emitted pollution that posed a cancer risk greater than 1-in-1 million, EPA still could not make the required showing that "no adverse environmental effect will result from emissions from any source" in the category. 42 U.S.C. § 7412(c)(9)(B)(ii). The extensive record supporting EPA's 2000 finding, 2012 affirmation, and 2016 Supplemental Finding shows that power-plant hazardous air pollution causes tremendous environmental harm. ⁴⁶

The harmful ecological effects of power-plant mercury emissions, in particular, are well-documented. *See* Section I.A, *supra*.⁴⁷ EPA's 2000 appropriate and necessary finding

⁴⁴ See EPA, Denial of Petitions for Reconsideration of Certain Issues: MATS and Utility NSPS 73–74 (2015), https://www.epa.gov/sites/production/files/2015-11/documents/20150421denial.pdf.

⁴⁵ See id.; 84 Fed. Reg. at 2679; EPA, Supplement to the Non-Hg Case Study Chronic Inhalation Risk Assessment for the Utility MACT "Appropriate and Necessary" Analysis 14 (2011), Doc. ID. No. EPA-HQ-OAR-2009-0234-19912 (examining the cancer risks associated with the inhalation of hazardous air pollutants other than mercury from a sample set of sixteen coal- and oil-fired power plants and finding that emissions from at least six of those facilities resulted in risks that exceeded the statutory threshold).

⁴⁶ EPA's previous two delisting analyses did not reach the second statutory threshold. *See* 77 Fed. Reg. at 9365; 84 Fed. Reg. at 2680.

⁴⁷ See also, e.g., C. E. Osborne et al., Biodiversity Research Inst., Mercury Contamination within Terrestrial Ecosystems in New England and Mid-Atlantic States: Profiles of Soil, Invertebrates, Songbirds, and Bats (2012), http://www.briloon.org/uploads/BRI_Documents/Mercury_Center/Hidden%20Risk/BRI_2011-09_Osborne.etal.2011.pdf; C.R. DeSorbo et al. Mercury Concentrations in Bald Eagles Across an Impacted Watershed in Maine, USA, 627 Sci. of the Total Env't 1515 (2018),

concluded that power plants are a "substantial" source of harmful environmental mercury contamination. 65 Fed. Reg. at 79,827. EPA's 2016 Supplemental Finding reaffirmed that conclusion. *See, e.g.*, 81 Fed. Reg. at 24,423 (power-plant mercury emissions "contribute to adverse impacts on fish-eating birds and mammals"). EPA has further found that "[e]xposure to methylmercury can have serious toxicologic effects on wildlife," as "wildlife consume fish from a much more limited geographic area than do humans which can result in elevated levels of mercury in certain fish-eating species," including some endangered species. 65 Fed. Reg. at 79,830. ⁴⁸ In a world without the MATS Rule, EPA found, the environmental damage caused by power-plant mercury emissions would only worsen: "increased mercury deposition will lead to increased levels of methylmercury in fish, and . . . increased levels in fish will lead to toxicity in fish-eating birds and mammals, including humans." *Id*. The extensive record evidence demonstrating that deregulating power plants would have tremendously adverse effects for ecosystems and wildlife, as well as the agency's own prior findings, thus indicate EPA could not make the second statutory finding required under section 112(c)(9).

EPA must abandon its unlawful attempt to evade the statutory requirements that it clearly cannot satisfy. *See New Jersey*, 517 F.3d at 582.

V. EPA's Proposed Revised Finding Is Arbitrary and Capricious, Contrary to the Clean Air Act and *Michigan*, and an Unlawful Departure from the Supplemental Finding (C-2).

Even if EPA had authority to reconsider its appropriate and necessary finding—and it does not—EPA's proposed new approach to considering costs under section 112(n)(1)(A) is arbitrary and capricious and unlawful. EPA fails to provide "good reasons" for its rejection of either of the Supplemental Finding's two reasonable alternative approaches to considering costs and benefits. See Fox, 556 U.S. at 515. EPA now wrongly claims it was required to conduct a more "direct" benefit-cost comparison and must limit its consideration of benefits to only those non-"ancillary" benefits that may be monetized. See 84 Fed. Reg. at 2674–78. Neither Michigan nor the Clean Air Act requires EPA, for purposes of its cost consideration, to undertake such a benefit-cost analysis—let alone one that arbitrarily fails to consider whole categories of benefits.

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https://www.ncbi.nlm.nih.gov/pubmed/30857113 (bald eagles in interior Maine and in the Catskill Park region of southeastern New York State are commonly exposed to mercury, primarily from atmospheric deposition, at concentrations associated with neurological and reproductive impacts in birds); Comments of Center for Biological Diversity on the Proposed Supplemental Finding 5–13 (Jan. 15, 2016), Docket No. EPA-HQ-OAR-2009-0234-20559; Comments of Defenders of Wildlife Comments on the Proposed Supplemental Finding 4–8 (Jan. 15, 2016), Docket No. EPA-HQ-OAR-2009-0234-20545.

⁴⁸ See also, e.g., R. Dietz et al., *Trends in Mercury in Hair of Greenlandic Polar Bears (Ursus maritimus) during 1892–2001*, 40 Envtl. Sci. Tech. 1120 (2006), https://pubs.acs.org/doi/10.1021/es051636z (finding mercury in federally protected polar bears); Ludo Holsbeek et al., *Heavy Metals, Organochlorines and Polycyclic Aromatic Hydrocarbons in Sperm Whales Stranded in the Southern North Sea During the 1994/1995 Winter*, 38 Marine Pollution Bulletin 304 (1999), https://www.whoi.edu/science/B/people/mhahn/Holsbeek_304.pdf (finding mercury in federally protected sperm whales).

In fact, by failing to consider all relevant costs and benefits of reducing power-plant hazardous air emissions, EPA's proposed new cost-analysis approach disregards the purpose of the Clean Air Act, federal guidelines on economic analysis, and the Supreme Court's directive in *Michigan*. The Proposal arbitrarily ignores the considerable unquantified health benefits from reducing hazardous air emissions, as well as the quantifiable benefits of preventing thousands of premature deaths from harmful particulate matter emissions, which result directly from the technological controls used to capture power-plant emissions of mercury and acid gases. In addition, EPA's proposed new cost-analysis approach arbitrarily turns a blind eye toward evidence of actual (not projected circa 2011) costs and benefits of regulation, including the actual compliance investments made by the electric power sector—which were far below EPA's initial estimate. Because EPA has failed to "examine the relevant data," *State Farm*, 463 U.S. at 43, and to explain that its proposed new approach is "permissible under the statute" *Fox*, 556 U.S. at 515, the Proposal is unlawful and should be withdrawn.

A. The Supplemental Finding's Preferred Approach Was a Reasonable Interpretation of the Clean Air Act and Accorded with *Michigan*.

The Proposal mischaracterizes EPA's preferred approach in the 2016 Supplemental Finding. EPA now contends that, contrary to *Michigan*, the preferred approach did not "fully consider 'the advantages *and* the disadvantages" of regulating power-plant hazardous air pollution and failed to assess "whether the benefits garnered by the rule were worth it." 84 Fed. Reg. at 2675 (quoting *Michigan*, 135 S. Ct. at 2707 (emphasis in original)). But EPA's preferred approach meaningfully considered costs and weighed costs relative to benefits, consistent with the breadth of section 112. EPA's contention now that its preferred approach relied on irrelevant caselaw also lacks merit. None of the purported flaws identified by EPA provide the "good reasons" necessary to reject EPA's prior interpretation. *See Fox*, 556 U.S. at 515.

1. EPA's Preferred Approach in the Supplemental Finding Appropriately Weighted Consideration of Costs Relative to Benefits, and Meaningfully Considered Costs, Consistent with Congress' Intent.

Under the Supplemental Finding's preferred approach, EPA in fact "consider[ed] cost in a meaningful way relative to benefits." 84 Fed. Reg. at 2675. Consistent with the breadth of section 112(n)(1)(A), as confirmed by *Michigan*, 135 S. Ct. at 2709, EPA properly applied routine cost-impact metrics and considered real-world evidence to assess industry's ability to absorb the costs of regulation. Assessing benefits, EPA properly considered an extensive record of health and environmental harms posed by power-plant hazardous emissions. EPA then conducted a multi-factor weighing of benefits relative to costs. *See*, *e.g.*, 81 Fed. Reg. at 24,223 (EPA "evaluated the cost estimates in the RIA . . . using several different metrics and weighed these costs against the previously identified advantages of regulating HAP emissions from EGUs.").

As EPA found in 2016, the Supplemental Finding's preferred approach is consistent with the text and context of section 112(n)(1)(A), which reflect Congress' overriding goal of promptly

reducing the dangers posed by toxic air emissions. *See id.* at 24,421.⁴⁹ It is also consistent with the Clean Air Act's purposes to "protect and enhance the quality of the Nation's air resources so as to promote the public health and welfare" and to assist states in controlling air pollution, 42 U.S.C. § 7401(a)(2), (b)(1). *See* 81 Fed. Reg. at 24,421. And it is consistent with *Michigan*, which explicitly declined to require EPA, in making its appropriate and necessary determination, "to conduct a formal cost-benefit analysis in which each advantage and disadvantage is assigned a monetary value." 135 S. Ct. at 2711. Multiple states have taken a similar approach to assessing costs in adopting their own mercury-control rules, further demonstrating the rationality of EPA's prior approach. *See* NESCAUM Report at 10.

In adopting the Supplemental Finding, EPA reasonably determined that a full monetized benefit-cost analysis is not required for purposes of the section 112(n)(1)(A) finding due to the magnitude of the public health and environmental benefits of regulation that are inherently difficult to quantify accurately, as well as the challenge of accounting for distributional effects, such as effects on sensitive populations. 80 Fed. Reg. at 75,039–40; see also Entergy Corp. v. Riverkeeper, Inc., 556 U.S. 208, 218–26 (2009) (recognizing that, in the absence of explicit statutory direction, there are many reasonable approaches for EPA to consider cost). Indeed, the focus on quantifiable, monetized benefits in benefit-cost analyses consistently understates the true value of public health and environmental protection, thereby minimizing those benefits in public discourse on proposed regulatory action. Given the statutory goal of preventing public health and environmental risks from hazardous air emissions, 81 Fed. Reg. at 24,421, and EPA's well-supported finding that the cost of reducing those emissions from power plants is reasonable and will not jeopardize an affordable and reliable electricity supply, id. at 24,426–27, the Supplemental Finding's preferred approach reasonably met the agency's obligation to give "at least some attention to cost," Michigan, 135 S. Ct. at 2707, in deciding whether to regulate.

2. EPA Properly Considered Clean Air Act Caselaw in Devising Its Preferred Approach.

Given the lack of specific direction in section 112(n)(1)(A) about how EPA should consider costs, EPA previously looked to caselaw interpreting the Clean Air Act's open-ended directive under section 111, 42 U.S.C. § 7411(a)(1), to "tak[e] into account" costs in regulating power plants and other stationary source categories. 2015 Legal Memorandum at 18–19. The D.C. Circuit has confirmed that statutory goals are relevant to the agency's exercise of discretion

⁴⁹ See also EPA, Legal Memorandum Accompanying the Proposed Supplemental Finding that it is Appropriate and Necessary to Regulate Hazardous Air Pollutants from Coal- and Oil-Fired Electric Utility Steam Generating Units (EGUs) 21–22 (2015), Doc. ID. No. EPA-HQ-OAR-2009-0234-20519 [2015 Legal Memorandum].

⁵⁰ See Lisa Heinzerling & Frank Ackerman, *Pricing the Priceless: Cost-Benefit Analysis of Environmental Protection* 27–28 (Georgetown Envtl. L. & Pol'y Inst. & Georgetown Envtl. L. Ctr. 2002), http://ase.tufts.edu/gdae/publications/c-b%20pamphlet%20final.pdf; Comments of the Attorney General of New York et al. on EPA's Advance Notice of Proposed Rulemaking—Increasing Consistency and Transparency in Considering Costs and Benefits in the Rulemaking Process 16–18 (Aug. 13, 2018), Doc. ID No. EPA-HQ-OA-2018-0107-0102. *Cf.* Exec. Order No. 12,866, 58 Fed. Reg. 51,735 (Oct. 4, 1993) (defining "costs and benefits" to include "qualitative measures of costs and benefits that are difficult to quantify, but nevertheless essential to consider").

in analyzing costs under section 111 and that "it is important to consider whether the power sector can reasonably absorb the compliance costs." *Id.* at 19 (citing *Lignite Energy Council v. EPA*, 198 F.3d 930, 933 (D.C. Cir. 1999); *Sierra Club v. Costle*, 657 F.2d 298, 343 (D.C. Cir. 1981); *Portland Cement Ass'n v. Train* 513, F.2d 506 (D.C. Cir. 1975)). EPA reasonably considered those decisions, among other things, in devising its preferred approach to considering costs in the Supplemental Finding. *See id.* at 20.

EPA now contends that section 111 methodologies "are not particularly informative" to its decision about whether to impose higher-cost regulations on existing sources under section 112. See 84 Fed. Reg. at 2675. But EPA's summary conclusions fail to demonstrate any impropriety in its prior consideration of section 111 methodologies or provide any defensible rationale for ignoring them now. EPA's consideration of caselaw interpreting a comparable section of the Clean Air Act in evaluating the scope of its discretion under section 112 accords with common agency practice and is consistent with how courts traditionally have assessed the reasonableness of agencies' statutory interpretations. See, e.g., Lead Indus. Ass'n, Inc. v. EPA, 647 F.2d 1130, 1148–49 (D.C. Cir. 1980) (considering the interpretation of section 111 in evaluating EPA's ambient air quality standard for lead under section 109); *Motor & Equip. Mfrs.* Ass'n, Inc. v. EPA, 627 F.2d 1095, 1117–18 (D.C. Cir. 1979) (referencing use of the phrase "public health and welfare" across multiple sections of the Clean Air Act in interpreting the meaning of that phrase as used in sections 209 and 202). EPA's claim now that the D.C. Circuit's interpretations of section 111 are irrelevant, either because they relate to regulation of new sources or because the costs at issue differed, is unpersuasive. Economic principles do not change based on whether the agency is analyzing \$1 or \$100.

Moreover, the Supplemental Finding does not rest on EPA's consideration of section 111 methodologies alone. The record plainly contradicts EPA's contention now that it relied solely or principally on section 111 caselaw in devising its preferred approach, 84 Fed. Reg. at 2674. EPA's preferred approach in 2016 was based on multiple considerations, including the text, structure, and legislative history of section 112 and caselaw interpreting section 112, including the Supreme Court's decision in *Michigan*. *See* 2015 Legal Memorandum at 15–22. EPA's preferred approach is a reasonable interpretation of section 112 even without considering section 111 caselaw. Moreover, the Supplemental Finding's alternative cost-analysis approach does not rely on consideration of section 111 caselaw and is a reasonable, independent basis for EPA's prior finding. *See id.* at 22–25. Therefore, even if the Proposal were correct that section 111 caselaw is irrelevant, a contention the States and Local Governments reject, that impropriety could not provide a rational basis for EPA's proposed new cost-analysis approach. *See Fox*, 556 U.S. at 515.

B. EPA's Supplemental Finding Appropriately Considered How Power Plants Are Different from Other Sources.

EPA previously and correctly read section 112(n)(1)(A) within the broader context of section 112's purpose "to achieve prompt, permanent and ongoing reductions in HAP emissions from stationary sources to reduce the hazards to public health and the environment." 2015 Legal Memorandum at 11. EPA interpreted the statute to "highlight the importance of certain cost

considerations" in deciding whether regulation of power plants is appropriate and necessary but not to require a formal benefit-cost analysis. *Id.* at 15, 22. And even if a benefit-cost analysis were required, EPA reasonably read section 112(n)(1)(A) in the broader context of the Clean Air Act and its legislative history to conclude that "all of the benefits identified in the RIA should be considered in any such analysis," including collateral benefits from reducing criteria pollutant emissions. *Id.* at 22; *see also id.* at 22–25. For instance, as EPA previously recognized, Congress anticipated there would be important, ancillary benefits from the implementation of technology-based standards under section 112(d), and granted EPA permission to "consider the benefits" from the control technologies that reduce the emissions of listed pollutants and "may also have the effect of limiting other [] emissions" that "even in attainment areas, may produce substantial health and environment benefits." S. Rep. No. 101-228, 1990 U.S.C.C.A.N. at 3557; *see also* 2015 Legal Memorandum at 25 n.28.

EPA now contends that its previous contextualized reading of the statute failed to consider the special status of power plants under section 112, as highlighted by the *Michigan* decision. *See* 84 Fed. Reg. at 2675, 2677. That contention is wrong. EPA in 2016 expressly considered that "Congress set a different path for listing EGUs when it enacted section 112(n)(1)(A)," thereby rendering power plants "the only [major] source category" to be "excused from the automatic listing requirement" in section 112. 2015 Legal Memorandum at 11 & n.8. The current Proposal has identified no inconsistency between EPA's 2016 interpretation and the Supreme Court's directive in *Michigan*. Although the Supreme Court considered that "[t]he Clean Air Act treats power plants differently from other sources," 135 S. Ct. at 2707, the Court did not state or imply that the statute's unique treatment of power plants means that EPA must conduct a formal benefit-cost analysis. Indeed, the Court found the opposite. *Id.* at 2711 ("We need not and do not hold that the law unambiguously required the Agency . . . to conduct a formal cost-benefit analysis"). Nor did the Court suggest that EPA must ignore the collateral benefits of regulation—or even consider that issue. *See id.* (the Court "need not address" EPA's consideration of co-benefits under section 112(n)(1)(A)).

The Court in *Michigan* specifically rejected EPA's prior argument that because cost is irrelevant to EPA's decision to regulate other sources under section 112, a "harmonize[d]" statutory reading would imply that cost is irrelevant to EPA's appropriate and necessary determination, too. *Id.* at 2710. EPA now misuses the court's reference in *dictum* to a "harmonized" reading to exclude contextualized readings of section 112(n)(1)(A) it dislikes, *see* 84 Fed. Reg. at 2675, 2677 (arguing that EPA should reject the Supplemental Finding's preferred approach and should not fully consider co-benefits), while nonetheless relying on statutory context when convenient to support its desired outcome, *see*, *e.g.*, *id.* at 2677 (referencing the "the overall structure" of the Clean Air Act). But the Court was clear that such "interpretive gerrymanders under which [EPA] keeps parts of statutory context it likes while throwing away parts it does not" are impermissible. *Michigan*, 135 S. Ct. at 2708.

Michigan did not overrule "the fundamental canon of statutory construction" guiding courts and agencies to consider context and, when appropriate, legislative history in interpreting statutory terms. *UARG*, 573 U.S. at 320 (internal quotation marks omitted); *see also, e.g.*, *Natural Resources Defense Council, Inc. v. EPA*, 822 F.2d 104, 111 (D.C. Cir. 1987) (in

reviewing EPA's interpretation of the statutes it administers, courts "look to the statute and, if necessary, legislative history to divine the intent of Congress" and must evaluate the reasonableness of EPA's interpretation of ambiguous text "in light of the language, legislative history, and policies of the statute"). Indeed, the *Michigan* Court itself expressly found that "[s]tatutory context reinforce[d]" its holding. 135 S. Ct. at 2708; *see also id.* at 2705, 2707 (considering how power plants are treated under other subsections of section 112 and how cost is considered in other regulatory contexts).

Try as it might, EPA has failed to identify anything in the *Michigan* decision that precludes the Supplemental Finding's reasonable cost-analysis approach. Unlike the current Proposal's "interpretive gerrymander[ing]," EPA's prior interpretation accords with the text, context, structure, and legislative history of section 112, as well as *Michigan*. EPA has no "good reason[]" to discard it. *See Fox*, 556 U.S. at 515.

C. EPA's Proposed New Approach to Considering Costs and Benefits Is Arbitrary and Capricious and Unlawful Because It Disregards Important Health and Environmental Benefits of Regulating Power-Plant Hazardous Air Pollution.

Under its alternative approach to cost-analysis in the Supplemental Finding, EPA reasonably concluded, based on the benefit-cost analysis presented in the MATS RIA, that the benefits drastically outweigh the costs of regulation. 80 Fed. Reg. at 75,041. Indeed, the MATS RIA amply demonstrates that the MATS Rule is a bargain for human health and the environment. EPA projected compliance would sharply reduce toxic pollution while also producing substantial co-benefits, such as reductions in fine particulate matter, greenhouse gases, and other non-hazardous pollutants. 77 Fed. Reg. at 9424, 9428–32; MATS RIA at 5-1 to 5-7. EPA's analysis also showed that, even with the MATS Rule in effect, electricity prices were projected to be *lower* in 2015 and 2020 than they were in 2010. *See* 77 Fed. Reg. at 9414.

EPA now proposes to use the same MATS RIA data, but to bias its analysis against regulation by excluding from its benefit-cost comparison whole categories of relevant health and environmental benefits identified in the MATS RIA, including the substantial unquantified benefits of reducing hazardous air pollutant emissions and the enormous benefits of reducing emissions of other air pollutants. *See* 80 Fed. Reg. at 2677. Nothing in the Clean Air Act authorizes EPA to arbitrarily exclude that "relevant data" from its consideration. *State Farm*, 463 U.S. at 43. Rather, "fai[ling] to consider [such] an important aspect of the problem," *Michigan*, 135 S. Ct. at 2707 (quoting *State Farm*, 463 U.S. at 53), would be arbitrary and contrary to the Clean Air Act, as well as Supreme Court's decision in *Michigan* and the Executive Branch's own guidelines on economic analysis. It is hard for the public to properly evaluate the merits of an agency action when the agency itself does not consider all of the action's merits. The Proposal's vague description of EPA's proposed new approach also fails to inform the public of exactly how EPA is analyzing costs and benefits. EPA's proposed new approach is thus irrational and unlawful and should not be finalized. *See Fox*, 556 U.S. at 515.

1. EPA Fails to Properly Consider the Substantial and Unavoidable Benefits of Reducing Particulate Matter and Sulfur Dioxide Pollution.

EPA's alternative approach in the Supplemental Finding properly accounted for the significant ancillary benefits (also called collateral benefits or "co-benefits") to public health and the environment from reductions in fine particulate matter and sulfur dioxide that unavoidably result from the technological controls used to capture mercury and the acid gases contained in power-plant emissions. In the Proposal, EPA now takes a hairsplitting position that although it can consider those ancillary benefits, it cannot consider them "equal" to benefits from reducing hazardous air pollution. *See* 84 Fed. Reg. at 2676–77. However, EPA's subsequent discussion, and conclusion that no amount of ancillary benefits could overcome costs to industry, can fairly be read as not meaningfully considering co-benefits in any respect. *Id.* at 2677. EPA's failure to give adequate weight to the thousands of lives saved each year by particulate matter and sulfur dioxide reductions violates the Court's directive in *Michigan*, ignores the agency's statutory duty to protect the public from air pollution, and renders the Proposal arbitrary and capricious. *See Michigan*, 135 S. Ct. at 2707.

i. EPA Must Consider the Inherent Health Benefits of Reducing Particulate Matter and Sulfur Dioxide Pollution as a Relevant Factor in Determining the Appropriateness of Regulating Power-Plant Hazardous Air Emissions.

It is arbitrary and unlawful for EPA to blind itself to the substantial and inherent ancillary benefits resulting from the MATS Rule, namely the health and environmental benefits from reductions in fine particulate matter and sulfur dioxide emissions that result from the majority of controls available to reduce emissions of hazardous metals and acid gases from power plants. Contrary to EPA's suggestion that benefits from reduced emissions of fine particulate matter are tangential to EPA's decision to regulate power plants under section 112, 84 Fed. Reg. at 2677, reducing that pollution will address health risks from air toxics directly by reducing exposure to the non-mercury metals, such as arsenic and selenium, that make up a significant portion of the fine particulate matter emitted by coal-fired power plants. See 80 Fed. Reg. at 75,041. As EPA previously recognized, a requirement to reduce emissions of hazardous non-mercury metals necessarily results in reductions of particulate matter because those toxic metals are normally found in particles and, like particle-bound mercury, they are captured by removing the filterable particulate matter emitted by power plants. 80 Fed. Reg. at 75,041.⁵¹ In addition, because the acid gases, selenium, and ionic mercury regulated under section 112 are readily captured by technologies that are typically used to control sulfur dioxide, use of sulfur dioxide control technologies for MATS Rule compliance will remove those toxic pollutants indiscriminately, as

⁵¹ See also NESCAUM, Control Technologies to Reduce Conventional and Hazardous Air Pollutants from Coal-Fired Power Plants 23–24 (Mar. 31, 2011), http://www.nescaum.org/documents/coal-control-technology-nescaum-report-20110330.pdf/ (describing particulate matter controls that can be used for controlling hazardous air pollutants).

well.⁵² The MATS Rule thus targets fine particulate matter and sulfur dioxide as surrogates for certain hazardous air pollutants. *See* 81 Fed. Reg. at 24,438 n.29.

Whether described as direct benefits of MATS Rule controls, or as ancillary or "cobenefits," the benefits associated with particulate matter and sulfur dioxide reductions under the MATS Rule are substantial, reduce health risks most likely to affect sensitive populations, yield important environmental benefits, and are appropriate factors to consider when evaluating the regulation of power plants under section 112. *See State Farm*, 463 U.S. at 43.⁵³ For instance, exposure to power-plant fine particulate matter is strongly linked to premature death, aggravated asthma, chronic bronchitis, and other cardiopulmonary illnesses. *See* American Thoracic Soc'y Br. *Amici Curiae* in Support of EPA 10–11, Jan. 25, 2017, *Murray Energy Corp. v. EPA*, No. 16-1127 (D.C. Cir.), ECF No. 1657472. The predicted benefits of MATS-Rule-related particulate matter reductions include an estimated 4,200 to 11,000 avoided premature deaths; 2,800 fewer cases of chronic bronchitis; 4,700 fewer non-fatal heart attacks; 830 fewer hospital admissions for respiratory symptoms; 1,800 fewer hospital admissions for cardiovascular symptoms; 540,000 fewer lost work days; and 3,200,000 fewer minor restricted activity days in adults. 77 Fed. Reg. at 9306; MATS RIA at 5-95.

Substantial improvements in public health associated with decreased pollution reduce costs from lost school and work days, emergency room visits, and other health care-related costs. *N. Carolina ex rel. Cooper v. Tennessee Valley Auth.*, 593 F. Supp. 2d 812, 823 (W.D.N.C. 2009), *rev'd on other grounds*, 615 F.3d 291 (4th Cir. 2010); MATS RIA at 5-37 to 5-38, tbl.5-7.⁵⁴ Although EPA was unable to quantify all categories of benefits associated with reductions in sulfur dioxide and fine particulate matter (particularly those associated with ecosystem and visibility effects), its estimates of the monetized benefits in 2016 associated with the implementation of the MATS Rule ranged from \$59 billion to \$140 billion. 76 Fed. Reg. at 25,085.

It would defy commonsense for EPA to ignore those massive and clearly related benefits. Similarly, it would be senseless to decide whether to take a new job considering only the salary but not the benefits of health-care coverage or the benefit of an easier commute, or to decide

⁵² NESCAUM, Control Technologies to Reduce Conventional and Hazardous Air Pollutants from Coal-Fired Power Plants, supra note 51, at 23–24; see also id. at 13, 22 (noting that injection of dry sorbent reagents that react with acid gases (DSI), combined with a downstream particulate matter control device to capture the reaction products, can remove ninety percent of the sulfur dioxide and ninety-eight percent of the hydrochloric acid (regulated under section 112) present in power-plant emissions).

⁵³ See also MATS RIA at ES-12 to ES-13 (co-benefit reductions will have advantageous environmental effects including reductions in visibility impairment, reduced vegetation and ecosystem effects from exposure to ozone, reduced effects from acid deposition (e.g., improved ecosystem functions), and reduced effects from nutrient enrichment (e.g., coastal eutrophication)); *id.* at 7-36 to 7-37 (noting that exposure to fine particulate matter can cause or contribute to adverse health effects, such as asthma and heart disease, that significantly affect many minority, low-income, and tribal individuals and their communities); *id.* at 5-95 (providing estimates of significant improvements in children's health, including reductions in acute bronchitis and asthma, from MATS Rule).

⁵⁴ See generally Philip J. Landrigan et al., *The* Lancet *Commission on Pollution and Health*, 391 Lancet 462 (2018), https://doi.org/10.1016/S0140-6736(17)32345-0 (discussing the substantial welfare costs of pollution).

whether to order a meal based solely on its calorie count without considering whether the food will be flavorful or nutritious. Like those benefits, the thousands of lives saved and the enormous avoided costs associated with inevitable reductions in particulate matter associated with hazardous air pollution controls are an important and "relevant factor" that EPA must consider in its section 112 analysis. *See Michigan*, 135 S. Ct. at 2709.

ii. EPA's Failure to Adequately Consider the Benefits of Reductions in Harmful Air Pollution Contradicts the Goals of the Clean Air Act and Best Practices of Benefit-Cost Analysis.

EPA misinterprets the text of section 112 and ignores the purpose of the Clean Air Act, which support adequate consideration of saved lives from reductions in particulate matter pollution. The Proposal argues that "it would be highly illogical for the Agency to make a determination that regulation under CAA section 112, which is expressly designed to deal with HAP, is justified principally on the basis of the criteria pollutant impacts of these regulations . . . 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." 84 Fed. Reg. at 2676. But the contention that no amount of premature deaths avoided would offset the costs of reducing hazardous air pollution is undeniably counter to the Clean Air Act's unequivocal directive "to protect and enhance the quality of the Nation's air resources so as to promote the public health and welfare." 42 U.S.C. § 7401(b)(1).

Section 112(n)(1)(A) itself reflects congressional intent that such "co-benefits" be a part of regulatory decisionmaking under that section by directing the agency to consider the co-benefits of hazardous air pollutant reductions related to the regulation of sulfur dioxide and nitrogen oxides under other Clean Air Act programs. *See* 80 Fed. Reg. at 75,041. That evidence of Congressional intent supports EPA's consideration of the benefits that will result from the expected reductions in power-plant particulate matter and sulfur dioxide emissions.

Section 112 legislative history not specifically directed at power plants also supports the consideration of criteria pollutant benefits attributable to the regulation of hazardous air pollution emissions. Specifically, the Senate report for the 1990 Clean Air Act Amendments states: "[w]hen establishing technology-based [Maximum Available Control Technology] standards under this subsection, the Administrator may consider the benefits which result from control of air pollutants that are not listed but the emissions of which are, nevertheless, reduced by control technologies or practices necessary to meet the prescribed limitation." *A Legislative History of the Clean Air Act Amendments of 1990*, Vol. 5, p. 8512; p. 172; Report of the Committee on Environment and Public Works S. 1630.

EPA's Proposal attempts to justify the agency's failure to fully consider benefits associated with reductions of non-hazardous criteria pollutants by noting other provisions of the Clean Air Act that specifically address those pollutants, namely, the national ambient air quality standards program. See 84 Fed. Reg. at 2677 (citing, e.g., 42 U.S.C. §§ 7409, 7410). However, the existence of "the cavalcade of statutory provisions governing levels of these pollutants," id., is indication of, if anything, Congress' deep concern about the health and environmental risks

they pose. EPA should not ignore those important risks here. EPA claims that "[t]o the extent that additional reductions of these criteria pollutants are necessary" such action "is best reserved for the NAAQS program." *Id.* But Administrator Wheeler's EPA has shown no willingness or even interest in using the national ambient air quality standards program or other Clean Air Act programs to reduce the continuing grave health risks posed by criteria pollutants. EPA's claim thus lacks any credibility and further suggests that EPA's proposed new cost-analysis approach is an attempt to undermine, rather than support, the Clean Air Act's overriding pollution-reduction goals.

Furthermore, federal guidance on benefit-cost analysis and EPA's own best practices support consideration of the thousands of lives saved by reductions in particulate matter pollution. Executive orders governing regulatory review direct agencies to assess the "actual results of regulatory requirements" and explicitly require analysis of both direct and indirect costs and benefits. Exec. Order No. 13,563 § 1, 76 Fed. Reg. 3821, 3821 (Jan. 21, 2011); accord Exec. Order No. 12,866 § 6(a)(3)(C), 58 Fed. Reg. at 51,735. The Office of Management and Budget ("OMB") Circular A-4 calls for agencies to consider "any important" co-benefits, including those "secondary to the statutory purpose of the rulemaking." Office of Mgmt. & Budget, Circular A-4 at 26 (2003) ("OMB Circular A-4"). EPA's own guidelines likewise direct the agency to assess "all identifiable costs and benefits," including both direct effects "as well as ancillary benefits and costs." Adhering to those guidelines, EPA has for decades taken cobenefits into account when evaluating Clean Air Act regulations. EPA has for decades taken cobenefits into account when evaluating Clean Air Act regulations. It would be beyond arbitrary and capricious for EPA to stray from such well-established decisionmaking practice when thousands of lives are at risk for premature death.

iii. Michigan Confirms That EPA Cannot Ignore the Lives Saved by Reductions in Particulate Matter Pollution.

In proposing to exclude consideration of the saved lives from particulate matter reductions in its appropriate and necessary finding, EPA misinterprets and misapplies the

⁵⁵ EPA, *Guidelines for Preparing Economic Analyses* 11-2 (2010), https://www.epa.gov/environmental-economics/guidelines-preparing-economic-analyses; *see also id.* at 8-7 to 8-8 (discussing "indirect costs" that are "incurred in related markets or experienced by consumers or government agencies not under the direct scope of the regulation").

⁵⁶ See, e.g., 75 Fed. Reg. 51,570, 51,578, 51,582–83 (Aug. 20, 2010) (considering indirect benefits from reducing carbon monoxide, volatile organic compounds, and nitrogen oxides in regulating hazardous air pollutants from reciprocating internal combustion engines); 72 Fed. Reg. 8428, 8430 (Feb. 26, 2007) (finding that "[a]lthough ozone and PM_{2.5} are considered criteria pollutants rather than 'air toxics," their reductions as "are nevertheless important co-benefits" of proposed controls on mobile sources to reduce emissions of benzene and other section 112 pollutants); 63 Fed. Reg. 18,504, 18,585–87 (Apr. 15, 1998) (discussing the indirect benefits of reducing co-pollutants such as volatile organic compounds, particulate matter, carbon monoxide, and sulfur dioxide through section 112 standards for pulp and paper producers); 56 Fed. Reg. 24,468, 24,469, 24,473 (May 30, 1991) (justifying Clean Air Act section 111(b) performance standards and section 111(d) emission guidelines for municipal solid waste landfills based in part on "the ancillary benefit of reducing global loadings of methane"); 52 Fed. Reg. 25,399, 25,406 (July 7, 1987) (considering "the full spectrum of the potential impacts of regulation," including "indirect benefits accruing from concomitant reductions in other regulated pollutants" in deciding to regulate emissions from municipal waste incinerators under section 111(b) and (d) of the Clean Air Act).

Supreme Court's directive in *Michigan*. *Michigan* does not indicate that "it is appropriate not to give equal weight to" monetized particulate matter benefits. 84 Fed. Reg. at 2677. In fact, while the Court explicitly declined to decide the specific issue of whether "ancillary" benefits should be considered, *Michigan*, 135 S. Ct. at 2711, the Court's discussion, reasoning, and holding demonstrate that it would be arbitrary and capricious for EPA to blind itself to the MATS Rule's co-benefits. *See id.* at 2707.

Contrary to EPA's proposed restrictive reading of *Michigan*, the Court's decision stands in harmony with the longstanding administrative law principle that an "agency may not 'entirely fai[1] to consider an important aspect of the problem' when deciding whether regulation is appropriate." *Id.* (quoting *State Farm*, 463 U.S. at 53). *Michigan* pushed EPA to evaluate all relevant factors holistically, not put up blinders that arbitrarily allow consideration of some important facts but not others. With its Proposal, EPA has repeated the same error that was reversed by the *Michigan* court: EPA may not cherry-pick the factors it relies on for purposes of its appropriate and necessary finding to reach a results-driven conclusion.

The "problem" that the MATS Rule seeks to address is hazardous air pollution from power plants, and one undoubtedly "important aspect" of addressing that problem is concomitant reduction in emissions of other pollutants, with very significant accompanying public health and environmental benefits. Thus, EPA's previous analysis and consideration of co-benefits in the Supplemental Finding was the legally proper response to *Michigan*. Indeed, recent caselaw supports consideration of co-benefits. For example, the D.C. Circuit in *U.S. Sugar Corp v. EPA*, 830 F.3d 579 (D.C. Cir. 2016), upheld an EPA regulation that considered co-benefits when analyzing the effects of reducing hazardous air pollutants from boilers, process heaters, and incinerators. *See also Center for Biological Diversity v. Nat'l Highway Traffic Safety Admin.*, 538 F.3d 1172, 1198 (9th Cir. 2008) (agency should have considered the co-benefits of carbonemission reductions, and could not, by ignoring those benefits, "put a thumb on the scale by undervaluing the benefits and overvaluing the costs").

Consistent with the principle that an agency must consider all factors relevant to its decision, *Michigan* indicated it would be arbitrary for EPA to ignore indirect or "co-costs." *See Michigan*, 135 S. Ct. at 2707 ("[A]ny disadvantage could be termed a cost. EPA's interpretation precludes the Agency from considering *any* type of cost—including, for instance, harms that regulation might do to human health or the environment."). For instance, the \$9.6 billion annual compliance cost estimate that EPA relies on in its Proposal includes costs "that are ancillary to the intended purpose of [the MATS Rule]." 81 Fed. Reg. at 24,439. EPA calculated that estimate for the MATS RIA using the Integrated Planning Model (IPM). Specifically, EPA used the IPM to estimate "the increased expenditures by *the entire power sector* to comply with the [MATS Rule] while continuing to serve a given level of electricity demand." "For example, the \$9.6 billion cost estimated in the MATS RIA included costs that would be passed on to

⁵⁷ EPA, Compliance Cost, HAP Benefits, and Ancillary Co-Pollutant Benefits for "National Emission Standards for Hazardous Air Pollutants: Coal-and Oil-Fired Electric Utility Steam Generating Units—Reconsideration of Supplemental Finding and Residual Risk and Technology Review" 2 (Dec. 14, 2018), Doc. ID No. EPA-HQ-OAR-2018-0794-0007 [Docket Memorandum] (emphasis added).

electricity customers and higher fuel costs, which are beyond the costs borne by owners of coaland oil-fired units regulated by MATS." 81 Fed. Reg. at 24,439–40. The Proposal incorrectly assumes all system cost differences are "compliance costs" actually born by regulated entities, without making any attempt to distinguish between such costs and indirect costs.

Comparing both direct and indirect costs to only the "direct" benefits associated hazardous air pollutant reductions, as EPA proposes to do now, is not an apples-to-apples comparison. Co-benefits are the mirror image of co-costs. ⁵⁸ If "any disadvantage can be termed a cost," then, by the same logic, any advantage—including co-benefits—can be termed a benefit. Thus, EPA can no more ignore significant ancillary benefits of regulation than it can ignore significant ancillary costs. ⁵⁹ Put another way, if EPA were proposing to repeal the MATS Rule, *Michigan* clearly would require the agency to consider the indirect costs of its proposed deregulatory action, including costs associated with increased particulate matter emissions that would result from the repeal. The reverse is equally true. Because the Proposal considers indirect costs but ignores indirect benefits, EPA has put its thumb on the scale against regulation—a result prohibited by *Michigan*.

2. EPA Arbitrarily and Unlawfully Fails to Give Sufficient Consideration to the Substantial Unquantified Benefits of Reducing Mercury and Air Toxics.

In its Docket Memorandum, EPA identifies the benefits of reducing mercury and air toxics, "both quantified and unquantified, as the centrally relevant portion of the analysis for purposes of the appropriate and necessary finding." Docket Memorandum at 1. However, EPA fails to demonstrate that it gave any meaningful consideration in its benefit-cost comparison to the numerous health effects of reducing mercury emissions that EPA has not quantified. The neurologic, genotoxic, immunotoxic, and cardiovascular effects of mercury pollution that EPA determined could not be readily monetized in the MATS RIA must play a central role in EPA's section 112(n)(1)(A) determination to be consistent with *Michigan*, federal cost-benefit guidelines, economic best practices, legislative history, and regulatory precedent. Instead, while disregarding significant and available information on the broad harms of mercury, EPA now arbitrarily narrows its analysis to the monetized effects of IQ loss in "children born to a subset of

⁵⁸ For a more detailed discussion of co-benefits as the "mirror image" of indirect costs, *see* Samuel J. Rascoff & Richard L. Revesz, *The Biases of Risk Tradeoff Analysis: Towards Parity in Environmental and Health-and-Safety Regulation*, 69 Univ. Chi. L. Rev. 1763, 1780–90 (2002).

⁵⁹ See White Stallion I, 748 F.3d at 1266 (opinion of Kavanaugh, J.) (term "appropriate" in section 112(n)(1)(A) "includes consideration of all the relevant factors"), rev'd sub nom. Michigan v. EPA, 135 S. Ct. 2699 (2015); see also, e.g., U.S. Telecom Ass'n v. FCC, 290 F.3d 415, 424–25 (D.C. Cir. 2002); Competitive Enter. Inst. v. Nat'l Highway Traffic Safety Admin., 956 F.2d 321, 323–35 (D.C. Cir. 1992); Corrosion Proof Fittings v. EPA, 947 F.2d 1201, 1224–25, 1229–30 (5th Cir. 1991) (EPA's ban of asbestos-based brakes under Toxic Substances Control Act not supported by substantial evidence where it failed to consider indirect safety effects of substitute options); Am. Trucking Ass'ns, Inc. v. EPA, 175 F.3d 1027, 1051–52 (D.C. Cir. 1999) (Clean Air Act's protective public health purpose required EPA to consider all beneficial health effects when setting national ambient air quality standards, rather than only "half of a substance's health effects"), rev'd, on other grounds sub nom. Whitman v. Am. Trucking Ass'ns, Inc., 531 U.S. 457 (2001).

recreational fishers who consume fish during pregnancy"—an incredibly small slice of the MATS Rule's myriad benefits. 84 Fed. Reg. at 2677.

The MATS RIA evaluates numerous health and environmental advantages of regulating hazardous air pollution from power plants, including benefits that, due to methodological and data limitations, EPA determined could not be quantified or assigned monetary value. 60 EPA accounted for those benefits qualitatively, however. For example, the serious harms caused by prenatal exposure to low levels of mercury—including impaired attention, fine motor function, language skills, visual-spatial abilities, and verbal memory—limit children's ability to learn and achieve. 76 Fed. Reg. at 25,018; see also 65 Fed. Reg. at 79,829. Those harms impose life-long costs that EPA did not attempt to quantify in evaluating the public health risks of power-plant methylmercury exposure or as part of the MATS RIA. See 77 Fed. Reg. at 9353 (explaining that because IO is "not the most sensitive neurodevelopmental endpoint affected by [methylmercury] exposure" reliance on it "underestimates the impact of reducing methylmercury in water bodies"); MATS RIA at 4-65. Exposure to non-mercury hazardous air pollutants emitted by power plants is also associated with a variety of health conditions that include cancer risks, as well as adverse neurological, cardiovascular, immunological, reproductive, liver, kidney, and respiratory effects. 76 Fed. Reg. at 25,003; MATS RIA at 4-68 to 4-73; Kim et al. (2016), supra note 18, at 381–83 (discussing pathologies associated with mercury exposure). EPA recognizes, in both the MATS Rule and the Supplemental Finding, that the MATS RIA reflects only a "small subset of the benefits of reducing [mercury] emissions," 77 Fed. Reg. at 9428, and does not quantify the benefits of reducing the other pollutants controlled by the Rule, see id. at 9323, 9363, 9426–28. See also 80 Fed. Reg. at 75,040 (noting the limited nature of the MATS rulemaking IQ-loss benefit analysis, and that EPA did not consider ocean or estuarine waterbodies or commercially caught fish as part of its analysis).

The *Michigan* court made clear that it was not requiring EPA to "conduct a formal costbenefit analysis" or to "assign[] a monetary value" to "each advantage and disadvantage." 135 S. Ct. at 2711. And as EPA properly concluded in adopting the Supplemental Finding, the text of section 112 nowhere contains such a requirement for *any* determination, including the section 112(n)(1)(A) appropriate and necessary finding. 2015 Legal Memorandum at 21–22. By effectively limiting its analysis to consideration of the single benefit it could most easily monetize, EPA urges an interpretation that would impermissibly narrow that standard and is inconsistent with *Michigan*. *See* 135 S. Ct. at 2709 (section 112(n)(1)(A)'s "broad reference to appropriateness encompasses *multiple* relevant factors"). The Proposal necessarily *underestimates* the more than *sixty* distinct categories of unquantified health, environmental, and economic benefits identified in the MATS RIA—contravening Congress's clear intent that EPA carefully analyze health hazards posed by power-plant hazardous emissions. *Compare* 42 U.S.C.

⁶⁰ See, e.g.,77 Fed. Reg. at 9306 (noting "limitations and uncertainties" of monetary figures); MATS RIA at 4-2 (discussing uncertainty and concluding that mercury benefits were likely underestimated due to data limitations); MATS RIA at ES-9 to ES-13 (describing neurologic, cardiovascular, genotoxic, and immunologic damage to humans and reproductive harm to fish, birds, and mammals that are connected to mercury emissions are particularly difficult to quantify).

§ 7412(n)(1)(A) (directing EPA to regulate after considering its study of health hazards reasonably anticipated to result from power-plant hazardous emissions).

EPA's prior decision in the 2016 Supplemental Finding not to limit its analysis to monetized benefits was consistent with the purpose of section 112 as a whole. Congress understood it would be difficult to quantify, at the initial point of regulation, the benefits of reducing toxic emissions that cause health harms over time and recognized that scientific understanding of the human health effects of toxic pollutant exposure would evolve. See, e.g., S. Rep. No. 101-228, 1990 U.S.C.C.A.N. at 3567 (recognizing the difficulties of "giv[ing] sufficient weight" to "substances which express their toxic potential only after long periods of chronic exposure"). Accordingly, while it made technology-based standards and emissions volume the regulatory starting points, it also required a subsequent evaluation of "remaining" or "likely to remain" health risks, 42 U.S.C. § 7412(f)(1)(A), and of whether such risks necessitated more stringent emissions standards, *id.* § 7412(f)(2).

Under EPA's new approach, that overwhelming evidence of the benefits of regulation is rendered essentially irrelevant because such benefits are not *monetized*. That interpretation is contrary to the specific concern Congress expressed about mercury harms, including from power-plant mercury emissions. *See* 42 U.S.C. § 7412(c)(6) (prioritizing development of non-power-plant standards for certain persistent pollutants, including mercury); *id.* § 7412(n)(1)(B), (C) (requiring study of mercury emissions, including from power plants, and health risks); S. Rep. No. 101-228, 1990 U.S.C.C.A.N. at 3515 (noting widespread contamination of fish in northern lakes "attributable to mercury emissions from coal-fired power plants"). Congress expected available information and understanding of the potential harms of hazardous air pollutants to evolve over time. As described *infra*, new information about the effects of hazardous air pollutant emissions on public health and the environment has come to light since the 2011 MATS RIA. In fact, over the last few decades, some of the most important categories of benefits of environmental regulation that were once considered unquantifiable were subsequently quantified. Richard L. Revesz, *Quantifying Environmental Benefits*, 102 Cal. L. Rev. 1423, 1436 (2014).

Because the effects of toxic exposure are difficult to quantify and often can be understood only after years or even decades, the length of time needed even to attempt to conduct a fully monetized analysis further undercuts EPA's contention. See Portland Cement Ass'n v. Ruckelshaus, 486 F.2d 375, 387 (D.C. Cir. 1973) (rejecting argument that section 111(a) requires quantified benefit-cost analysis in part because of "the specific time constraints" imposed by Congress for listing sources and setting standards); see also Entergy Corp., 556 U.S. at 232, 235 (Breyer, J., concurring in part and dissenting in part) (interpretation that avoided formal costbenefit proceedings was reasonable given, in part, Congressional concern that such analyses would "delay[] regulation" and "emphasize easily quantifiable factors over more qualitative factors"); NESCAUM Report at 20 ("While the regulated community has incentive and resources to estimate compliance costs . . . it has no such incentive to monetize public benefits" and government "often lacks the resources to do so."). EPA has thus failed to explain how its new interpretation "is rationally related to the goals of the statute." Village of Barrington v. Surface Transp. Bd., 636 F.3d 650, 665 (D.C. Cir. 2011) (internal quotation marks omitted).

EPA's proposed new cost-analysis approach is also inconsistent with longstanding agency practice. For years, EPA has accounted for unquantified effects as important factors in its regulatory decision-making.⁶¹ EPA's qualitative accounting for these benefits in the MATS RIA is consistent with federal guidelines governing regulatory economic analyses that instruct agencies to include any non-monetized and unquantifiable costs and benefits, and it is appropriate for EPA to consider such benefits in its decision to regulate hazardous air pollution from power-plants.⁶² Indeed, there are a great many public policy priorities that cannot be quantified, such as investing in early childhood education⁶³ and public infrastructure.⁶⁴ EPA's longstanding practice of considering unmonetized benefits is consistent with that of the states that have adopted their own rules limiting power-plant mercury emissions. NESCAUM Report at 21. An agency need not put a dollar value on every policy determination it makes. *See*, *e.g.*, *Fox*, 556 U.S. at 519–20 ("Congress has made the determination that indecent material is harmful to children," and while the agency "adduced no quantifiable measure of the harm" caused by it, the Supreme Court has "nonetheless held that the government's interest in the well-being of its youth . . . justified its regulation" (internal quotation marks omitted)).

3. EPA Fails to Explain the Data and Methodology Used to Analyze Costs Under its Proposed New Approach.

EPA's vague and inconsistent descriptions of its proposed new cost-analysis approach do not satisfy its duty under the Clean Air Act to explain "the methodology used in obtaining the data and in analyzing the data." 42 U.S.C. § 7607(d)(3)(B); see also State Farm, 463 U.S. at 43 (EPA must "articulate a satisfactory explanation for its action including a rational connection between the facts found and the choice made"). EPA states that it is not proposing to undertake

⁶¹ See e.g., 69 Fed. Reg. 38,958, 39,138–39 (Jun. 29, 2004) (evaluating all effects of regulating emissions from non-road diesel engines and "not just those benefits and costs which could be expressed [] in dollar terms"); 64 Fed. Reg. 52,828, 53,023 (Sept. 30, 1999) (considering the "real, but unquantifiable benefits" of section 112 standards for hazardous waste combustors); 55 Fed. Reg. 8292, 8302 (Mar. 7, 1990) ("reject[ing] the position that only quantified information can be considered in" setting section 112 standards for benzene waste and transfer operations).

⁶² See, e.g., OMB Circular A-4, *supra*, at 2 (warning agencies against ignoring unquantifiable benefits, because the most efficient rule may not have the "largest quantified and monetized . . . estimate"); Exec. Order No. 13,563 § 1,76 Fed. Reg. at 3821 (affirming Exec. Order No. 12,866) ("Our regulatory system . . . must take into account benefits and costs, both quantitative and qualitative."); Exec. Order No. 12,866 § 1, 58 Fed. Reg. at 51,741 ("Costs and benefits shall be understood to include both quantifiable measures . . . and qualitative measures of costs and benefits that are difficult to quantify, but nevertheless essential to consider.").

⁶³ See, e.g., Economic Policy Institute, Enriching Children, Enriching the Nation Public Investment in High-Quality Prekindergarten, Executive Summary (May 2007), https://www.epi.org/publication/book_enriching/ ("Public investment in early childhood education that is effective improves educational outcomes, enhances the quality of life of the recipients of the investment, and creates a range of external benefits to society over and above those to individual students. While such investment can increase the knowledge, skills, and literacy of students, it is not easy to accurately measure this improvement in educational outcomes and there is no un-ambiguous way to translate these improvements into dollar terms.").

⁶⁴ See, e.g., Elizabeth McNichol, Ctr. on Budget & Pol'y Priorities, *It's Time for States to Invest in Infrastructure* (March 19, 2019) https://www.cbpp.org/research/state-budget-and-tax/its-time-for-states-to-invest-in-infrastructure ("The interactions between public infrastructure investments and private-sector growth are [] highly complex . . . these sorts of investments' benefits may be difficult to quantify because they occur years in the future or because improvements in quality of life or the environment are less tangible.").

a "formal benefit-cost analysis" in accordance with federal guidance documents or economic best practices, and that it proposes to depart in important respects from the benefit-cost analysis in the 2011 MATS RIA.⁶⁵ 84 Fed. Reg. at 2676. But EPA fails to clarify the data and methodologies used under its proposed new approach. *See Brand X*, 545 U.S. at 981 (any "[u]nexplained inconsistency" between a policy and its repeal is arbitrary and capricious). For example:

- EPA uses imprecise terms and fails to explain its treatment of co-benefits. EPA variously interprets the Clean Air Act to require that its cost analysis "focus *primarily* on benefits associated with reduction of HAP," that EPA should not "place *much weight* on the co-benefits of further criteria pollutant reductions," and that "it is appropriate not to give *equal weight* to . . . co-benefits." 84 Fed. Reg. at 2676–77 (emphases added). EPA then apparently fails to compare co-benefits to costs in its benefit-cost analysis.
- EPA fails to explain its treatment of unquantified benefits associated with reducing hazardous air pollution. EPA claims that its proposed new approach "does not discount" such benefits, *id.* at 2678, and that such benefits are a "centrally relevant portion of the analysis," Docket Memorandum at 1, but EPA then apparently excludes non-monetized benefits from its benefit-cost comparison for all relevant purposes. *See* 84 Fed. Reg. at 2678.
- EPA proposes that unquantified benefits associated with reducing hazardous air pollution are "not sufficient, in light of the gross imbalance of monetized costs and HAP benefits, to support a finding that it is appropriate and necessary to regulate EGUs." *Id.* at 2677; *see also id.* at 2678 (The "unquantified benefits of MATS are not sufficient to overcome the significant difference between the monetized benefits and costs of this rule."). But EPA does not explain how it determined that unquantified benefits are "not sufficient" or what the threshold of "sufficiency" is to overcome a disparity in monetized costs and benefits under its proposed new approach. Moreover, EPA's description of its cost-benefit comparison process leaves unclear when and how exactly EPA compared unquantified benefits to costs.
- EPA variously proposes that the "gross disparity," "gross imbalance," or "significant difference" between costs and benefits "is too large to support an affirmative appropriate and necessary finding" but EPA does not explain how it arrived at that conclusion, or what it means by the terms "gross disparity," "gross imbalance," "significant," and "too large," particularly as regards the unquantified benefits. *Id.* at 2677.

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⁶⁵ Thus, EPA's statement in its memorandum to the rulemaking docket "refer[ing] readers to the 2011 RIA for full details . . . including the underlying methodologies for deriving costs and benefits" is misleading. *See* Docket Memorandum at 1.

- EPA estimates, based on Table 1 in the Docket Memorandum, "that the net target HAP benefits of the rule (HAP benefits-costs) are negative." *Id.* 2678. But EPA fails to explain the data or methodology used to calculate its estimate, given that Table 1 represents "the sum of all unquantified HAP benefits and disbenefits" as the letter "B." Docket Memorandum at 5 tbl.3 & n.d. And EPA provides no analysis or evidence for its conclusion that the total unquantified benefits of reducing hazardous air pollution are less than \$9.6 billion. *Id.* at 2 tbl.1; *see also id.* at 5 tbl.3 (purporting to summarize the total costs and benefits of regulation "+ B").
- EPA states that "even assuming that actual costs and benefits differed from projections made in 2011, given the large difference between target HAP benefits and estimated costs, the outcome of the Agency's proposed finding here would likely stay the same." 84 Fed. Reg. at 2678. But EPA provides no data or analysis to support that summary conclusion and fails to explain its methodology in evaluating the proposed likelihood.

Overall, the Proposal leaves the public in the dark as to what data and methodology EPA relies on to determine that the costs of regulating power plants under section 112 "grossly outweigh" the hazardous air pollution benefits. *Id.* at 2676. EPA's glib assertions and handwaving cannot satisfy the statutory notice requirement or the threshold for reasoned agency decisionmaking. *See* 42 U.S.C. § 7607(d)(3)(B); *State Farm*, 463 U.S. at 43.

D. EPA's 2011 Benefit-Cost Analysis Data Cannot Provide a Rational Basis for EPA to Reconsider the Appropriateness of Regulating Power Plants Under its Proposed New Approach.

The Proposal acknowledges that "the actual costs and benefits of the MATS rule may differ" from the 2011 MATS RIA's analysis. 84 Fed. Reg. at 2678. Indeed, they do—EPA's projection of compliance costs in 2015, \$9.6 billion, was nearly five times higher than the actual estimated cost of approximately \$2 billion. *See* Staudt Declaration, *supra* note 28, at ¶ 5. And more recent science and data have further bolstered EPA's prior conclusion that the benefits of regulation massively outweigh costs. ⁶⁶ However, EPA proposes that it is nonetheless "reasonable" for EPA to rely, for the purposes of its proposed revised finding, on the MATS RIA's outdated projections of costs and benefits. ⁶⁷ 84 Fed. Reg. at 2678 & n.15. EPA's interpretation is untenable for multiple reasons, as discussed below.

⁶⁶ See, e.g., Elsie M. Sunderland et al., Benefits of Regulating Hazardous Air Pollutants from Coal and Oil-Fired Utilities in the United States, Envtl. Sci. & Tech. at A (2016), http://eelp.law.harvard.edu/wp-content/uploads/Sunderland Benefits-Regulating-Haz-Air-Pollutants.pdf (finding that the monetized benefits in the MATS RIA "vastly understate the benefits associated with reductions of those emissions").

⁶⁷ The Proposal claims that "EPA has provided an updated comparison of costs and target pollutant benefits" in EPA's Docket Memorandum but fails to clarify that it is only the presentation of a comparison that is updated—the underlying costs and benefits data is unchanged from the 2011 MATS RIA. 84 Fed. Reg. at 2678; *see also* Docket Memorandum at 2 tbl.1.

1. EPA Arbitrarily and Capriciously Fails to Consider Relevant Data Regarding Costs and Benefits.

If EPA has inherent authority or discretion to reconsider its appropriate and necessary finding—a contention the States and Local Governments reject⁶⁸—then EPA must exercise that authority only in accordance with principles of reasoned agency decisionmaking. EPA must "examine the relevant data" including all "important aspect[s] of the problem." *State Farm*, 463 U.S. at 43. For the purposes of EPA's proposed reconsideration, relevant data must include the most up-to-date and accurate data available regarding the costs and benefits of regulating power-plant hazardous air pollution, including data that arose since the 2011 MATS RIA.

Specifically, EPA must consider evidence that the costs of regulating power-plant hazardous air pollution have been far lower than EPA's pre-implementation estimates. In 2011, EPA conservatively estimated that the costs to the electric power sector of complying with the MATS Rule would be \$9.6 billion per year. MATS RIA at 3-31 tbl.3-16. In fact, annual compliance costs incurred through April 2016—approximately \$2 billion—show that EPA's projection was greatly overestimated. *See* Staudt Declaration, *supra* note 28, at ¶ 5. *Cf.* Industry Comments, *supra* note 28, at 2 (stating that the electric power sector has invested \$18 billion *total* to comply with the MATS Rule since the Rule took effect, or approximately \$4.5 billion per compliance year). Also, there have been no undue costs to electric ratepayers and no adverse impacts to electric reliability since the MATS Rule took effect. As the NESCAUM Report discusses, it is not unusual for pre-implementation estimates to exceed actual compliance costs, as corroborated by the states' experiences. *See* NESCAUM Report at 11. As noted above, many of the undersigned states have been controlling mercury under state law at reasonable cost, and often to stricter emission standards than the MATS Rule, for years. To

⁶⁸ That EPA's irrational choice to use inaccurate data stems from its broader interpretation of section 112(n)(1)(A) further evidences that EPA's interpretation is wrong at bottom. EPA posits that because the appropriate and necessary finding is "a threshold analysis that Congress intended the Agency would complete prior to regulation," EPA should rely on its projections prior to implementation of the MATS Rule even when revisiting that analysis years later. 84 Fed. Reg. at 2678. Reliance on pre-implementation estimates for a section 112(n)(1)(A) finding makes sense under the States and Local Governments' interpretation that EPA has only one-time authority to determine whether regulation of power-plant hazardous air pollution is appropriate and necessary. *See* Section IV *supra*. Under EPA's theory of unlimited inherent reconsideration authority, however, it does not: that the 2011 MATS RIA data could be a basis for reconsidering the appropriate and necessary finding decades from now—and even if the costs of regulation fell to zero dollars—is far-fetched.

⁶⁹ Electricity prices for all U.S. sectors rose 7.5% from 2012 to 2018, *see* U.S. Energy Information Admin., Electric Power Monthly tbl.5.3 (Mar. 26, 2019), https://www.eia.gov/electricity/monthly/, while the Consumer Price Index, a common benchmark for inflation, rose 9.4% over the same period. *see Consumer Price Index from 1913 to 2019*, US Inflation Calculator, https://www.usinflationcalculator.com/inflation/consumer-price-index-and-annual-percent-changes-from-1913-to-2008/.

⁷⁰ See, e.g., Comments of the National Association of Clean Air Agencies on EPA's Proposed Supplemental Finding 7 (Jan. 15, 2016), Doc. ID No. EPA-HQ-OAR-2009-0234-17620 ("To our knowledge, no source has failed to comply with state deadlines for achieving [mercury] limitations, and no significant adverse impacts on electric system reliability were encountered as units were upgraded to meet state requirements."); *id.* at 6 ("Years, and in some cases decades, of experience demonstrates that [the technologies available to reduce power plant hazardous air pollutant emissions] can reliably deliver the expected performance at reasonable cost.").

EPA also must consider the wealth of recent scientific research and data indicating that the health, environmental, and economic benefits of regulating power-plant hazardous air pollution are orders of magnitude larger than EPA calculated in the MATS RIA. Although the MATS RIA identified many health and environmental benefits from reduced emissions of hazardous air pollution, it monetized only the extremely narrow category of IQ losses for children exposed to mercury through recreationally caught freshwater fish. *See* 77 Fed. Reg. at 9426–27. EPA valued that limited set of benefits between \$4 million and \$6 million per year. MATS RIA at ES-1, ES-6 tbl.ES-4. Since it promulgated the MATS Rule, EPA has not reevaluated whether it could quantify additional types of benefits. However, "[t]here are widely accepted methods that EPA could have used to monetize [other] benefits" of reduced power-plant mercury emissions. IEc Report at 4.

In fact, research shows that "quantified societal benefits associated with declines in mercury deposition attributable to implementation of MATS are much larger than the amount estimated by EPA in 2011." Sunderland et al. (2016), supra note 66, at A. For instance, one 2016 study projected that the cumulative economy-wide benefits associated with implementation of the MATS Rule through 2050 would amount to at least \$43 billion considering benefits from reducing mercury emissions alone. Giang & Selin (2016), *supra* note 15, at 288.⁷¹ A 2017 study estimated that the societal costs of the cognitive deficits associated with methylmercury exposure in the United States alone amount to approximately \$4.8 billion annually. Grandjean & Bellanger (2017), supra note 15, at 4 & tbl.1.72 Recent research also shows that "as-yetunquantified benefits to human health and wildlife from reductions in EGU mercury emissions are substantial." Sunderland et al. (2016), *supra* note 66, at A. For example, while EPA did not estimate risks posed by mercury contamination in coastal waters or from commercially caught fish, 76 Fed. Reg. at 25,007, researchers have since identified a strong correlation between decreasing North American mercury emissions and reduced mercury levels in important commercial species along the Atlantic seaboard. Cross et al. (2015), *supra* note 30, at 9064–72; Lee et al. (2016), supra note 29, at 12,829–30. Recent research also has linked mercury exposure to potentially fatal adverse cardiovascular effects. Genchi et al. (2017) supra note 12, at 8–9. And other research confirms that the MATS RIA underestimated power plants' contribution to local mercury deposition. Sunderland et al. (2016), supra note 66, at A.

⁷¹ See also Vincent Nedellec & Ari Rabl, Costs of Health Damage from Atmospheric Emissions of Toxic Metals: Part 2—Analysis for Mercury and Lead, Risk Analysis 1 (2016), https://www.researchgate.net/profile/Nedellec_Vincent/publication/298908575 Costs of Health Damage from At mospheric Emissions of Toxic Metals Part 2-

Analysis_for_Mercury_and_Lead/links/5ae740c70f7e9b837d38255e/Costs-of-Health-Damage-from-Atmospheric-Emissions-of-Toxic-Metals-Part-2-Analysis-for-Mercury-and-Lead.pdf (estimating that the damage cost associated with one kilogram of mercury is 22,937 €(2013) if there is a no-effect threshold, and 52,129 €(2013) if there is none, with ninety-one percent of the cost due to mortality from heart disease and the rest from IQ loss).

⁷² See also Leonardo Trasande et al., *Public Health and Economic Consequences of Methyl Mercury Toxicity to the Developing Brain*, 113(5) Envt'l Health Perspectives 590, 590 (2005), https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1257552/ (documenting \$8.7 billion in annual costs from lost productivity alone of methylmercury toxicity, \$1.3 billion of which is attributable each year to mercury emissions from U.S. power plants).

In addition, although EPA did not attempt to quantify the economic benefits to recreational or commercial fisheries from reduced mercury contamination, see MATS RIA at 5-7 tbl.5-3, states in fact derive substantial economic benefit from those industries, and studies show that mercury fish consumption advisories create enormous costs, including reduced numbers of fishing days and locations. See IEc Report at 3-4. Such advisories also decrease consumer demand even in non-sensitive populations not targeted by the advisory. Id. at 3. The IEc Report found that in the twelve Northeast and Midwest states it analyzed, changes in recreator and consumer behavior in response to reduced mercury contamination "are likely to result in substantial benefits to the economies and residents of these states and the Nation as a whole." Id. at 4. Such benefits include economic welfare benefits as well as regional and national economic activity in the form of jobs and expenditures. *Id.* at 17–18. "For example, if recreational anglers reduce their equipment- and trip-related expenditures by ten percent per year across the 12 states, the economic impact on value-added (equivalent to a GDP reduction) could be on the order of \$1.5 billion annually." Id. at 23. EPA could have monetized those benefits using well-known quantification methods that are "frequently applied by federal agencies bringing damage claims when acting as trustee for natural resources" under other federal laws. *Id.* at 24. Yet EPA wholly failed in its Proposal to "attempt to measure these benefits or even describe them qualitatively." Id. at 4; see also id. at 24.

In the face of relevant data on the costs and benefits of regulation, EPA cannot "put [its] head in the sand" and "blithely rely on a proxy" it knows to be inaccurate. Nat'l Ass'n of Regulatory Util. Comm'rs v. U.S. Dep't of Energy, 680 F.3d 819, 824 (D.C. Cir. 2012) (declaring the Energy Secretary's determination not to adjust nuclear-waste-disposal fees arbitrary and capricious where, inter alia, the Secretary based fees on inflated estimates for a since-abandoned disposal site and did not perform a valid cost evaluation). Basic tenets of administrative law and good government obligate EPA to consider up-to-date and accurate information in reconsidering a prior policy choice. See Nat'l Ass'n of Home Builders v. EPA, 682 F.3d 1032, 1039-40 (D.C. Cir. 2012) (if an "agency decides to rely on a cost-benefit analysis as part of its rulemaking, a serious flaw undermining that analysis can render the rule unreasonable" (citations omitted)); Oceana, Inc. v. Ross, No. 17-5247, slip op. at 12 (D.C. Cir. Apr. 12, 2019) (agency "could not ignore important evidence that was developed between [the date it promulgated a rule] and [the date it adopted a revised rule in response to the court's remand]"); Med. Waste Inst. v. EPA, 645 F.3d 420, 426 (D.C. Cir. 2011) (when an agency revises a rule on judicial remand, the court expects it to revisit and update its data and procedures as appropriate). EPA's failure to do so here renders its Proposal arbitrary and capricious.

2. EPA's Proposed New Cost-Analysis Approach Requires EPA to Analyze Appropriate Data on Monetized Benefits.

A second, independent error of EPA's interpretation is that the MATS RIA is unsuited to EPA's proposed new cost-analysis approach. *See State Farm*, 463 U.S. at 43. Although the MATS RIA's analysis provided ample support for the approaches in EPA's Supplemental Finding, EPA now proposes to diverge from its prior analysis in significant ways. Specifically, under its proposed new cost-analysis approach, EPA directly compared projected monetized costs to monetized hazardous air pollution benefits and claims to have estimated that the net

benefits of the MATS Rule are negative. 84 Fed. Reg. at 2677–78. EPA then considered in some unspecified way whether unquantified hazardous air pollution benefits and monetized particulate matter co-benefits were "sufficient to overcome" the "disparity" in monetized costs and benefits. *Id.* at 2678. EPA concluded they were not. *Id.* The MATS RIA, however, was not intended for use in a benefit-costs analysis that focuses primarily, if not exclusively, on monetized costs and benefits, and it cannot reasonably be used for that purpose now.

In preparing the MATS RIA, EPA devoted limited agency resources to monetizing the myriad benefits of reducing hazardous air pollution. As noted above, EPA calculated only a tiny sliver of monetized benefits: neurologic benefits (avoided IQ loss) to children exposed to mercury through recreationally caught freshwater fish. 77 Fed. Reg. at 9426–27. It did not quantify other neurologic effects, or other health effects such as increased cardiovascular health or decreased mortality, or any benefits at all from mercury exposure through channels other than recreationally caught freshwater fish. EPA did not even venture an educated guess as to the value of environmental benefits not directly tied to human health. MATS RIA at 5-6 to 5-7 & tbl.5-3. However, the MATS RIA identified, and EPA considered, those unquantified benefits. *Id.* at 5-59 to 5-92. EPA now wrongly infers that the total value of those many unquantified benefits is "limited" simply because EPA did not quantify it. *See* 84 Fed. Reg. at 2678. That erroneous conclusion is plainly contradicted by the ample record before EPA when it promulgated the MATS Rule and the Supplemental Finding, which includes extensive data on the health and environmental benefits of reducing power-plant hazardous air pollution.

The MATS RIA's poor fit to EPA's new approach is evident from Table 1 in the Docket Memorandum, in which EPA condenses its proposed cost analysis into a simple arithmetic problem. The MATS RIA's qualitative discussion of the massive health and environmental impacts (co-costs) of hazardous air pollution are reduced to the variable "B," which carries no weight in EPA's numbers-only methodology. EPA subtracts \$9.6 billion in costs from \$0.004–0.006 billion in benefits, plus "B," to estimate approximately \$9.6 billion in negative net benefits, plus "B." Docket Memorandum at 2 tbl.1. In concluding that the net benefits of regulation are negative, EPA essentially equated the total value of the unquantified benefits represented by "B" to zero. *See id.*; 84 Fed. Reg. at 2678. *Compare* OMB Circular A-4, *supra*, at 2 (warning agencies against ignoring unquantified benefits, because the most efficient rule may not have the "largest quantified and monetized . . . estimate"). Given section 112's emphasis on the urgency of controlling hazardous emissions from all major sources to prevent health and environmental hazards, Congress could never have intended to excuse power plants from regulation based on such a facile analysis. *See* Section IV.A.1–2, *supra*.

Assuming for the sake of argument that it is reasonable for EPA to reduce its statutory duty to consider costs to an arithmetic problem, EPA must obtain and analyze the data necessary to provide reasonable numerical inputs to its equation. A zero-value "B" variable does not suffice to represent extensive record evidence before EPA, both now and in 2012, of the massive health, economic, and environmental benefits associated with reducing power-plant hazardous air emissions. Failing to do so, EPA's proposed revised finding lacks a rational basis. *State Farm*, 463 U.S. at 43; *Fox*, 556 U.S. at 515 (EPA must "provide a more detailed justification

than what would suffice for a new policy created on a blank slate" when "its new policy rests upon factual findings that contradict those which underlay its prior policy").

VI. The Proposed Revised Finding Is Unlawful Because EPA Fails to Consider Its Significant Implications, Including the Potential Rescission or Invalidation of Emission Standards.

EPA's claim that "there would not be any cost, environmental, or economic impacts as a result of" the Proposal is a thinly veiled effort by EPA to avoid its obligation to consider the significant consequences that may result if the proposed revised finding is finalized. 84 Fed. Reg. at 2703. An agency declaring that its ongoing regulation of an industry is no longer "appropriate and necessary" is no ministerial action—it is extraordinary and inherently disruptive. If finalized, it is foreseeable that opponents will seek administrative rescission or judicial invalidation of the Rule on the basis that EPA has deemed it inappropriate and unnecessary. Indeed, Murray Energy has already publicly argued as much. Murray Energy Comments, *supra* note 2, at 2 (EPA "must . . . take the only logical and defensible next step by rescinding MATS altogether."). And EPA acknowledges potential interpretations of the Proposal that could trigger a cascading effect ending in deregulation of power-plant hazardous air pollution. 84 Fed. Reg. at 2679. EPA cannot reasonably pretend there is no risk its action ultimately could result in significant harm to the regulatory scheme. *Cf. Portland Cement Ass'n*, 665 F.3d at 187 (agencies must "acknowledge and account for a changed regulatory posture the agency creates").

EPA's failure to consider the serious health, environmental, and economic implications of rescission or invalidation of the MATS Rule, which would not be at risk but for the Proposal, renders its Proposal arbitrary and capricious and unlawful. *See Am. Farm Bureau Fed. v. EPA*, 559 F.3d 512, 520 (D.C. Cir. 2009) (an agency acts arbitrarily and capriciously when it fails "to consider a relevant and significant aspect of a problem"). *Cf. El Paso Elec. Co. v. Fed. Energy Regulatory Comm'n*, 201 F.3d 667, 671–72 (5th Cir. 2000) (order was arbitrary where Commission failed to consider potential disadvantages that "[we]re likely results of the Order" and therefore "quite relevant"). Because vitiation of the MATS Rule would be an economically significant regulatory action, EPA also has failed to conduct an economic impact analysis as required under Executive Order 12,866. *Cf.* 77 Fed. Reg. at 9432 (finding the MATS Rule was an economically significant regulatory action); 81 Fed. Reg. at 24,451 (finding the Supplemental Finding was a significant action because "it raise[d] novel legal or policy issues arising out of legal mandates" (internal quotation marks omitted)).

⁷³ See Envtl. & Energy L. Prog., Harv. L. Sch., Rolling Back the Mercury and Air Toxics Standards: Proposed Withdrawal of "Appropriate and Necessary" 9 (2019), http://eelp.law.harvard.edu/wp-content/uploads/MATS-Analysis-Goffman-final.pdf (arguing the Proposal "draws a path that could lead to . . . the eventual withdrawal of both the finding and the regulations").

A. EPA Fails to Consider the Enormous Health, Environmental, and Economic Costs to the States and Local Governments of Undermining the MATS Rule.

Rescission or invalidation of the MATS Rule would not materially benefit power companies or electricity consumers. *See Exhibit C*, James E. Staudt, *Andover Technology Partners, Update of the Cost of Compliance with MATS – Ongoing Cost of Controls* 7, 8 tbl.8 (2019) (finding that annual incremental operating costs associated with the MATS Rule are approximately \$203 million and avoidable compliance costs would equal approximately \$0.17 per megawatt-hour for energy generated by coal-fired power plants). But it could result in massive adverse impacts to the States and Local Governments—which EPA wholly fails to address. As the NESCAUM Report explains, in the absence of enforceable emission standards, there is an economic incentive for power plants to stop operating hazardous air pollution controls. *See* NESCAUM Report at 11–13. It is thus reasonable to expect that regulated power plants in states without state-law mercury-control requirements would operate pollution controls installed to comply with the MATS Rule less frequently or stop operating them altogether. *Id.* Given that the majority of U.S. coal-fired generation capacity is in states without mercury controls under state law, increases in emissions of hazardous air pollution due to vitiation of the MATS Rule could be enormous. *Id.* at 13.

Any increase in emissions of mercury and air toxics within their borders and from upwind states would negatively affect the States and Local Governments. See id. at 13–18; Section I, supra (discussing the benefits of the MATS Rule to the States and Local Governments). Greater mercury exposure, for example, would increase the risk of neurologic, cardiovascular, and genotoxic harms to human health, and increase the risk of reproductive harm to fish, birds, and mammals. See MATS RIA at ES-9 to ES-13. The serious human health harms posed by greater exposure to mercury disproportionately would affect highly exposed and sensitive populations, including children, American Indian tribal communities, and Asian/Pacific Islander communities. See 76 Fed. Reg. 24,977–78; Baehner (2018), supra note 26, at 17, 21. Increased power-plant emissions of other hazardous air pollutants would increase the risks of cancer and myriad other adverse human health effects. See MATS RIA at 4-68 to 4-73; 76 Fed. Reg. at 25,003. And turning off the controls required to meet the MATS Rule would result in significant increases in emissions of fine particulate matter and sulfur dioxide, with substantial resulting health and environmental impacts, most notably the premature deaths of thousands of Americans every year. See, e.g., MATS RIA at 5-95 tbl.5-18 (anticipated health benefits due to particulate matter reductions); id. at ES-12 to ES-13 tbl.ES-6 (anticipated beneficial environmental effects); id. at 5-59 (expected visibility improvements in national parks and wilderness areas). Increased emissions from the rescission or invalidation of the MATS Rule would be additive to pollution likely to result from other EPA deregulatory actions, if successful, including those in the coal, oil and gas, and light-duty motor vehicle sectors, with potentially compounding effects. And they would tax state and local public resources nationwide by requiring increased investments in education, outreach, public health, and social services necessary to prevent pollutant exposures, treat ensuing morbidity, and accommodate for neurological and developmental harms.

As the IEc Report demonstrates, if the MATS Rule were repealed or invalidated, the economic value of impacts to Northeast and Midwest fisheries alone would be massive—possibly in excess of \$1 billion in annual losses. IEc Report at 4. Increases in power-plant mercury emissions in the absence of the MATS Rule would lead to changes in recreator and consumer behavior, with substantial resulting economic impacts for the Northeast and Midwest regions as well as the nation as a whole. *See generally* IEc Report. As discussed in Section V.D.1 *supra*, methods to quantify such impacts are readily available and well-known to EPA. *See id.* at 24. Application of those methods in the Proposal "would provide a more complete and transparent understanding of the actual benefits of the MATS Rule, and as such an understanding of the social and regional economic cost that would result from removing these requirements." *Id.* Despite readily available quantification methods, however, EPA has failed to make any attempt to quantify, or even qualitatively discuss, the costs associated with potential repeal or invalidation of the MATS Rule.

In addition, repeal or invalidation of the MATS Rule would harm those states that rely on required emission reductions to satisfy other pollution-control requirements. As discussed above, many of the undersigned states rely on emission reductions under the MATS Rule to meet TMDL goals under the Clean Water Act. See Section I.B, supra. Emissions reductions under the MATS Rule also play a key role in state compliance with other Clean Air Act programs. For example, states are required to satisfy national ambient air quality standards for various pollutants that are affected by the MATS Rule. EPA guidance on compliance with national ambient air quality standards for sulfur dioxide and filterable particulate matter specifically contemplates incorporation of MATS-Rule-related reductions into state implementation plan submissions.⁷⁴ In addition, as the NESCAUM Report explains, EPA has incorporated the MATS Rule into emission projections that the states rely on, for example, in developing strategies to attain and maintain national ambient air quality standards and to achieve reasonable progress goals under regional haze plans. See NESCAUM Report at 17–18. Consequently, repeal or invalidation of the MATS Rule could generate compliance uncertainty for many, if not all, States.⁷⁵ That, in turn, would create uncertainty for members of the regulated community seeking permits for any new or modified source that emits either or both sulfur dioxide and particulate matter.

Emission reductions under the MATS Rule are also incorporated into other state and federal pollution-control regimes, including the modeling platforms used in ongoing natural

⁷⁴ See 42 U.S.C. § 7491; 80 Fed. Reg. 51,052, 51,062 (Aug. 21, 2015) (implementation schedule for 2016 round of sulfur dioxide nonattainment designations designed to allow states to "account for SO2 reductions that will occur over the next several years as a result of implementation of [other] requirements (such as [MATS])"); 80 Fed. Reg. 15,340, 15,349–50 & n.47 (Mar. 23, 2015) (instructing states with moderate nonattainment areas for particulate matter to incorporate sulfur dioxide reductions, such as those from the MATS Rule, into nonattainment modeling); 64 Fed. Reg. 35,747 (July 1, 1999) (regional haze rule); EPA, General Principles for the 5-Year Regional Haze Progress Reports for the Initial Regional Haze State Implementation Plans 8 (2013), http://www.4cleanair.org/Documents/haze_5year_4-10-13.pdf ("[R]eductions in SO2 and NOx emissions from EGUs are generally critical elements of each state's regional haze strategy.").

⁷⁵ EPA's interstate transport policies also rely on emission projections that include MATS Rule reductions and would be similarly affected if the MATS Rule were to be repealed or invalidated.

resource damage assessments and prior claims and settlement agreements related to mercury-contaminated sites and waterbodies in the States and Local Governments. Rescission or invalidation of the MATS Rule thus would inject uncertainty into federal and state efforts to evaluate the extent of mercury-related injuries and determine the restoration actions needed to return injured natural resources to their pre-contamination baseline and make the public whole for interim losses.

All of those risks to the States and Local Governments would not exist but for EPA's proposed revised finding. EPA's failure to analyze that "important aspect" of its Proposal is arbitrary and capricious and unlawful. *State Farm*, 463 U.S. at 43.

B. EPA Improperly Fails to Analyze Risks to Electricity Consumers and Power Companies That Have Made Substantial Investments to Comply with the MATS Rule.

Power companies have invested billions of dollars to comply with the MATS Rule, and power plants continue to incur ongoing costs associated with operation of hazardous air pollution controls. *See* NESCAUM Report at 12. If the MATS Rule is rescinded or otherwise invalidated as a result of the proposed revised finding (an outcome the States and Local Governments do not concede would be lawful), there is a serious risk that some electricity customers could be forced to bear those costs for years after power plant owners and operators turn off pollution controls. Publicly owned utilities and rural electric cooperatives, for instance, can continue to recover the capital costs of pollution controls directly from their customers even if those controls are no longer providing public health or environmental benefits. Despite calls from the electric power sector, EPA refuses to consider risks to ratepayers and power companies associated with reversing the appropriate and necessary finding.⁷⁶

In addition, EPA fails to consider that in many parts of the country, MATS Rule compliance costs are the subject of ongoing or pending reviews before state public utility commissions. By withdrawing the underlying finding that supports the Rule, EPA's Proposal would generate immediate uncertainty about whether those costs meet the standards for cost-recovery through electricity rates. In so-called "traditionally regulated" jurisdictions, utility commissions allow investor-owned utilities to recover the "prudent" costs of pollution controls through electricity rates. The prudence review considers, for example, whether costs were reasonable and necessary, whether any technologies installed are used and useful, and whether ratepayers will benefit from the investment. All prudent investments will be incorporated into the rate base, while any imprudent costs must be borne by the power companies' shareholders. The appropriate and necessary finding provides critical assurance to the electric power sector that investments in compliance with the MATS Rule were, and will continue to be, prudent. If it is reversed, there is a risk to power companies that state regulators will find some or all of their

⁷⁶ *See*, *e.g.*, Industry Comments, *supra* note 28; Letter from Edison Electric Inst. et al. to William L. Wehrum, Assistant Admin'r, Off. of Air & Radiation, EPA (July 10, 2018), *available at* https://www.eenews.net/assets/2018/07/11/document_gw_04.pdf.

investments to comply with the MATS Rule are imprudent and thus ineligible for cost recovery and a fair rate of return.⁷⁷

Without analyzing potential impacts to ratepayers and power companies, EPA cannot meet its burden to demonstrate that "there are good reasons for [the Proposal], and that the agency believes it to be better." Fox, 556 U.S. at 515. Nor has EPA met its higher burden to provide a "more detailed justification" for its new policy given the "serious reliance interests" of power companies and ratepayers engendered by EPA's appropriate and necessary finding. *Id*.

C. EPA Fails to Consider the Proposal's Implications for Ongoing Challenges to the Supplemental Finding.

EPA fails to address the implications of its Proposal for the ongoing litigation of challenges to the Supplemental Finding in Murray Energy Corp. v. EPA, No. 16-1127 (D.C. Cir. filed Apr. 25, 2016), which is currently in abeyance pending EPA's reconsideration in the current Proposal. See Order, Murray Energy Corp. v. EPA, No. 16-1127 (D.C. Cir. Apr. 27, 2017), ECF No. 1672987. In that case, various state and industry groups petitioned the D.C. Circuit for review of EPA's Supplemental Finding. Many of the undersigned States and Local Governments intervened in the case in support of the Supplemental Finding. The Murray Energy court has not remanded the Supplemental Finding to EPA and thus has continuing jurisdiction to address alleged legal errors in the Supplemental Finding. The court has been fully briefed on the same issues EPA raises in its Proposal regarding the alleged infirmities of the Supplemental Finding⁷⁸—including, for example, claims that the Supplemental Finding represents an unreasonable interpretation of section 112, that "a more direct comparison of benefits and costs" is required, and that EPA's reliance on the particulate matter air quality benefits resulting from reductions in hazardous air pollution "was flawed." 84 Fed. Reg. at 2674–75. EPA has neither informed the *Murray Energy* court nor addressed in its Proposal how finalization of the Proposal would affect the ongoing case.

This would appear to be another instance, like EPA's proposed "Affordable Clean Energy Rule" to replace standards limiting carbon emissions from existing power plants, 83 Fed. Reg. 44,746 (Aug. 31, 2018), where the agency is insisting that it must take a new regulatory action to comply with the law while putting up obstacles to the D.C. Circuit's determination of whether the agency's previous regulatory action is already in compliance with the law. *See, e.g.*,

⁷⁷ Cf. Order No. 12-493, *In the Matter PacifiCorp, dba Pacific Power, Request for a General Rate Revision*, Dkt. No. UE 246, at 17–33 (Or. Pub. Util. Comm'n Dec. 20, 2012), https://apps.puc.state.or.us/orders/2012ords/12-493.pdf (disallowing cost recovery for a portion of utility's \$661 million company-wide investment in power-plant emissions controls, where Commission found in prudence review that plants were not yet subject to "binding" federal or state emission limits); Order No. 25,920, *Investigation of Scrubber Costs and Cost Recovery and Determination Regarding Eversource's Generation Assets*, Dkt. Nos. DE 11-250 & DE 14-238, at 26–30 (N.H. Pub. Util. Comm'n July 1, 2016) (approving settlement agreements reducing utility's cost recovery for investment in power-plant emission controls by \$25 million where Commission found utility's practices were "contrary to good utility management").

⁷⁸ See, e.g., State & Industry Pet'rs Br. 28–58, Mar. 24, 2017, ECF No. 1667698; Resp't EPA Br. 24–60, Mar. 22, 2017, ECF No. 1667291; State & Local Resp't-Intervenors Br. 7–15, Mar. 24, 2017, ECF No. 1667668.

Order, *West Virginia v. EPA*, No. 165-1363 (D.C. Cir. Apr. 28, 2017), ECF No. 1673071 (holding consolidated cases challenging the Clean Power Plan in abeyance). If it is in fact EPA's belief that the law precludes the Supplemental Finding, then EPA should not be protesting a D.C. Circuit ruling on the Supplemental Finding's legality.

VII. This Rulemaking Process Is Tainted by EPA's Failure to Address Administrator Wheeler's and Assistant Administrator Wehrum's Potential Ethical Issues in Connection with the Proposal.

As discussed in these comments, EPA's Proposal offers no rationale based on the Clean Air Act for the agency's choice to act. That raises concerns that the proposed revised finding serves improper motives. Far from dispelling that notion, the Proposal all but declares EPA's desire to dodge Clean Air Act requirements. Although the Proposal affirms that power-plant hazardous air emissions exceed statutory health and environmental thresholds for deregulation, see 84 Fed. Reg. at 2679–2700, EPA solicits comment on various legal theories under which it "could reasonably conclude that the [law] does not limit the Agency's authority to rescind the MATS rule" or to find that Rule is not appropriate, *id.* at 2679.

Given that EPA is engaging in a regulatory maneuver that could be motivated by an improper purpose of aiding the fossil-fuel industry, and in particular, the coal industry, the States and Local Governments are concerned EPA is doing just that. Those concerns are not without reasonable basis. For years immediately prior to joining EPA, Administrator Andrew Wheeler was a highly paid coal lobbyist and Deputy Administrator William Wehrum was a lawyer for companies that operate coal-fired power plants. Messrs. Wheeler and Wehrum both advocated on behalf of their former clients to repeal or revise the MATS Rule yet have decided nonetheless to participate in this rulemaking proceeding, in potential violation of ethical standards. *See* Exec. Order No. 13,770 at § 1, ¶¶ 6, 7; 5 C.F.R. §§ 2635.101(b)(14), 2635.502(a)(2), 2635.502(d). EPA has failed to address those potential violations.

As a condition of appointment to their current positions at EPA, Messrs. Wheeler and Wehrum each signed an Ethics Pledge⁸⁰ that bars them from participating for two years in "any particular matter involving specific parties that is directly and substantially related to [their] former employer or former clients," Exec. Order No. 13,770 § 1, \P 6 (Jan. 28, 2017), including any meeting that is not "open to all interested parties," id. § 2(s). As a recent former registered lobbyist, Mr. Wheeler is also barred by his Ethics Pledge from participating for two years in any "particular matter" on which he lobbied during the two years prior to his appointment, or "in the specific issue area in which that particular matter falls." Id. § 1, \P 7. The participation of Messrs. Wheeler and Wehrum in this rulemaking proceeding within the two-year recusal period

⁷⁹ See Coral Davenport, *Trump Administration Prepares a Major Weakening of Mercury Emissions Rules*, N.Y. Times, A13, Sept. 30, 2018, https://www.nytimes.com/2018/09/30/climate/epa-trump-mercury-rule.html.

⁸⁰ See Andrew F. Wheeler Certification of Ethics Agreement Compliance, at 3 (June 1, 2018); William L. Wehrum Certification of Ethics Agreement Compliance, at 3 (Dec. 7, 2017, as amended Sept. 27, 2018). Mr. Wheeler's and Mr. Wehrum's Certifications of Ethics Agreement Compliance are available at the Office of Government Ethics' website: https://extapps2.oge.gov/201/Presiden.nsf/201+Request?OpenForm.

may violate their Ethics Pledge. Their participation may also violate standards of ethical conduct requiring Executive Branch employees to avoid any appearance of partiality.⁸¹

In the case of Mr. Wheeler, EPA has not justified his failure to recuse himself from this proceeding despite reports indicating that he recently lobbied on the MATS Rule on behalf of his former top client, Murray Energy Corporation ("Murray Energy"), a large coal producer. 82 Notably, Murray Energy is also the lead petitioner in the ongoing legal challenge to EPA's 2016 Supplemental Finding—the very action that Mr. Wheeler's EPA now proposes to reverse. See Murray Energy Corp. v. EPA, No. 16-1127 (D.C. Cir. filed Apr. 25, 2016). On behalf of Murray Energy, Mr. Wheeler arranged and attended meetings on March 29, 2017 with Energy Secretary Rick Perry and Robert Murray, Chief Executive Officer of Murray Energy, wherein Mr. Murray distributed and presumably discussed Murray Energy's "Action Plan" for repealing the MATS Rule and other environmental regulations. 83 Mr. Wheeler admitted that "Mr. Murray gave Secretary Perry a copy of his plan." Wheeler Nomination Statement, *supra* note 43. Mr. Wheeler has not denied that the Action Plan was discussed during those meetings. See id. The day before the meetings, Mr. Murray also sent Secretary Perry a packet containing draft executive orders that purport to rescind or revisit the MATS Rule and five other regulations.⁸⁴ Despite the potential ethical concerns posed by Mr. Wheeler's prior representation of Murray Energy immediately before joining EPA, Mr. Wheeler has refused to recuse himself from this rulemaking proceeding. See Exec. Order No. 13,770 at § 1, ¶ 6, 7; 5 C.F.R. §§ 2635.101(b)(14), 2635.502(a)(2), 2635.502(d).

EPA has also failed to justify Mr. Wehrum's participation in this proceeding despite his representation of UARG while at his former law firm, Hunton & Williams (now Hunton Andrews Kurth) ("Hunton"). Mr. Wehrum reportedly participated in a June 22–23, 2017 meeting with his client UARG in which UARG's Policy Committee planned its deregulatory

⁸¹ See 5 C.F.R. § 2635.101(b)(14) ("Employees shall endeavor to avoid any actions creating the appearance that they are violating the law or the ethical standards set forth in this part."); *id.* § 2635.502(a)(2) (when there is a reasonable question as to whether an employee's participation in a rulemaking "would raise a question regarding his impartiality," the employee must seek prior authorization); *id.* § 2635.502(d) (procedures to obtain an ethics authorization).

⁸² See, e.g., Steven Mufson, Scott Pruitt's likely successor has long lobbying history on issues before the EPA, Wash. Post, July 5, 2018, https://wapo.st/2L8srce; Lisa Friedman, Andrew Wheeler, New E.P.A. Chief, Details His Energy Lobbying Past, N.Y. Times, Aug. 1, 2018, https://www.nytimes.com/2018/08/01/climate/andrew-wheeler-epa-lobbying.html.

⁸³ See Emily Atkin, A Coal Baron's Takeover of the EPA is Nearly Complete, The New Republic, Jan. 16, 2019, https://newrepublic.com/article/152908/coal-barons-takeover-epa-nearly-complete; Rebecca Leber, The Next Likely EPA Chief has Almost Completed His Former Coal Client's Wish List, Mother Jones, Jan. 16, 2019, https://www.motherjones.com/politics/2019/01/andrew-wheeler-bob-murray-confirmation-hearing/; Friedman, supra note 82; Wheeler Nomination Statement, supra note 43.

⁸⁴ See Memorandum from Robert E. Murray, Chairman, President and CEO, Murray Energy Corp., to James Richard "Rick" Perry, Sec'y of Energy, U.S. Dep't of Energy (Mar. 28, 2017), https://www.eenews.net/assets/2018/06/07/document_gw_01.pdf.

strategy for the coming year. ⁸⁵ Briefing materials distributed ahead of that meeting indicated that UARG budgeted \$200,000 for Hunton to "[p]articipate in litigation challenging EPA's Supplemental Finding . . . and EPA's denial of reconsideration for the 2012 MATS rule," "[c]oordinate member efforts and strategy regarding EPA review and potential reconsideration of [the] Supplemental Finding," and "[m]onitor and participate, as necessary, in MATS-related litigation currently being held in abeyance in the D.C. Circuit," among other related activities. ⁸⁶ UARG also budgeted \$100,000 for Hunton, among other things, to continue coordinating "meetings and other informal communications with incoming EPA decision-makers concerning the Agency's overall approach to the regulation of emissions from electric generating units." ⁸⁷ Mr. Wehrum invited an EPA official, Mandy Gunasekara, to attend that meeting and indicated that UARG would be interested to hear her speak about EPA's plans regarding "the Mercury and Air Toxics Standard." Despite potential ethical issues posed by Mr. Wehrum's prior representation of UARG immediately before joining EPA, Mr. Wehrum similarly has refused to recuse himself from this rulemaking proceeding. *See* Exec. Order No. 13,770 at § 1, ¶ 6; 5 C.F.R. §§ 2635.101(b)(14), 2635.502(a)(2), 2635.502(d).

In fact, Mr. Wehrum apparently has continued to meet with UARG since joining EPA. ⁸⁹ For instance, in December 2017, Mr. Wehrum travelled to Hunton's offices to meet with UARG members and update them on regulatory developments, including issues related to the MATS Rule. ⁹⁰ Mr. Wehrum has argued this meeting did not violate his Ethics Pledge because five power companies were in attendance and it was therefore a "public" meeting. ⁹¹ However, all of

⁸⁵ See Zack Colman & Alex Guillen, *Documents detail multimillion-dollar ties involving EPA official, secretive industry group*, Politico, Feb. 20, 2019, https://www.politico.com/story/2019/02/20/epa-air-pollution-regulations-wehrum-1191258.

⁸⁶ Available at https://static.politico.com/59/f4/19e386684cde98d283683e8bbb54/utility-air-regulatory-group.pdf.
⁸⁷ Id.

⁸⁸ See Email from William Wehrum, Partner, Hunton, to Mandy Gunasekara, Assistant Adm'r, EPA (May 23, 2017), https://www.documents/4776445-EPA-s-William-Wehrum-and-the-Effort-to-Move.html#document/p31/a448254. Mr. Wehrum later requested a meeting between Ms. Gunasekara and UARG specifically to discuss the MATS Rule. See Email from William Wehrum, Partner, Hunton, to Mandy Gunasekara, Assistant Adm'r, EPA (July 20, 2017), https://www.documentcloud.org/documents/4776445-EPA-s-William-Wehrum-and-the-Effort-to-Move.html#document/p46/a448254.

⁸⁹ Juliet Eilperin, *EPA regulator skirts the line between former clients and current job*, Wash. Post, Feb. 25, 2019, <a href="https://www.washingtonpost.com/national/health-science/epa-regulator-skirts-the-line-between-former-clients-and-current-job/2019/02/24/b826b5fa-3767-11e9-a400-e481bf264fdc_story.html?noredirect=on&utm_term=.15bc85a18000.

⁹⁰ See id; Invitation from Makram Jabar, Hunton, to William Wehrum, Assistant Adm'r, EPA, <a href="https://www.washingtonpost.com/invite-form-for-william-wehrum,-from-his-former-law-firm/eed9c891-1a73-473f-96fd-0ea45b0a1923_note.html?questionId=9e918d9c-b85c-454c-9f65-2aae769115e1&utm_term=.004a99d49142; William Wehrum, Assistant Adm'r, EPA, Clean Air Act: Update on Stationary Source Regulations (Dec. 7, 2017), https://www.document/p190/a448289.

⁹¹ See Eilperin, supra note 89.

the participating power companies were contributing members of UARG and therefore did not represent the "public" or any meaningful "diversity of viewpoints" on the issues discussed. ⁹² Under Mr. Wehrum's interpretation, it is difficult to imagine how any meeting with a membership entity like UARG could ever violate his Ethics Pledge.

Despite the potential ethical concerns associated with Mr. Wheeler's and Mr. Wehrum's participation in preparing the Proposal, EPA has made no attempt to assuage the States and Local Governments' legitimate concerns about the integrity of this rulemaking process. Mr. Wheeler's and Mr. Wehrum's failures to recuse may violate ethical standards. Because their participation has incurably tainted this rulemaking, EPA should withdraw the Proposal.

CONCLUSION

For all the reasons set forth above, EPA should not finalize the proposed revised finding and instead should support and uphold its conclusion, first made in 2000 and affirmed in 2012 and 2016, that it is appropriate and necessary to regulate hazardous air pollution from power plants.

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⁹² Memorandum from Andrew R. Wheeler, Deputy Adm'r, EPA, to E. Scott Pruitt, Adm'r, EPA 2 (May 24, 2018), https://wapo.st/2Bw7m7i (stating the Office of Government Ethics advised then Deputy Administrator Wheeler that under his ethics pledge, a meeting "open to all interested parties" means "a multiplicity of parties representing a diversity of viewpoints").

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