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U.S. Environmental Protection Agency  
EPA Docket Centers  
Mail Code 28221T  
1200 Pennsylvania Avenue NW  
Washington, DC 20460

RE: 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  
Docket ID No. EPA-HQ-OAR-2018-0794

Dear Administrator Wheeler and Assistant Administrator Wehrum:

The National Bituminous Coal Group (“NBCG”) is an ad hoc association dedicated to vigorously defending the American coal industry. NBCG welcomes the opportunity to comment on your rulemaking proposal.

NBCG urges you to avoid a potentially disastrous second round of national uniform emission mandates under Section 112 for coal power plants. Whatever you may intend to do if coal power plants remain under Section 112, litigious anti-coal pawns such as the National Resources Defense Council and Sierra Club, funded with massive war chests filled by wealthy business interests that stand to profit from the retirement of existing power plants, will try to use Section 112 to gain what the stay of the Clean Power Plan denied them. These foes of coal need only find a way to force a moderate increase in the stringency of the non-mercury metal surrogate particulate matter standard to devastate the coal power plant fleet. Moreover, they will at a minimum be able to use reconsideration petitions and litigation to keep open and subject to amendment any Section 112 residual risk and technology review rulemaking past 2020.

To be clear, the first war on coal was largely fought through battles over sulfur dioxide and acid gas emission regulations through the New Source Review program and the Section 112 Utility Maximum Achievable Control Technology (“Utility MACT”) rule. The second war on coal will be fought through battles over particulate matter emissions. Keeping coal power plants under Section 112 leaves this potent field of attack wide open—an opportunity for national uniform control mandates that force dozens of gigawatts to either install new controls or shut down, all in one fell swoop. And contrary to prior rulemaking proceedings, it is clear that regulated investor owned electric utilities, even those that continue to own and operate coal power plants, are most interested in securing rate base increases tied to the construction of new power plants (including natural gas combined cycle and heavily subsidized renewables) and transmission projects that, while creating profits for these companies, do very little to replace the American jobs, both mining and at coal power plants, that are lost when mines and coal power plants are shuttered.

Some have raised concerns over potentially stranded investments that have already been made to comply with the Utility MACT rule. It is argued that these investments might be disallowed by utility regulators if the rule is undone now, or that removing coal power plants from Section 112 will result in less operation of controls installed to comply with Utility MACT. But States can, and many already do, impose requirements to run the already installed controls pursuant to their own authority and as part of National Ambient Air Quality Standard (“NAAQS”) implementation plans and construction and operation air quality permitting. Given ample lead time and forewarning, these legal requirements can all be expeditiously imposed without opposition from NBCG or anyone else. Claims that removing coal power plants from Section 112 will yield dire consequences are baseless, and in many instances, are mere covers for an anti-coal agenda which plans to use Section 112 to shut down more coal plants within the coming decade.

**I. The Technology Review Memorandum Demonstrates the Enormous Stakes of this Rulemaking for the Future of the Coal Industry and EPA Should Conduct Modeling Now Showing the Disastrous Negative Consequences of a Potential *De Facto* Baghouse Mandate.**

The July 2018 memorandum entitled “Technology Review for the Coal- and Oil-Fired EGU Source Category” denominated EPA-HQ-OAR-2018-0794-0015 (“Technology Review”) is an incredibly significant analysis that shows how important this rulemaking is to securing the future for the coal power fleet and the industry that provides its fuel. NBCG urges EPA to take the next step and model the consequences of the *de facto* baghouse mandate that anti-coal interests are seeking to ultimately achieve through continued regulation of power plants under the Section 112.

Make no mistake, there is a reason that this proceeding has received significant attention from anti-coal nonprofits and politicians, and that reason is amply reviewed by EPA's Technology Review. For the better part of a decade, anti-coal groups have been filing comments, reconsideration petitions, and lawsuits intended to force EPA to impose an ever-so-slightly more stringent emission control mandate under Section 112 for emissions of particulate matter as a surrogate for non-mercury metals that cannot be achieved by power plants that are equipped with electrostatic precipitators (referred to as ESPs). The result of this would be a *de facto* mandate that every coal power plant install a baghouse, even though the regulatory benefits of installing baghouses on power plants that already operate electrostatic precipitators would be dwarfed by the economic costs and other resulting negative consequences.

As the Technology Review reveals, there are 323 coal power plant stacks that are not equipped with baghouses. If EPA were to imposed tighter non-mercury metal surrogate standards on these power plants, the coal generating units associated with these 323 stacks would face an existential threat as utilities and cooperatives decide whether to retire the units or install baghouses. For many if not most of these units, a tighter control mandate for particulate matter would render it uneconomic to continue operation and result in shut down.

Consistent with reasoned decision-making and the obligations imposed by the Unfunded Mandates Reform Act and the Regulatory Flexibility Act, EPA should model and consider the results of a tighter control mandate for non-mercury metals on the power plant fleet even if EPA does not impose such a mandate and even if EPA does not formally consider the results as a part of the reconsideration process.

NBCG strongly urges the Administration to use EPA's modeling capabilities to demonstrate the legal and policy stakes of this proceeding which will also set a benchmark against which future actions by the agency will be measured.

Providing this analysis to the public and to members of Congress has the potential to lead to legislation that avoids this problem. In addition, the analysis will help highlight for D.C. Circuit and the Supreme Court the significance to the nation of potential litigation efforts by anti-coal interests that may seem innocuous when they are anything but.

This Administration should take a strong lesson from the failure to conduct a similar modeling analysis in a timely manner with respect to acid gas emission control requirements. Running the model will reveal the number of coal power plants that would be threatened with potential closure as a result of a baghouse mandate. In addition, EPA can conduct a screening analysis to identify specific plants that could close as a result and identify which thermal coal mines supply them and are therefore at risk of layoffs if a baghouse mandate is imposed.

Accordingly, conducting this modeling exercise can help inform EPA in its legally mandated obligation to “conduct continuing evaluations of potential loss or shifts of employment which may result from the administration or enforcement of the provision[s] of [the Clean Air Act] . . . including where appropriate investigating threatened plant closures or reductions in employment allegedly resulting from such administration and enforcement.” 42 U.S.C. § 7621(a). While the provision mandating this analysis cannot be “construed to require or authorize the Administrator . . . to modify or withdraw any requirement imposed or proposed to be imposed under this chapter,” 42 U.S.C. § 7621(d), that limitation only directs that “nothing in this section shall be” cited or relied on in this way. That provision does not prevent EPA from considering the resulting information itself where EPA is authorized to do so, such as in deciding whether it is appropriate and necessary to regulate power plants under Section 112.

In addition, the plain language of the employment effects provision of the Clean Air Act makes clear that EPA must identify and assess “potential” job losses and plant closures whenever they “may result from the Administration” of the Clean Air Act. Given that anti-coal groups have for years argued that EPA must, as a matter of law or reasoned decision-making, impose a more stringent non-mercury metal control, this is a clear and present threatened consequence of leaving power plants regulated under Section 112. Indeed, EPA will almost surely receive comments in this very proceeding in which anti-coal interests argue in favor of a *de facto* baghouse mandate, and that triggers EPA’s Section 321(a) and reasoned decision-making obligation to examine the consequences that would result, if for no other purpose than to inform the public, members of Congress, and the White House of the risks involved in this proceeding and the litigation that will inevitably follow this proceeding.

EPA can and should model and consider the resulting plant closures, job losses, and other localized economic dislocations that would occur if power plants are left regulated under the national uniform Section 112 program and anti-coal groups succeed in forcing EPA to tighten the non-mercury metals control mandate. Indeed, the obligation of reasoned decision-making and the Supreme Court’s decision in *Michigan v. EPA* leave no doubt that EPA cannot lawfully and reasonably select Section 112 as the means of regulating power plants without considering this crucial potential downside of doing so.

The public deserves to know when livelihoods and communities are at risk as early as possible so they can take action rather than sitting by unaware while decisions of enormous consequence to them are made in Washington, D.C.

NBCG applauds EPA for finally recognizing the disastrous consequences of layoffs on workers and their families and communities, especially in particular communities and industries where they cannot be easily transitioned into alternative employment. See U.S. EPA, *Regulatory Impact Analysis for the*

*Proposed Emission Guidelines for Greenhouse Gas Emissions from Existing Electric Utility Generating Units; Revisions to Emission Guideline Implementing Regulations; Revisions to New Source Review Program*, at 5-10 to 5-14 (Aug. 2018) (cited pages incorporated here by reference). These effects can include increased “substance abuse,” “poorer health,” and “increased mortality rates.” *Id.* at 5-14. Sudden shut downs of power plants and mines in vulnerable communities are accordingly not just an economic issue—lives are truly at stake. Running EPA’s model to show what is potentially at stake in this proceeding is warranted by the circumstances and legally required so that EPA, the public, Congress, and the President can ensure that the agency does not now or in the near future impose unnecessary and undue harms on people and communities around the country in the name of environmental protection.

## **II. Stop the Misleading Practice of Calling the National Standards “Mercury and Air Toxics Standards” and “MATS.”**

Contrary to popular belief, Section 112 of the Clean Air Act is not limited to “[c]hemical compounds and elements that are known to cause or are suspected of causing cancer, birth defects, reproduction problems, and other serious health effects.” U.S. 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)* at 6 (undated), EPA-HQ-OAR-2009-0234-20519. This misconception stems from the fact that prior to 1990, Section 112 was limited to regulation of substances that “may reasonably be anticipated to result in an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness.” 42 U.S.C. § 7412(a)(1) (1988). But that was the pre-1990 threshold for substances to be regulated under Section 112, and this narrow definition was not the criteria that EPA and Congress used to compile the list of substances in Section 112(b), nor the test that survived after Congress broadened the Section 112 program beyond its original mandate which was limited to specifically addressing health effects detrimental to the “productive capacity” of [the nation’s] populace,” rather than their general well-being and comfort. 42 U.S.C. § 7401(b)(1)).

The Section 112(b) list enacted in 1990 was derived from an ad hoc set of 224 substances. *See* Committee Report on S. 1894, S. Rep. No. 100-231 at 223–25 (1987). Of these, 201 were included on the list merely because they were included on the SARA Section 313 list and also in Table 4 of the 1986 National Air Toxics Information Clearinghouse Data Base Report on State and Local Agency Air Toxics Activities. *Id.* But between 46 and 128 of these substances were only included because they were part of the Maryland Toxic Substances Registry, and that program relied heavily on the ACGIH list of Threshold Limit Values even though those limits are intended for no other use apart from industrial hygiene and are not suitable for “evaluation of or control of community air pollution

nuisances.” U.S. EPA, *Methods for Pollutant Selection and Prioritization 2-4* (July 1987). That these substances were also included in Table 4 of the 1986 NATICH report is not surprising since so many state air standards relied on the same flawed misapplication of TLVs, which is why the 1986 NATICH report makes clear that it includes “any non-criteria air pollutant” for which any state or local agency had set an air standard and expressly clarified that “[i]nclusion of a pollutant . . . does not necessarily mean that it is toxic at ambient concentrations.” 1 National Air Toxics Information Clearinghouse, Data Base Report on State and Local Agency Air Toxics Activities at iii (July 1986).

Thus, the Section 112(b) list of substances today is a highly inclusive potpourri of substances, and it is not a list of substances that are reasonably anticipated to be toxic at ambient concentrations. Notably, EPA has removed many of these substances from the SARA Section 313 list because they are not toxic. *See, e.g.*, 70 Fed. Reg. 37698 (deleting methyl ethyl ketone); *Am. Chemistry Council v. Johnson*, 406 F.3d 738, 743 (D.C. Cir. 2005) (holding a SARA Section 313 delisting petition must be granted if a substance does not “cause harm via exposure” and directing district court to order delisting of methyl ethyl ketone because “EPA’s own analysis demonstrates that MEK fails this test”); 42 U.S.C. § 7412(b)(1)(A) (list including methyl ethyl ketone). But EPA has not removed those substances from the Section 112(b) list because Congress provided that EPA cannot delist substances until EPA determines “there is adequate data on the health and environmental effects of the substance to determine that emissions, ambient concentrations, bioaccumulation or deposition of the substance may not reasonably be anticipated to cause any adverse effects to the human health or adverse environmental effects,” the latter of which is defined to include “any significant and widespread adverse effect, which may reasonably be anticipated, to wildlife, aquatic life, or other natural resources, including adverse impacts on populations of endangered or threatened species or significant degradation of environmental quality over broad areas.” 42 U.S.C. § 7412(b)(3)(C); 42 U.S.C. § 7412(a)(7).

Nowhere in the statute itself or in the development of the Section 112(b) list is there any indication whatsoever that all of the listed substances are properly characterized as particularly “toxic.”

In addition, going forward mercury emission regulations are not the biggest issue at stake in the Section 112 program. Mercury controls have been installed and are being operated. Going forward, the major issue will be non-mercury metals and to a lesser extent acid gases.

Accordingly, it is misleading for the agency to refer to the regulations imposed under Section 112 on coal power plants as “Mercury and Air Toxics Standards.” NBCG urges the agency to avoid this misleading description as well as the abbreviated “MATS.”

Every other industry standard under this program has been described accurately as “National Emission Standards for Hazardous Air Pollutants,” or “NESHAPs,” and “Maximum Achievable Control Technology Standards,” or “MACT standards.” NBCG urges you to utilize terminology consistent with other industries rather than continuing to use terms that single out a particular industry regulation as dealing with “mercury” and “toxics” when the use of this phrase misleading suggests that Section 112 standards are limited to only addressing extremely hazardous substances.

### **III. EPA Should Expressly Weigh the Particular Characteristics and History of the Power Plant Fleet as Basis to Reject Section 112.**

EPA should expressly consider the unique nature of the power plant fleet as a basis weighing against Section 112 regulation of power plants.

Section 112(n)(1) is a special provision that applies only to “electric utility steam generating units” (referred to herein as “power plants”). 42 U.S.C. § 7412(n)(1); 42 U.S.C. § 7412(a)(8). The entire point of Section 112(n)(1) is the assessment of the appropriateness of that program for power plants as opposed to other stationary sources. EPA accordingly must expressly consider issues specific to power plants that are addressed by Section 112(n)(1).

As EPA recognized long ago in 2005, “Congress plainly treated Utility Units differently from other source categories, and that special treatment reveals Congress’ recognition that Utility Units are a broad, diverse source category.” 70 Fed. Reg. at 15999. EPA should once again consider this key characteristic of power plants in the assessment of the costs of subjecting them to an inflexible, uniform, and cost-blind national standards program.

For over a century, States and local governments have constructed and supported the nation’s power plants in order to provide affordable and reliable electric power. Power plants are as diverse in size and age as the States themselves and they vary widely in design and age because the fleet has evolved over decades of support and regulatory oversight by State and local governments taking into account widely differing local circumstances.

The Supreme Court has long recognized these pioneering State and local government efforts. As Justice Jackson stated, “[l]ong before the Federal Government could be stirred to regulate utilities, courageous states took the initiative and almost the whole body of utility practice has resulted from their experiences.” *FPC v. East Ohio Gas Co.*, 338 U.S. 464, 489 (1950) (Jackson, J., dissenting); *see also FERC v. Mississippi*, 456 U.S. 742, 789 (1982) (O’Connor, J., concurring in judgment and dissenting in part) (“Utility regulation . . . is a field marked by valuable state invention.”). Indeed, nearly all power plants in this

country, both public and private, are the result of significant State and local government efforts. Many were directly constructed by State and local governments. Most others owe their economic feasibility to a “regulatory compact” with the States. In exchange for territorial monopolies that protect their investments and provide the degree of certainty necessary for enormous capital outlays, private power utilities are intensely regulated by State commissions that determine what prices they charge and what power plants they build. Robert L. Swartwout, *Current Utility Regulatory Practice from a Historical Perspective*, 32 NAT. RES. J. 289, 289–90 (1992); *see generally General Motors Corp. v. Tracy*, 519 U.S. 278, 288–90 (1997) (citing Swartwout’s article while discussing State regulation of utilities). This important legacy of State and local initiative is especially evident in the public power sector that provides electricity for communities previously unserved or underserved by private utilities. *See* THE POWER INDUSTRY AND THE PUBLIC INTEREST 104 (1944) (“Between 1882 and 1927 most municipal systems were operating in communities never before served by private companies.”); 77 Fed. Reg. 9,304, 9,440 (Feb. 16, 2012) (estimating “80 municipalities, 5 states, and 11 political subdivisions” are currently operating large power plants that would be subject to regulation under Section 112).

Moreover, regulated utility investments in power plants are closely supervised by the State commissions that ensure investment decisions are made primarily for the benefit of users of electricity by keeping costs as low as possible. This supervision covers the decision where and when to build a new power plant, the determination of its design, the decision whether any upgrades should be made, and the decision when it should be retired and replaced.

In order to ensure that electricity costs are minimized for users, each of these decisions is influenced by local conditions such as the availability and cost of local fuel sources. Power plants are designed foremost according to the local availability and of fuel and its projected cost over the life of the unit. First, a designer of a fossil fuel fired power plant has to decide whether to use natural gas, coal, or oil for combustion. Over the long run and even today in many areas coal is less expensive per Btu than natural gas, and it remains less expensive than oil throughout the continental United States. Even where fuel cost savings associated with using natural gas might otherwise justify its use over coal, natural gas would not be available for power generation without an adequate pipeline. Access to natural gas is by no means universal, as your agency has recognized: “Natural gas pipelines are not available in all regions of the U.S. Even where pipelines provide access to natural gas, supplies of natural gas may not be available in adequate quantities for utilities. For example, it is common practice in large metropolitan areas during winter months (or periods of peak demand) to prioritize natural gas usage for residential areas before industrial areas (i.e., natural gas curtailments).” 69 Fed. Reg. at 4669. When there is no pipeline, it is no small feat to construct one. Even when natural gas is available, States and local governments still must limit their exposure to the potential for future volatility in fuel prices and supply by ensuring that the power system does not depend too heavily on any one fuel.

Thus, some communities have been unable to utilize natural gas while the rest must ensure that they do not depend too much on natural gas.

Once a fuel is chosen, that does not dictate an optimal power plant design, unlike in other industries where there is usually a single or few state of the art designs that would be employed anywhere in the country at a particular time. When a power plant designer selects coal as the source of fuel for a power plant, the designer must then perform “[e]ngineering calculations . . . to determine the optimum positioning and sizing” for the various “boiler components” necessary for “building an optimally efficient plant.” 69 Fed. Reg. 4,652, 4,665 (Jan. 30, 2004). These calculations have to be made every time a power plant is built because optimization depends heavily on the projected cost of fuel for that plant, and the cost of fuel for that plant will depend on its location. As a rule, the more thermally efficient a power plant is designed to be, the more expensive it is to construct, and returns on investment in thermal efficiency differ depending on fuel costs. Therefore, State and local governments and regulated utilities must minimize the cost of electricity for users by choosing the correct amount of investment at which any further investments in thermal efficiency are not justified by fuel savings. This calculation differs depending on fuel cost projections for the power plant which depend on location because transportation is such a significant component of the price of coal. Power plants that can be located at or near mines pay much less for coal than power plants that are far away from mines and must obtain coal shipments by rail or barge over long distances. The price of coal is also subject to changes in supply and production costs, which also vary significantly by location.

EIA data on coal prices delivered to end users by State shows that the variations in price by location are very significant. For example, in October 2014, the average cost of coal delivered for electricity generation in the electric power sector in New Hampshire was \$3.95 per MMBtu whereas it was \$1.43 per MMBtu in North Dakota, such that New Hampshire’s average cost was 2.8 times more expensive per MMBtu than North Dakota. *See* U.S. Energy Information Administration, *Average Cost of Coal Delivered for Electricity Generation by State, October 2015 and 2014*. Even states in the same general region have significant cost variation. For example, in October 2015, the average cost of coal delivered for electricity generation in the electric power sector in South Carolina was 1.3 times as expensive as Georgia, its neighbor next door: The average cost in South Carolina was at \$3.64 per MMBtu while in Georgia it was \$2.76 MMBtu. *Id.* Even coal-producing States face different costs. In October 2015 the average cost of coal delivered for electricity generation in Texas was \$1.84 MMBtu, but was \$2.28 MMBtu in West Virginia. *Id.* On the other hand, in Iowa, which is not a particularly prominent coal-producing state, the average cost of coal delivered for electricity generation was \$1.60 in October 2015. *Id.* One of the largest coal-producing States, West Virginia, had an average cost nearly one and a half times as expensive as Iowa, a State which produces more corn than coal. Year to year, these cost variations by location remain relatively consistent. Thus, in October

2014, the average cost of coal delivered for electricity generation in New Hampshire was \$4.46 per MMBtu and it was the same \$1.43 per MMBtu in North Dakota, close to 3 times less expensive. *Id.* As a final example of the extreme differences in coal prices at different locations, the average cost of coal delivered for electricity generation in Alaska was \$0.33 per MMBtu in October 2015 whereas in New Jersey, the cost was \$3.45 per MMBtu in the same year. *Id.* In that particular month, the electric power sector in New Jersey paid nearly 12 times as much for coal as in Alaska.

In addition to variations by location, the cost of fuel also varies significantly over time. The price of coal has increased over time as the cheapest-to-mine resources have been depleted, and it is well-known that the cost of coal “depends on the cost of the factors of production—that is, coal, labor, equipment, capital funds, and scale of operations, technology, and coal transport costs.” Emil D. Attanasi and Philips A. Freeman, *Chapter E: Coal Marketability: Current and Future Conditions*, U.S. Geological Survey and U.S. Department of the Interior (2009), 2. Beginning in the 1970s and until the early 1980s, “coal contract prices were at historical highs because powerplant fuel demand had shifted to coal from oil and gas.” *Id.* at 8. However, “after the severe recession in the early 1980s, new coal contract prices declined.” *Id.* Also, during that time and until around 2004, rail “rates declined by more than three-fourths.” *Id.* at 29. Similarly, in the early 1990s, the price of coal rose and fell again, tracking the volatility of the gas market. *Id.* And around 2000, the cost of coal rose, also tracking transportation costs, where “rise in rates from 2004 through 2006 (assuming a 1,000-mile haul and an 8,800 Btu/lb of coal [5,891 cal/g]) amount[ed] to an additional \$0.43 per MMBtu . . . added to delivered cost.” *Id.* at 29. In recent decades there has been substantial variance in the cost of coal.

The result of differences in fuel prices in different locations and at different times is that when fuel prices are higher for a specific power plant project then it is cost effective to design the power plant so that it generates more power with less fuel by investing more to achieve greater thermal efficiency. Thus, both the amount of money spent to construct a power plant and the thermal efficiency of its design depend on the fuel price projections over the expected life of a particular power plant and this projected price is principally a function of its location.

Given the variability of coal prices by location and over time, some States and local governments and utilities built very expensive power plants that cost far more to construct but that are also more thermally efficient than power plants built elsewhere at the same time. This led directly to a substantial diversity in the thermal efficiency of the power plant fleet even among power plants of the same age. The diversity in the power plant fleet has further increased over time because of improvements in techniques have also lowered the cost of achieving thermal efficiency. As thermal efficiency itself has become less expensive, succeeding generations of new facilities have been designed to be more efficient than the fuel prices would previously have justified. Indeed, technological improvements

caused the “heat energy required to produce 1 kWh of electricity” to “declin[e] by 11-fold between 1899 and the mid-1960s.” 69 Fed. Reg. at 4669. But technology alone is not responsible for all the diversity in the fleet, as fuel prices remain highly variable by location.

While coal price variability and technological developments can change the calculation of optimal efficiency for a new power plant at a particular location or even more generally, it by no means renders an older less efficient power plant obsolete or wasteful. It takes decades to recoup the investment in a power plant. And even when that investment has been recouped, closing an existing power plant to build a new one increases the prices users must pay for electricity unless the difference in efficiency between the existing power plant and a proposed replacement makes the investment worth it. This is the reason why regulated utilities must justify their investments in new power plants to State commissions, so that States can ensure that power plants are not scrapped and replaced without a showing that the construction costs will be offset by fuel savings and lead to lower prices for electricity users. All else equal, the benefits of replacing a power plant with a more efficient power plant will always be relatively greater in the areas of the country that have higher fuel costs. In areas with higher fuel costs, power plants will be replaced more often and so they will generally have younger power plant fleets than those areas of the country that enjoy lower fuel costs.

Importantly, Congress has recognized the unquestionable benefits of having a diverse fleet of power plants tailored to local circumstances and Congress concluded that States are best positioned to regulate power plants in a way that achieves these benefits. Accordingly, the Federal Power Act has consistently preserved State authority to regulate power plants rather than preempt state regulation of electric generation with federal law and regulations. Congress declared that Federal regulation of “of matters relating to generation” would “extend only to those matters which are not subject to regulation by the States.” 16 U.S.C. § 824(a). Accordingly, the Act provides that the Federal Energy Regulatory Commission “shall not have jurisdiction, except as specifically provided in this subchapter and subchapter III of this chapter, over facilities used for the generation of electric energy.” 16 U.S.C. § 824(b)(1). So while the Commission has authority to promulgate and enforce reliability standards, the Act fastidiously prohibits “any requirement . . . to construct new . . . generation capacity,” 16 U.S.C. § 824o(a)(3), and expressly prohibits the Commission from ordering “construction of additional generation . . . capacity.” 16 U.S.C. § 824o(i). The Commission’s authority over generation that is regulated by the states is essentially limited to the power “to conduct investigations regarding the generation . . . of electric energy, however produced, throughout the United States and its possessions, whether or not otherwise subject to the jurisdiction of the Commission” for the purpose of obtaining “information necessary or appropriate as a basis for recommending legislation.” 16 U.S.C. § 825j. The Federal Energy Regulatory Commission’s limited fact-finding authority over generation regulated by the States pales in comparison with the expansive authority of the Federal

Communications Commission over regulated communications utilities, because a single national regulator is far less equipped in this unique context where minimizing costs to users requires diverse approaches and decisions in different parts of the country.

Thus, that a power plant built in a location facing higher fuel prices is comparatively more fuel efficient than one built at the same time in a location facing lower fuel prices does not reflect a failing in judgment or lack of prudence. Rather, the difference in the degree of thermal efficiency of power plants built in different areas at the same time are the result of State commission decisions that account for differing local circumstances in determining the most cost effective way to generate electricity for users. And Congress has gone out of its way to permit and facilitate this beneficial diversity that results from the expertise and judgment of State commissions.

In addition to the appropriate diversity in the thermal efficiency, design characteristics, and age of power plants, the composition of emissions from burning coal and the potential health and environmental impacts of using coal also differs widely by location. The composition of emissions from a coal-fired power plant coal depend in large measure upon the characteristics of the locally available coal that the power plant uses. Coal in some parts of the country has a lower sulfur content, and burning this coal produces less sulfur dioxide. As transportation costs are such a significant component of fuel costs, the composition of the coal a power plant uses, and as a result the emissions it produces, depends chiefly on its location.

The differences in the composition of coal that power plants use combines with another aspect of diversity in power plant emissions that is highly relevant to determining whether imposing uniform and cost-blind standards for power plants under Section 112 is appropriate in light of the costs: The widely varying prevalence of controls that were installed in order to meet new national ambient air quality standards, new source performance standards, and combat the problem of acid rain by reducing sulfur dioxide emissions.

For decades, EPA carried out its job under the Clean Air Act to regulate power plant emissions from power plants to protect the public health without inefficiently displacing traditional State regulations designed to account for differing local circumstances.

EPA required that every power plant constructed since 1971 employ the best available technology that had been adequately demonstrated by that time. 40 C.F.R. Part 60, Subpart D. EPA then imposed an updated standard for new power plants constructed after 1978. 40 C.F.R. Part 60, Subpart Da. Even beyond the controls required by these standards, new power plants have been required since 1977 to install the best available technology for each new facility as determined

through an individualized case-by-case assessment in light of costs. And under the national ambient air quality standards program, further controls have been required at specific new and existing power plants when necessary and appropriate to address emissions that need only be controlled to the extent necessary in the aggregate to meet certain ambient levels in the local atmosphere.

In all, the set of sources and existing controls in any given area, as well as local geographic and atmospheric conditions and the timing of construction, have led to substantial diversity in the controls installed at power plants.

New power plants are now generally required to reduce sulfur dioxide emissions to a level that can only be achieved using controls, but attaining the national ambient air quality standards has not and does not require that every existing plant install those controls.

Meanwhile, the acid rain problem depends most on where coal-fired power plants are located and the overall regional level of the emissions that lead to acid rain. Given the differences in the cost of coal and the availability of other potential sources of power, coal power plants are not evenly dispersed throughout the United States, and acid rain is not a problem in areas where they are not concentrated. Coal power plants tend to be concentrated in areas where local circumstances heavily favor the use of coal. Coal power plants are far less concentrated in regions that rely on coal primarily to provide diversity in power generation portfolios even if though it is not the cheapest source of power, and power plants in these areas do not pose an acid rain problem. Furthermore, the acid rain problem can be cost-effectively addressed in areas where local circumstances permit low sulfur coal to be cost-effectively incorporated into the design and operation of power plants. However, the availability and cost of low sulfur coal varies according to location, and it is not a cost-effective means of reducing emissions in areas where its use requires long distance transportation.

Finally, given that acid rain depends on the total amount of emissions in an area, it can be managed without requiring that every coal fired power plant reduce emissions by the same amount, since the sulfur dioxide emission reductions required to address acid rain are fungible.

Thus, when it came time for Congress to address acid rain, many power plants did not have scrubbers and the reductions necessary to address acid rain did not require that every existing power plant install sulfur dioxide controls. Given that the controls used to reduce sulfur dioxide emissions cost hundreds of millions of dollars, and if they are to be installed in a new power plant or at an existing power plant, the costs are ultimately passed on to the consumers of electricity, the unique nature of the acid rain problem led Congress to create a program that allowed for the strategic rather than uniform deployment of scrubbers, and this has an important effect on emissions from power plants unrelated to acid rain.

Congress whole-heartedly encouraged strategic rather than uniform deployment of new scrubbers in enacting the federal acid rain program, Title IV of the 1990 Amendments to the Clean Air Act. Under this program, utilities are given incentives to efficiently identify the most cost-effective opportunities to reduce emissions that lead to acid rain, in some cases installing scrubbers, in some cases switching to more expensive low sulfur coal, and in other cases continuing operations as normal while providing financial support to power plants that have more cost-effective opportunities to achieve the reductions. The result is, as Congress intended, that some power plants have installed scrubbers to address acid rain while others did not and instead either used low sulfur coal or financially supported scrubber installations at other power plants where the investments were more cost-effective. This addressed acid rain in a way tailored to local conditions and obtained the same benefits at a much lower cost. Once the acid rain program was fully implemented, 30 new scrubbers were installed as a result, Legal Memo at 17 n.18, and the rest of the fleet either complied by burning low sulfur coal or by financially supporting the installation of these 30 new scrubbers. With the addition of these new scrubbers, by 2012 two-thirds of power plants had scrubbers and one-third of power plants did not. Exelon Comments on Proposed Toxics Rule at 25 n.47, 50-51, Exhibit 10 at 8-11, Exhibit 2 at 19-20, tbl. 5, Exhibit 4 at 10.

This prevailing pattern of strategic scrubber deployment lies at the heart of why the utility MACT sulfur dioxide surrogate standard for acid gases was woefully unjustified by the costs it imposed and the shutdowns and economic dislocation that resulted.

The problem is that the scrubbers installed to reduce sulfur dioxide emissions also reduce acid gas emissions, including hydrochloric acid and hydrofluoric acid, below the levels that would otherwise be emitted. Crucially, even though burning low sulfur coal emits far less sulfur dioxide, it does not emit correspondingly lower amounts of acid gases. While using low sulfur coal can achieve the sulfur dioxide emission levels that are achieved using scrubbers, using low sulfur coal cannot achieve the acid gas emission levels that are achieved using scrubbers.

That two-thirds of power plants installed scrubbers to address sulfur dioxide emissions when necessitated by local circumstances to meet national ambient air quality standards and address the acid rain problem made sense, but it was a far different question whether it made sense to install scrubbers on the remaining one third of power plants when the national ambient air quality standards and the acid rain program have not required them solely in order to achieve reductions in emissions in acid gases. Moreover, in a large number of cases, the result of the scrubber mandate was simply the retirement of coal power plants in favor of alternative generation sources, which resulted in significant economic dislocation and job losses and harms to vulnerable communities.

Even if additional scrubbers or scrubber upgrades could have been cost-effectively deployed at some existing power plants, EPA never considered whether it was rational to require scrubbers to be deployed at all existing power plants and for existing scrubbers to be upgraded merely to meet an arbitrary emission target based on the performance of other power plants that received subsidies to achieve greater control efficiencies under the acid rain program.

Using a tailored and case-by-case approach would have allowed the power plants that retired as a result of the Utility MACT scrubber mandate to have remained in operation while still requiring power plants that could have affordably installed or upgraded scrubbers to do so.

In sum, certain States have older and less thermally efficient fleets because they are closer to coal resources and enjoy lower fuel costs such that investing in new and larger plants does not offer the same return as in States that have much higher fuel costs. And certain States have been able to avoid requiring expensive scrubbers on every coal power plant while nevertheless achieving national ambient air quality standards and complying with the provisions of the Title IV acid rain program, largely through use of locally available low sulfur coal. Given the traditional and ongoing role of States in cultivating and overseeing the nation's power generation industry and the cooperative federalism model in the Clean Air Act and the Federal Power Act, it is no surprise that power plants are diverse in design, size, and age. This diversity is no accident — it is a central feature of the federal system. As with many issues they address, State and local governments have responded to differing local circumstance with decades of decisions that tailored their power plant fleets accordingly. Given this unique nature of the nation's power plant fleet, EPA in 2005 rightly concluded that “Congress plainly treated Utility Units differently from other source categories” because “Utility Units are a broad, diverse source category that is subject to numerous CAA requirements, including requirements under both Title I and Title IV, and that such sources should not be subject to duplicative or otherwise inefficient regulation.” 70 Fed. Reg. at 15999.

In light of the forgoing, it is not rational to assume that Section 112(d)(3)'s cost-blind floor standards are reasonable for power plants. The differences in costs between the results of subjecting the power plant fleet to Section 112 and the many other major sources EPA has regulated under Section 112 shows that in the magnitude and in relative cost-effectiveness, regulating power plants under Section 112 is manifestly far different from regulating other stationary sources under that program, demonstrating that the assumption that the costs of setting MACT floors would be per se reasonable does not hold for power plants. This is because unlike other stationary sources, power plants are inherently more diverse and “the best-performing power plants' emissions limitations” do not reflect “cost-conscious decisions” that can serve as a proxy for the choice of whether other power plants can reasonably be forced to upgrade to match the performance of the lowest emitters. *Michigan v. EPA*, 135 S. Ct. at 2711. Indeed, the premise

of the Title IV acid rain program is that scrubbers should only be installed strategically and it creates incentives to install larger, more efficient, and more expensive controls at some plants rather than have every power plant install controls. And the installation of other control equipment reflects the need to attain national ambient air quality standards in light of local circumstances that do not exist elsewhere. Section 112 is not appropriate for power plants because by its very nature it will force wasteful investments in controls merely because the standards are driven by the level of emission reduction that has been obtained as a result of other programs that were themselves designed to avoid rather than require a one-size-fits-all approach to the regulation of emissions.

Due to the unique issues associated with regulation of power plants, Section 112 is a program that inappropriately nationalizes locally appropriate choices for these particular sources, and this is an important consideration that weighs against finding it is appropriate and necessary to regulate power plants under that program rather than using available alternatives.

The history of the enactment of Section 112(n)(1) confirms that the foregoing issues associated with regulating power plants under Section 112 with uniform national standards are the reason why Congress enacted it. *See* Letter from Murray Energy Corp. to Admin. Gina McCarthy Regarding Supplemental Finding at 19-29 (Jan. 15, 2016) (attached and incorporated herein by reference).

This history amply demonstrates that Congress was specifically concerned that regulating coal power plants under Section 112 “would increase power rates, while potentially providing little or no public health benefit.” 136 CONG. REC. 3493 (Mar. 6, 1990) (statement of Sen. Steve Symms). Indeed, EPA reported to Congress that regulating power plants under Section 112 “may result in several billion dollars of unnecessary costs with unknown environmental benefits.” Letter from William K. Reilly, Adm’r, EPA, to Members of the Senate (Jan. 26, 1990), *reprinted in Clean Air Act Amendments (Part 3): Hearing Before the Subcomm. on Health and the Environment of the H. Comm. on Energy and Commerce*, 101st Cong. 771, 775, 791, 837 (1990); *see also Energy Policy Implications of the Clean Air Act Amendments of 1989: Hearing Before the S. Comm. on Energy & Natural Resources*, 101st Cong. 241 (1990) (testimony of William G. Rosenberg, Assistant Adm’r, Air & Radiation, EPA).

Today, the concern going forward which is amply revealed by the technology review is no longer about scrubbing mandates to address acid gases. Rather, the issue now is that a huge portion of the coal power plant fleet is equipped with electrostatic precipitators while another portion of the fleet has baghouses.

As the foregoing demonstrates, the coal fleet is highly diverse and has been tailored to local circumstances. The result, unsurprisingly, is that there is also a diversity in the particulate matter controls that are installed on coal power plants.

In some circumstances, either the particular design of a particular power plant or local air quality concerns have resulted in the installation of baghouses. Elsewhere, electrostatic precipitators are installed. It is true that in general baghouses, which are usually only found on the largest coal power plants, can technically achieve greater relative degrees of control efficiency than electrostatic precipitators. But it is only a marginal improvement, and not so large that it would ever be rational let alone appropriate to require a power plant with an electrostatic precipitator to either install a baghouse or shut down. Moreover, in today's age of lower natural gas prices, the result of a mandate for greater particulate matter control efficiency as a surrogate for non-mercury metal control would result in many, if not most or all, power plants faced with that ultimatum to be shut down.

EPA's Technology Review shows the results of decades of appropriate, localized decision that have resulted in differences in control technology. The foregoing information shows why this has occurred and why there is no basis to presume that it makes sense to leave the door open for tighter non-mercury metal control mandates that would supplement these differences with a uniform national standard that can only achieved by installing baghouses.

#### **IV. Alternative Control Strategies.**

NBCG urges EPA to expressly consider the use of Section 112 for power plants in light of alternative control strategies and also repudiate the prior Administration's false assertion that the question posed by Section 112(n)(1) is whether to regulate power plant emissions "at all." 76 Fed. Reg. 24,976, 24,989 (May 3, 2011).

EPA should finally expressly compare the costs and downsides of using Section 112 for power plants to the available alternatives of relying on States to regulate or utilizing the flexible, cooperative-federalism approach offered by Section 111.

EPA's first regulatory alternative is to regulatory option is to leave regulation of power plant emissions of Section 112(b) substances to the States. Unlike other federal laws, Congress preserved State authority over this regulatory problem because Congress found that "air pollution prevention . . . and air pollution control at its source is the primary responsibility of States and local governments." 42 U.S.C. § 7401(a). Congress intended for the Clean Air Act to "promote reasonable . . . State . . . and local governmental actions . . . for pollution prevention." 42 U.S.C. § 7401(c). Congress therefore preserved the authority of States to regulate "emissions of air pollutants," 42 U.S.C. § 7416, and expressly instructed EPA to "encourage cooperative activities by the States and local governments for the prevention and control of air pollution; encourage the enactment of improved and, so far as practicable in the light of varying conditions and needs, uniform State and local laws relating to the prevention and control of air pollution; and encourage the making of agreements and compacts between States for the prevention and control of air pollution." 42 U.S.C. § 7402(a).

There is no reason to believe that States are unable or unwilling to regulate potentially harmful emissions of Section 112(b) substances from power plants. Indeed, each substance on the Section 112(b) list was already being regulated by a State because the list only includes substances that were on Table 4 of the 1986 National Air Toxics Information Clearinghouse Data Base Report on State and Local Agency Air Toxics Activities. *See* Committee Report on S. 1894, S. Rep. No. 100-231 at 223–25 (1987). And EPA is statutorily required to provide States the technical information and assistance that is required for them to regulate Section 112(b) substances because the Act requires EPA to “establish and maintain an air toxics clearinghouse and center to provide technical information and assistance to State and local agencies . . . on control technology, health and ecological risk assessment, risk analysis, ambient monitoring and modeling, and emissions measurement and monitoring.” 42 U.S.C. § 7412(1)(3). With all of the information and assistance EPA is required to provide, States are adequately equipped to address emissions of Section 112(b) listed substances from power plants and they can do so in far more innovative, effective, and appropriate ways than EPA can using the Section 112 program. And if EPA does leave this responsibility to the States and finds certain emissions from power plants are insufficiently addressed, EPA has the authority to “call a conference concerning this potential air pollution problem to be held in or near one or more of the places where such discharge or discharges are occurring or will occur” and to “send such findings, together with recommendations concerning the measures which the Administrator finds reasonable and suitable to prevent such pollution, to the person or persons whose actions will result in the discharge or discharges involved; to air pollution agencies of the State or States and of the municipality or municipalities where such discharge or discharges will originate; and to the interstate air pollution control agency, if any, in the jurisdictional area of which any such municipality is located.” 42 U.S.C. § 7403(k). There is no basis to conclude that States and local governments would fail to respond to such findings.

Importantly, State regulation of Section 112(b) substances cannot be rejected out of hand because Congress instructed EPA to rely on that method in regulating area sources of Section 112(b) substances. Section 112(k) requires that EPA to “encourage and support areawide strategies developed by State or local air pollution control agencies that are intended to reduce risks from emissions by area sources within a particular urban area” and that at least 10% of funding for this purpose must “support areawide strategies addressing hazardous air pollutants emitted by area sources” that are “innovative and effective.” 42 U.S.C. § 7412(k)(4). Furthermore, Congress also instructed EPA to support programs focused on “high-risk point source review” because of the undoubted benefits of that approach as opposed to national uniform standards.

EPA has never found that State regulators aided and encouraged by EPA’s air toxics clearinghouse and center and given specific findings pursuant to EPA’s conference authority would be unable to achieve all appropriate and necessary emission reductions from power plants. Absent such a finding, EPA should

consider deferring to the States as a viable approach as an alternative control strategy to Section 112 as part of EPA's reassessment of the decision whether to impose stringent national standards for power plant emissions under that program.

Section 111 is another alternative control strategy that EPA must consider. In light of the enormous costs of using the Section 112 program to regulate power plants, the potentially inconsistent treatment of power plants under the Acid Rain Program and Section 112, and the significant state role in assuring a diverse fleet of local power generation facilities that meets local power demand cost-effectively, in 1990 Congress specifically amended the statute to ensure that Section 111 is an alternative program. In general, Section 111 can be used to address emissions that "cause[], or contribute[] significantly to, air pollution which may reasonably be anticipated to endanger public health or welfare." 42 U.S.C. § 7411(b)(1)(A). This includes regulation of new sources under Section 111(b) and regulation of existing sources under Section 111(d) provided that EPA does not regulate those existing sources under the Section 112 program. 42 U.S.C. § 7411(b); 42 U.S.C. § 7411(d).

The existence of Section 111 as an alternative to regulate power plant emissions is no happenstance. In the very legislation enacting Section 112(n)(1), Congress included an amendment to provide for the regulation of existing sources under Section 111(d) if they were not regulated under Section 112. Pub. L. No. 101-549, § 108(g), 104 Stat. 2399, 2467 (1990). Prior to 1990, the Act prohibited Section 111(d) regulation of the limited set of emissions that were regulated under the initially very narrow Section 112 program. See 42 U.S.C. § 7411(d) (1988); 42 U.S.C. § 7412(a)(1) (1988) (pre-1990 limitation on Section 112 regulation to those emissions "which may reasonably be anticipated to result in an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness"); 42 U.S.C. § 7412 (post-1990 expanded authority for Section 112 regulation of those emissions "which present, or may present, . . . a threat of adverse human health effects . . . or adverse environmental effects"). By removing the pollutant based restriction and inserting a restriction on regulating emissions from source categories that EPA is regulating under Section 112, the amendment assured Section 111 is an alternative control strategy for directly regulating any harmful emissions from power plants that could be regulated under Section 112.

Thus, as EPA explained in advocating for passage of Section 112(n)(1), Congress adopted an approach that would "allow[] the needed flexibility to identify and address the most significant toxic chemicals from utilities without mandating expensive controls that may be unnecessary." Letter from William K. Reilly, Adm'r, EPA, to Members of the Senate (Jan. 26, 1990), *reprinted in Clean Air Act Amendments (Part 3): Hearing Before the Subcomm. on Health and the Environment of the H. Comm. on Energy and Commerce*, 101st Cong. 771, 775, 791, 837 (1990). The heart of this approach is the amendments that specifically allowed EPA to use Section 111 as an alternative control strategy for power plants

in order to selectively target emissions of concern without imposing national uniform and cost-blind control mandates.

Thus, Congress intentionally gave EPA the choice whether to subject power plants to Section 112 or Section 111. Accordingly, part of the decision that Section 112(n)(1) requires EPA to make is whether the costs of using Section 112 for power plants are justified relative to the costs of using the Section 111 to regulate them. Indeed, EPA found in 2005 and 2006 the alternative of using the Section 111 program to regulate emissions from new and existing power plants is available, adequate to the task, and more cost-effective than using the Section 112 program, and based on this fact EPA at that time found the Section 112 program was inappropriate and unnecessary for regulating potentially harmful emissions from power plants.

The reasoned decision-making requirement and the provisions of Section 112 demand consideration of these alternative control strategies in assessing whether it is appropriate and necessary to use Section 112 to regulate power plants.

Congress directed EPA first, to study the public health hazards reasonably anticipated to occur as a result of hazardous air pollutant emissions by power plants “after imposition of the requirements of this chapter.” 42 U.S.C. § 7412(n)(1). Second, EPA was required to present the results of the study, including a description of “alternative control strategies for emissions found to warrant regulation under” the Section 112 program. *Id.* Then Congress directed EPA to “regulate electric utility generating units under this section” if and only if the Administrator reasonably concludes that “such regulation is appropriate and necessary after considering the results of the study” which must include analysis of alternative control strategies for the emissions from power plants that could be regulated under the Section 112 program. *Id.*

Congress expressly directed in Section 112(n)(1) that EPA “develop and describe” the “alternative control strategies for emissions which may warrant regulation under this section,” which are “emissions by electric utility steam generating units of pollutants listed under subsection (b) of this section.” 42 U.S.C. § 7412(n)(1). These alternative control strategies are other regulatory options, not “technologies which are available to control . . . emissions.” *Id.* This is confirmed by statutory context. Section 112 repeatedly uses “strategy” and “strategies” to refer to regulatory options. 42 U.S.C. § 7412(k)(3)(A) (“prepare” “comprehensive strategy to control emissions”); 42 U.S.C. § 7412(k)(4) (“encourage and support areawide strategies developed by State . . . agencies”); 42 U.S.C. § 7412(n)(5) (“develop and implement” “control strategy for emissions”). Indeed, Section 112(n)(5) calls for EPA to consider a “control strategy” under which EPA and the States work together to regulate under Section 111, illustrating that “alternative control strategies” include using Section 111 and

similar options like relying on and encouraging States to use their authority that is preserved by Section 116.

The “directive” to “study” alternative control strategies “is a[n] . . . indication of the relevance” of considering regulatory alternatives to Section 112 in deciding whether it is appropriate and necessary to select that program for power plants. *Michigan v. EPA*, 135 S. Ct. at 2708. EPA has “insisted that the provisions concerning all three studies ‘provide a framework for [EPA’s] determination of whether to regulate’ emissions from power plants under the Section 112 program. *Id.* By ignoring the alternative control strategies in assessing costs and the use of Section 112, the prior Administration once again engaged in impermissible “interpretive gerrymander[ing] in which an agency keeps parts of statutory context it likes while throwing away parts it does not.” *Id.*

Furthermore, the Unfunded Mandates Reform Act further demonstrates that EPA has until now unlawfully failed to consider alternative control strategies for regulating power plant emissions because that statute requires EPA to explain “why the least costly, most cost-effective or least burdensome method of achieving the objectives of the rule was not adopted.” Every one of EPA’s alternative control strategies is less costly, more cost-effective, and less burdensome than Section 112, yet EPA has never addressed why it rejected superior approaches, contrary to the requirements of the Mandates Act and the “the backdrop of . . . established administrative practice,” which has been defined by the provisions of the Mandates Act. *Michigan v. EPA*, 135 S. Ct. at 2708.

The Regulatory Flexibility Act also demonstrates EPA should have long ago expressly considered alternative control strategies for regulating power plant emissions because it requires the agency to describe “any significant alternatives to the proposed rule which accomplish the stated objectives of applicable statutes and which minimize any significant economic impact . . . on small entities” and it requires you to prepare “a statement of the factual, policy, and legal reasons for selecting the alternative adopted in the final rule and why each one of the other significant alternatives to the rule considered by the agency which affect the impact on small entities was rejected.” 5 U.S.C. § 602(c); 5 U.S.C. § 604(6).

The alternative control strategies of relying on states or using Section 111(d) to accomplish the stated objectives of reasonably regulating power plant emissions and they substantially reduce the economic impacts on small entities by providing for greater flexibility in addressing emissions from power plants owned and operated by small entities that EPA has found faced compliance costs greater than 1% of generation revenue. *Cf.* Utility MACT RIA at 7-15. Accordingly, the Regulatory Flexibility Act and “the backdrop of . . . established administrative practice,” which has been defined by the provisions of that Act require you to consider alternatives to using Section 112 to regulate power plant emissions. *Michigan v. EPA*, 135 S. Ct. at 2707.

As a matter of reasoned decision-making, EPA must specifically consider how the availability of alternative control strategies has the potential to allow EPA to regulate some emissions without having to impose cost-blind mandates for arbitrary levels of control of other emissions where the costs of doing so are dramatically outweighed by the benefits.

In particular, EPA should address the fact that the Section 112 standards that EPA imposed on power plants are really three distinct control mandates that result in distinct sets of costs and benefits.

First, EPA found that the controls required to meet the standards for mercury would cost \$3 billion per year, Regulatory Impact Analysis for the Final Mercury and Air Toxics Standards at 3-10 (Dec. 2011), EPA-HQ-OAR-2009-0234-20131, to achieve only 20 tons of emission reductions, *id.* at Tbl. 3-4, and yield \$4 to \$6 million in quantified benefits, *id.* at 4-67.

Second, EPA found that the controls required to meet the standards for non-mercury metals would cost at least \$1 to \$2 billion per year to achieve an unspecified amount of emission reductions and zero quantified benefits. UARG Comments, Ex. 1, *The American Energy Initiative, Part 15: What EPA's Utility MACT Rule Will Cost U.S. Consumers: Hearing Before the Subcomm. on Energy & Power of the H. Comm. on Energy & Commerce*, 112th Cong. (2012) (statement of Anne E. Smith, Ph.D., at 6, Tbl. 1), EPA-HQ-OAR-2009-0234-20557 (incorporated herein by reference).

Third, EPA found that the controls required to meet the standards for acid gases (primarily scrubber installations and scrubber upgrades) would cost \$5 billion per year, *id.* at 6, Tbl. 1, to achieve 39.8 thousand tons of hydrogen chloride emission reductions, Regulatory Impact Analysis for the Final Mercury and Air Toxics Standards at 3-10, Tbl. 3-4 (Dec. 2011), EPA-HQ-OAR-2009-0234-20131, an unspecified amount of other acid gas emission reductions, and yield zero quantified benefits.

The cost-benefit imbalance that results from regulating power plants under Section 112 is especially evident when these three control mandates are separately considered, and this bolsters the importance of considering flexible alternative control strategies that would result in more targeted and cost-conscious regulation by EPA and the States.

For example, if the benefits of regulating mercury outweigh the costs, then EPA has alternatives to ensure that mercury is appropriately regulated without forcing the agency to also impose acid gas and non-mercury metal control mandates that are not justified by their costs.

Under these circumstances, failing to consider the alternatives of deferring to State regulation pursuant to Section 116 or utilizing the Section 111 program would constitute an “artificial narrowing of option[s]” “antithetical to reasoned decisionmaking.” *Int’l Ladies’ Garment Workers’ Union v. Donovan*, 722 F.2d 795, 817 (D.C. Cir. 1983) (internal quotation marks and citation omitted).

**V. EPA Must Consider that It Cannot Regulate Coal Power Plants under Section 111(d) Unless EPA First Ensures That Coal Power Plants Are Not Regulated under Section 112 Because Section 111(d) Is Superior to Section 112 in Every Conceivable Way.**

Sources cannot be regulated under both Section 112 and Section 111(d). Full stop. *See* 42 U.S.C. 7411(d) (excluding regulation of emissions that are “emitted from a source category which is not regulated under section 7412”).

As the Solicitor General acknowledged in the briefing that resulted in the unprecedented stay of the Clean Power Plan: “If EPA’s decision to regulate power plants under Section 7412 ha[s] the dramatic legal effect that applicants attribute to it — i.e., if that decision foreclosed the agency from subsequently regulating power-plant emissions of non-hazardous pollutants under Section 7411(d) — EPA would [be] expected to take that consequence into account in determining whether regulation under Section 7412 was ‘appropriate and necessary.’” Mem. Fed. Res. at 28, *Murray Energy v. EPA*, 136 S. Ct. 999 (2016) (No. 15A778). Now that EPA is reassessing the appropriateness of using Section 112 to regulate coal power plants, EPA should “take . . . into account th[e] consequence” that doing so renders the more flexible Section 111(d) option legally unavailable for regulating coal power plants. EPA should consider this legal issue and regulatory consequence as a part of reconsideration of the supplemental finding.

The straightforward limitation on EPA’s power that forbids regulation of sources under both Section 112 and Section 111(d) should never have been doubted. The Supreme Court’s unprecedented and extraordinary Clean Power Plan stay exposed the ridiculous folly rooted in a mistaken identification of an unofficial, error-riddled document in a legislative history print as a copy of the United States Statutes at Large. Congress meant precisely what Congress said in Section 108(g) of the 1990 Amendments. Congress’s will cannot be subverted by pointing at the mere inclusion of an obvious and superfluous scrivener’s error in Section 302(a) held over without any amendment or mention from earlier bills which merely purports to delete a handful of characters from a cross reference that Congress elsewhere struck entirely from the law. Nothing but disagreement with Congress’s enacted policy supports any argument to the contrary. The farcical saga of alleged uncertainty, not merely of the *meaning* of the law, but of what the law *says*, should be buried in history along with the Clean Power Plan.

This comment incorporates herein by reference the following attached material related to the Section 112 exclusion and Section 112(n)(1) of the Clean Air Act: Coal Industry Application for Immediate Stay of Final Agency Action Pending Judicial Review, *Murray Energy Corp. v. EPA*, 136 S. Ct. 999 (2016) (No. 15A778); Coal Industry Reply in Support of Application for Immediate Stay of Final Agency Action Pending Judicial Review, *Murray Energy Corp. v. EPA*, 136 S. Ct. 999 (2016) (No. 15A778); Brief of Murray Energy Corp. as Amicus Curiae in Support of Petition for Writ of Certiorari, *Michigan v. EPA*, 135 S. Ct. 2699 (2015) (No. 14-46); Brief of Murray Energy Corp. as Amicus Curiae in Support of Petitioners, *Michigan v. EPA*, 135 S. Ct. 2699 (2015) (No. 14-46); Final Opening Brief of Petitioner, *In re Murray Energy Corp.*, 788 F.3d 330 (D.C. Cir. 2015) (No. 14-1112); Final Reply Brief of Petitioner, *In re Murray Energy Corp.*, 788 F.3d 330 (D.C. Cir. 2015) (No. 14-1112); Letter from Murray Energy Corp. to EPA Admin. Gina McCarthy Regarding Supplemental Finding (Jan. 15, 2016); Reply Brief of State and Industry Petitioners, *Murray Energy v. EPA*, No. 16-1127 (D.C. Cir. Mar. 24, 2017) (see all attached). These materials amply refute EPA's legal authority to subject the power plant fleet to both the Section 112 and Section 111(d) programs.

The foreclosure of the use of Section 111(d) as a result of using Section 112 is an important aspect of the problem of whether to subject power plants to Section 112 and the obligation of reasoned decision-making requires that EPA consider the issue in this proceeding.

Foreclosing the use of Section 111(d) is a negative consequence that weighs against finding it is appropriate and necessary to subject power plants to the Section 112 program. Section 111(d) is far more flexible than Section 112 while still offering EPA ample authority to address problems that may be associated with emissions from power plants without imposing costs in excess of benefits.

The Supreme Court's decision in *Michigan v. EPA* demonstrates Section 111(d) guarantees that States have the discretion to adjust the stringency of standards for their own sources based on "other factors" which must include cost and localized circumstances under any reasonable reading of the statute. EPA "*shall permit* the State in applying a standard of performance to any particular source under a plan submitted under this paragraph to take into consideration, among other factors, the remaining useful life of the existing source to which such standard applies." 42 U.S.C. § 7411(d)(1)(B) (emphasis added). The plain language of (d)(1)(B) makes clear that EPA has no discretion—it must let the States consider remaining useful life and "other factors" in setting a standard for a particular source. Furthermore, a straightforward application of the *Michigan v. EPA* decision demonstrates that the only reasonable interpretation of "other factors" is that it includes consideration of cost and other localized factors. In that case, the Supreme Court determined the consideration of whether regulating power plants under Section 112 was "appropriate" could only reasonably interpreted to require assessment of cost, which includes all of the downsides of regulation. *Michigan v. EPA*, 135 S. Ct. 2699 (2015). EPA has given effect to this requirement by

proposing factors that “give meaning” to Section 111(d)(1)(B), such as “[u]nreasonable cost of control,” “physical impossibility,” and “[o]ther factors specific to the facility.” 83 Fed. Reg. 44,746, 44,766, 44,773 (Aug. 31, 2018); *see* 40 C.F.R. 60.24(f). As this provision recognizes, under Section 111(d), States must be permitted to engage in their own tailored analyses of the costs of control and other localized concerns as they exercise their discretion to adjust the standards when applying them to their own set of sources. These analyses will flexibly consider plant age, location, or basic design process, and other factors in order to minimize the downsides of regulation and avoid imposing unreasonable costs and other negative consequences that are not justified.

Thus, Section 111(d) has a built-in tailoring mechanism that ensures that it will not result in excessive negative consequences that are not justified by the relevant benefits sought by the regulatory program. The Section 111(d) program also leverages the role of the States to consider the unique circumstances associated fuel availability, geographic factors, and local power needs and ensure that regulation is crafted considering these important factors, rather than through a one-size-fits-all inflexible federal program.

In particular, Section 111(d) even affords States the ability to impose regulations on a plant-by-plant basis, whereas Section 112 inflexibly requires EPA to regulate “a category or subcategory” which can only “distinguish among classes, types, and sizes of sources” without regard to specific situations that call for a more nuanced approach.

The Section 111(d) alternative also entirely avoids subjecting power plants to a second round of regulation under the residual risk and technology review provisions of Section 112, while still enabling EPA as appropriate to update and revise regulations as appropriate going forward.

Indeed, there is not one way that has been identified by any party to the decades of wrangling over the issue at the heart of this proceeding in which Section 112 is superior to Section 111(d). In every way, Section 111(d) is far better suited to addressing the diverse array of factors relevant to regulating power plants. Thus, Congress asked EPA to answer a question that has but one reasonable answer, that it is not necessary and appropriate to subject power plants to Section 112. Importantly, however, there was likely uncertainty at the time over precisely how Section 112’s regime would work in practice and how that would apply to power plants. But as the D.C. Circuit and EPA have interpreted the program and as it has been administered, Section 112 is an unduly blunt instrument that does not even ensure that the standards that result are cost effective and achievable, despite the fact that Congress provided the Administrator must set the standards “taking into consideration the cost of achieving [the] emission reduction[s]” and “determine[]” that they are “achievable.” 42 U.S.C. § 7412(d)(2). Whatever the wisdom of the cost-blind regime that EPA has administered over the past three decades, it is neigh impossible to justify its extension to sources that Congress provided cannot

be regulated in this manner unless it is “appropriate and necessary.” 42 U.S.C. § 7412(n)(1).

**VI. Title IV and Co-Benefits.**

In addressing the potential consideration of co-benefits, EPA should specifically address the fact that the clear majority of co-benefits that EPA has previously projected were specifically the result of sulfur dioxide emissions from the very same sources that Congress itself specifically regulated in the Title IV program in painstaking detail. Whatever the appropriateness of considering co-benefits in general, in this situation the consideration of sulfur dioxide emission reductions beyond the amounts that Congress specifically agreed on in crafting the Title IV program contravenes Congress’s intent that EPA must consider Section 112 regulation “after imposition of the requirements” that Congress enacted elsewhere in the Clean Air Act. 42 U.S.C. § 7412(n)(1).

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NBCG appreciates your consideration of these comments on EPA’s proposal.

Respectfully,

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