

III. EPA's PROPOSAL TO REGULATE MERCURY AND NICKEL EMISSIONS FROM UTILITY UNITS UNDER SECTION 111 OF THE ACT IS UNLAWFUL.

A. EPA does not have the authority to regulate HAPs under section 111 of the CAA.

1. Congress intended listed HAPs to be regulated under section 112, and EPA's interpretation of the 1990 amendments to 111(d) does not suggest otherwise.

Prior to the 1990 Amendments, the CAA explicitly barred EPA from regulating listed HAPs like mercury under section 111(d). Specifically, 111(d)(1) provided for a SIP-like program for “any air pollutant . . . which is not included on a list published under section 108(a) or 112(b)(1)(A),” and section 112(b)(1)(A) required EPA to maintain “a list which includes each hazardous air pollutant for which [the Administrator] intends to establish an emission standard under this section.”¹ Thus, because EPA listed mercury as a HAP in 1971,² EPA could not issue section 111(d) standards of performance for source categories emitting mercury, but instead was required to regulate such categories under section 112.

The legislative history of section 111 is very instructive. Section 111(d) was not included in either the House or Senate version of section 111 (section 113 and 112 in the Senate and House versions of the bill, respectively).³ Nor is there a mention of the provision in the legislative history of the conference committee.⁴ However, the precursor of section 111(d) appears to have been section 114 of the Senate version of the bill.⁵

¹ 42 U.S.C. §7411(d)(1) (1990).

² 36 Fed. Reg. 5,931 (Mar. 31, 1971) (codifying 40 CFR §61.01(a)).

³ S. 4358, 91st Cong. § 113 (1970), *reprinted in* Comm. On Public Works, *A Legislative History of the Clean Air Act Amendments of 1970*, at 553-560 (1974) (hereinafter “1970 Legislative History”; H.R. 17255, 91st. Cong. § 112, *reprinted in* 1970 *Legislative History* at 920-24.

⁴ *See id.* at 111-222.

⁵ *See* Frank B. Cross, *Section 111(d) of the Clean Air Act: A New Approach to the Control of Airborne Carcinogens*, 13 *B.C. Env't. Aff. L. Rev.* 215, 233 & nn.114-117 (1986) (noting that S. 4358 section 114 was

Section 114 of S. 4358 was intended to provide authority to regulate “selected pollutants which cannot be controlled through the ambient air quality standards and *which are not hazardous substances.*”⁶ The Senate Committee Report elaborates:

Knowledge and experience gained under the Air Quality Act of 1967 . . . has revealed that pollution agents and combinations of such agents fall into three general categories. The first of these categories are those pollution agents which are emitted from diverse stationary and moving sources into the ambient air and which are generally detectable through monitoring devices and systems. . . .

The second category of air pollution agents includes those which are hazardous to the health of persons. . . .

The third category of pollution agents includes those agents which are not emitted in such quantities or are not of such a character as to be widely present or readily detectable on a continuous bases with available technology in the ambient air. The presence of these agents is generally confined, at least for detection purposes, to the area of the emission source.⁷

In other words, the emission guideline program of section 111(d) was intended to be restricted to non-hazardous, non-NAAQS pollutants.

Notwithstanding this prior history, EPA points to two allegedly conflicting amendments to section 111(d) enacted in 1990 as an authorization to interpret the Act to permit HAP regulation under that section. As EPA notes, the House of Representatives put forward an amendment to section 111(d) which called for a SIP-like program for “any air pollutant . . . which is not . . . emitted from a source category which is regulated under section 112,” whereas the Senate amendment provided for such a program for “any air pollutant . . . which is not included on a list published under section 108(a) or 112(b).” In short, the Senate amendment can be read in no other way except to have the same effect as the pre-existing law; it simply makes a change to the paragraph reference to account

the precursor of section 111(b)). *Compare* S. 4358 § 114, *reprinted in 1970 Legislative History* at 560-64, with 42 U.S.C. §7411(d) (1976).

⁶ *1970 Legislative History* at 227 (statement of Senator Muskie) (emphasis added).

for the fact that the section 112 list was not contained in subsection (b)(1)(A) any longer. The question then becomes whether the House amendment conflicts with the Senate amendment at all. Even if it does, the House amendment should not be read to trump the Senate's clear intent, so as to effect a significant change from the clear prior law; instead, there is a more reasonable interpretation. As discussed below, there are at least two explanations for the House language that do not conflict with the Senate amendment. Even if one could conclude that the amendments are in tension, EPA arbitrarily has ignored the most reasonable reconciliation of the two provisions.

First, EPA wrongly assumes that the House and Senate amendments cannot be read literally and in harmony. As noted above, the Senate amendment obviously means that listed HAPs, like mercury, cannot be regulated under section 111(d). Similarly, the House amendment – which precludes section 111(d) regulation for pollutants “emitted from a source category which is regulated under section 112” – is consistent with this ban on regulating HAPs under section 111. The HAPs released by Utility Units – like mercury, for instance – are “emitted from . . . source categor[ies] which [are] regulated under section 112,” because there are numerous non-utility source categories for which MACT standards have been issued and from which these HAPs are emitted.⁸

Accordingly, the House amendment – read literally and logically – prohibits EPA from using section 111(d) to regulate mercury emissions (and any other HAP emitted from a section 112 source category).

⁷ S.R. No. 91-1196, *reprinted in 1970 Legislative History* at 418.

⁸ *See, e.g.*, 67 Fed. Reg. 77,562, 77,566 (Dec. 18, 2002) (proposed NESHAP for taconite iron ore processing; acknowledging mercury emissions from such sources); 68 Fed. Reg. 70, 903, 70,920 (Dec. 19, 2003) (NESHAP for mercury cell chlor-alkali plants; acknowledging mercury emissions from such sources).

Second, EPA also ignores the fact that both the House and Senate amendments reinforce the same principle – EPA cannot use section 111(d) to regulate HAPs, except where the CAA specifically tells EPA to do so. In characterizing these amendments as conflicting, EPA completely ignores the provision of the Act – section 129 – that explains, and allows EPA to implement, both amendments. Section 129 requires EPA to establish standards of performance for solid waste incineration units under the authority of section 111(b) (for new units) and section 111(d) (for existing units), but specifies that these standards must achieve MACT-level control.⁹ It also specifies that such units cannot be regulated under section 112(d).¹⁰ Given the requirements of section 129, both the House and Senate amendments to section 111(d) make perfect sense and are consistent with one another. Under the House amendment, HAPs from incineration units regulated under section 129 are not “regulated under section 112” and thus can be – indeed, section 129 specifies that they must be – regulated under section 111(d). Under the Senate amendment, EPA may not issue section 111(d) emission guidelines for HAPs listed under section 112(b), except where the more specific provision – section 129 – directs the agency to issue such guidelines for HAPs (and non-HAPs) from incineration units.

Third, even if these provisions could not be harmonized – which they can – there is a clearly better and non-arbitrary approach apart from the one EPA proposes to give effect to both provisions – EPA must read section 111(d) to preclude the regulation of HAPs on the section 112(b) list. That was the prior law, and it was the obvious intent of the “conforming amendment” from the Senate. Moreover, it is completely reasonable to

⁹ 42 U.S.C. §§ 7429(a)(1)-(2).

¹⁰ *Id.* § 7429(h)(2).

believe that, by referring to regulated source categories, the House amendment was intended to have the same effect as well. This is true because under section 112, the source category list flows directly from the pollutant list. *See* CAA § 112(c)(1). Thus, EPA should interpret the provision to serve its purpose – precluding HAP regulation under section 111(d) – and should not view the House amendment as a new and unmentioned authority for EPA to regulate HAPs differently.

The foregoing interpretations all provide a reasonable and internally consistent reading of the statute unlike EPA’s proposed arbitrary approach, and are reinforced by other provisions of section 112, which generally forbid EPA from regulating emissions of listed HAPs from stationary sources under other parts of the Act. For instance, section 112(b)(6) provides that pollutants listed under section 112 are not subject to the prevention of significant deterioration (PSD) program.¹¹ Likewise, although section 112(n)(5) directs EPA to study the risks from hydrogen sulfide emissions and, based on its assessment, “implement a control strategy for emissions of hydrogen sulfide to protect human health and the environment . . . using authorities . . . including section[] 111,” hydrogen sulfide is not a section 112(b) listed HAP. Congress understood that it was necessary not to list hydrogen sulfide under section 112(b) in order to permit EPA to regulate hydrogen sulfide under section 111.

¹¹ 42 U.S.C. § 7412(b)(6). Congress specifically identified the PSD program in the 1990 Amendments as a program to which pollutants listed under section 112 are not subject because this marked a conscious reversal of prior law. EPA can gain no support for its approach from the absence of a similar statutory term providing that pollutants listed under section 112 are not subject to section 111. This is so for several reasons: first, unlike PSD, section 111 had not covered HAPs previously; accordingly, there was no reason for Congress to highlight every other provision of the Act that did not apply to HAPs – like section 111 – and reaffirm that they still did not. Indeed, section 112(b)(6) proves that Congress knew how to overturn prior law with an express statutory amendments, which it plainly did not with an amendment applying section 111 to HAPs.

Moreover, the arbitrariness of EPA's reading is revealed by its creation of new problems that cause internal conflicts with the structure and objectives of section 112. The agency's interpretation – that section 111(d) applies to categories of sources not regulated under section 112, but emitting listed HAPs -- would permit the agency to promulgate standards of performance for source categories that were delisted as being low risk under section 112(c)(9). Similarly, EPA would have the discretion to regulate area sources of HAPs under section 111(d), despite the fact that section 112 specifies the manner in which Congress intended area sources are to be regulated.¹²

Even if it concludes that the House and Senate amendments are in conflict, EPA must not adopt its proposed reconciliation of the twin amendments to 111(d) because there is a canon of statutory interpretation that when two provisions are irreconcilably conflicting, “the last provision in point of arrangement must control.”¹³ In the CAA Amendments of 1990,¹⁴ the Senate amendment (section 309) comes later than the House amendment (section 108(g)). Accordingly, the last in order – the Senate amendment – should prevail.

Because there actually is an easy reconciliation of the two amendments that EPA identifies as conflicting, EPA lacks the authority to adopt an alternative interpretation in an attempt to invent new regulatory authority to regulate HAPs under section 111(d) beyond the requirements of section 129. Because this new authority does not exist, EPA cannot use section 111(d) to issue standards of performance for HAPs from existing Utility Units. Because EPA cannot use section 111(d), EPA's claimed authority to

¹² See, e.g., 42 U.S.C. § 7412(d)(5) (allowing EPA to apply “generally available control technologies”)

¹³ See *Lodge 1858, Am. Fed. of Gov't Employees v. Webb*, 580 F.2d 496, 510 (D.D.C. 1978) (citing numerous cases applying “established rule”).

¹⁴ Pub. L. 101-549.

rescind its regulatory determination evaporates, and regulation under section 112 remains “necessary,” just as EPA determined in December, 2000.

Looking at mercury confirms the necessity of this conclusion. Mercury was regulated under section 112, not section 111(d), prior to the 1990 Amendments, and a proper interpretation of these amendments would maintain this status quo. Given the ministerial nature of these two amendments and the lack of legislative history on the topic, it would be arbitrary to presume that Congress intended to effect such a momentous and substantive change in the manner in which one of the largest sources of one of the most pernicious HAPs is regulated.

2. Sections 112(c)(6) and 112(d)(7) do not support the assertion that HAP emissions can be regulated under provisions of the CAA other than section 112.

EPA argues that sections 112(c)(6) and 112(d)(7) “[support] the conclusion that HAP emissions could be regulated under other provisions of the CAA.” 69 FR at 4684/3. This is wrong. There is nothing in the language of these provisions, legislative history, or the structure of the Act to support this conclusion.

EPA’s proposal does not identify any language in section 112(c)(6) to support EPA’s conclusion, and indeed, the agency offers no reading whatsoever other than a conclusory assertion. *Id.* Section 112(c)(6) reads as follows:

With respect to alkylated lead compounds, polycyclic organic matter, hexachlorobenzene, mercury, polychlorinated biphenyls, 2,3,7,8-tetrachlorodibenzofurans and 2,3,7,8-tetrachlorodibenzo-p-dioxin, the Administrator shall, not later than 5 years after November 15, 1990, list categories and subcategories of sources assuring that sources accounting for not less than 90 per centum of the aggregate emissions of each such pollutant are subject to standards under subsection (d)(2) or (d)(4) of this section. Such standards shall be promulgated not later than 10 years after November 15, 1990. This paragraph shall not be construed to require the Administrator to promulgate standards for such pollutants emitted by electric utility steam generating units.

The first two sentences of section 112(c)(6) offer no support for EPA's conclusion, under any conceivable reading. The final sentence of the provision offers no support for this conclusion in and of itself either. The sentence says or implies *nothing* about authority to regulate HAP emissions under other provisions of the Act.

To the extent that EPA is reading this final sentence as an implied cross-reference to section 112(n)(1)(a), this reading fails to yield support for EPA's conclusion either. As discussed elsewhere in these comments, section 112(n)(1)(a) provides no authority or implication of authority to regulate HAP emissions under other provisions of the Act. Nothing in the language of section 112(c)(6) alters that fact.

There is also nothing in the Act's legislative history to indicate or imply that HAP emissions could be regulated under other provisions of the Act, based upon any support from section 112(c)(6). To the contrary, as discussed elsewhere in these comments, the legislative history is replete with indications that Congress intended EPA to regulate HAP emissions only under section 112.

Likewise, the proposal does not identify any language in section 112(d)(7) to support EPA's view that regulating HAPs under section 111 might be permissible, and indeed, the agency offers no reading whatsoever other than a conclusory assertion.¹⁵

That section provides:

No emission standard or other requirement promulgated under this section shall be interpreted, construed or applied to diminish or replace the requirements of a more stringent emission limitation or other applicable requirement established pursuant to section 7411 of this title, part C or D of this subchapter, or other authority of this chapter or a standard issued under State authority.

¹⁵ See 69 Fed. Reg. at 4,684.

Section 112(d)(7) is not a direct grant of authority to EPA to regulate HAP emissions under other (non-section 112) provisions of the Act. Nor does section 112(d)(7) contemplate or imply such regulation.

Section 112(d)(7) is concerned with ensuring that interpretation, construction or application of section 112 requirements do not diminish or replace requirements under state authorities or other Clean Air Act provisions, including section 111 and parts C or D of title I. In this respect, section 112(d)(7) merely serves a function akin to that of a savings clause. Again, it does not operate as a grant of authority to EPA in any way; rather, it represents a prohibition on EPA adopting section 112 standards that diminish or replace the aforementioned requirements.

It is incorrect to read section 112(d)(7) as direct or implied authority for the other identified “applicable requirements” being able to regulate HAP emissions, if that is the way in which EPA purports to find support for the conclusion that HAP emissions could be regulated under other provisions of the CAA. In other words, if EPA is implying that section 112 standards could logically “diminish or replace” the requirements of section 111 or other applicable requirements, only if those latter requirements regulated HAPs as well, that reading is plainly wrong for several reasons.

First and foremost, the argument proves too much. Since there is no distinction drawn in section 112(d)(7) between section 111 requirements, and those under parts C or D, or other Clean Air Act or state authorities, EPA’s argument leads to the absurd result that section 112(d)(7) supports the conclusion that any of these requirements or authorities could be used to regulate HAPs. This is plainly erroneous, since the many requirements within that wide-open universe of federal and state authorities clearly do not

each regulate HAPs. It is only EPA's tortured reading of section 112(d)(7), attempting to impute indirect authority to regulate HAPs where none exists, that leads to this absurd result. Under well-established canons of judicial interpretation, the statute should not be read to create this absurd result.

Second, EPA's reading is incorrect, because one of the very Clean Air Act provisions listed in section 112(d)(7) – part C of title I – is specifically *inapplicable* to HAPs. *See* CAA § 112(b)(6). Congress would not have included part C in section 112(d)(7) -- at the same time that it adopted section 112(b)(6) in the 1990 Amendments – if such inclusion were meant to convey authority under part C to regulate HAPs, as EPA would have it. Again, EPA's incorrect reading creates an internal statutory contradiction, where none exists if the proper reading of section 112(d)(7) is applied.

Third, EPA is wrong because another of the provision listed in section 112(d)(7) – part D of title I – also does not apply to HAPs. The nonattainment provisions contained in part D apply only to pollutants for which a NAAQS has been established – not to HAPs.

Finally, section 112(d)(7) is plainly intended to operate to prohibit EPA from employing section 112 standards to replace or diminish other regulations of criteria air pollutants or precursors. For example, a VOC RACT limit or a SIP particulate matter limit may not be replaced or diminished by section 112 standards, even if the VOCs or particulate matter is hazardous. RACT and SIP limits, however, apply to VOCs or particulate matter legally as criteria pollutants (or precursors), and *not* as HAPs. Section 112(d)(7) simply reflects Congressional recognition of this pre-existing federal and state system regulating criteria pollutants or precursors that *also* happen to be hazardous.

Congressional inclusion of section 111 requirements in the same section 112(d)(7) list as part C or D requirements, and other Clean Air Act and state authorities, demonstrates that Congress did not view section 112(d)(7) as a direct or indirect recognition of authority under section 111 to regulate HAPs. More broadly, section 112(d)(7) provides no support for the conclusion that HAP emissions could be regulated under other provisions of the CAA.

As with section 112(c)(6), there is also nothing in the Act's legislative history to indicate or imply that HAP emissions could be regulated under other provisions of the Act, based upon any support from section 112(d)(7).

B. EPA's Attempt To Rescind Its December 2000 Regulatory Determination And Listing Of The Utility Industry Is Unlawful.

EPA argues that it has authority to rescind the regulatory determination and the prior listing of Utility Units under section 112(c) because it has concluded that regulating mercury under section 111 is "adequate" to address the public health threats posed by utility units, and therefore regulation under section 112 is no longer "necessary." There are several basic flaws with this contention.

First, EPA neither quantifies the benefits of mercury control in this rulemaking, nor describes what considerations went into its conclusion that the section 111 program is "adequate"; this is the essence of arbitrary decisionmaking.

Second, as proposed, EPA's section 111 scheme results in far weaker controls than a legitimate MACT standard, rendering it inadequate.

Third, regulation under section 111 is plainly not an "adequate" replacement for section 112 regulation, when one considers the statutory structure of the CAA, and the

number of ways in which section 112 is more comprehensive and stringent than section 111.

Fourth, EPA cannot rescind the regulatory determination because it was designed to be a one-time event, which already has occurred, and EPA must abide by the consequences, or use the statutorily-prescribed route – section 112(c)(9) – for avoiding MACT requirements.

Fifth, EPA adopts an arbitrary reading of section 112(n)(1)(A) in order to find that mercury and nickel must be regulated from electric utility steam generating units at the same time that the agency circumvents the statutorily-prescribed method – section 112 – for doing so.

Finally, because the CAA compels EPA to list “all” categories of major sources of HAPs, and because it is accepted fact that Utility Units are major HAP sources, the listing decision cannot be withdrawn.

1. EPA acts arbitrarily and capriciously in concluding that regulation under section 111 is “adequate” to deal with Utility Units’ mercury pollution.

EPA claims that its regulations under section 111 of the CAA “can be employed to adequately address the hazards to public health resulting from Hg and Ni emissions from Utility Units,”¹⁶ but this conclusion is arbitrary and capricious because it is based on little more than hope, not on reliable information.¹⁷ Throughout the preamble to the proposed rule, EPA proclaims that it lacks the necessary information to correlate power plant pollution control with human health effects. For instance, the agency says that it “cannot currently quantify whether, and the extent to which, the adverse health effects

¹⁶ 69 Fed. Reg. at 4,684.

occur in the populations surrounding these facilities and the contribution, if any, of the facilities to those problems.”¹⁸ Likewise, EPA lists eight separate known or potential health effects that are associated with mercury exposure – neurological disorders, learning disabilities, developmental delays, cardiovascular effects, altered blood pressure regulation, increased heart rate variability, myocardial infarctions, and reproductive effects in adults – but states that “the available science does not support quantification of the[] benefits [of reducing mercury pollution] at this time”¹⁹ Thus, EPA has no empirical data with which to compare one mercury pollution control strategy to another, and accordingly has no factual basis upon which to conclude that its section 111 proposal is an “adequate” alternative to protect the public health from the threats of mercury pollution.

2. The record of this rulemaking disproves EPA’s belief that section 111 will control mercury pollution “adequately,” when compared to section 112 regulation.

A simple comparison of the agency’s section 111 control program to the speedy and significant reductions that faithful implementation of the MACT requirements will achieve proves that EPA’s proposal is nowhere near an “adequate” replacement for section 112 regulation. Specifically, EPA’s own modeling reveals that its section 111 proposal will permit emission levels to remain significantly elevated long into the future, whereas a responsible MACT approach will require approximately a 90 percent reduction in mercury pollution within 3 years. In the face of these figures, it is arbitrary and

¹⁷ See *Horsehead Resource Dev. Co., Inc. v. Browner*, 16 F.3d 1246, 1269 (1994) (“speculation is an inadequate replacement for the agency's duty to undertake an examination of the relevant data and reasoned analysis; thus the EPA's action . . . was arbitrary and capricious”).

¹⁸ 69 Fed. Reg. at 4,657.

¹⁹ 69 Fed. Reg. at 4,708, 4,711.

capricious to conclude that the replacement program is a sufficient substitute for aggressive controls on mercury.

As discussed above, our analysis shows that MACT floor controls, after eliminating EPA's unlawful subcategories and the obviously improper statistical adjustments for "variability," would result in annual mercury emissions of approximately 4 tons, for a reduction from 1999 levels of 92 percent, to say nothing of implementing above-the-floor MACT. (Even accepting EPA's unlawful subcategories and ignoring above-the-floor controls results in annual emissions of approximately 12 tons.) Under the CAA, MACT standards must become effective for existing sources within three years of promulgation.²⁰ Thus, the standards should reduce emissions (currently estimated to be approximately 48 tons per year) by approximately 44 tons per year (or, at worst, 36 tons), and start doing so by 2008.²¹

By contrast, EPA's proposal would establish annual emission caps of approximately 34 tons in 2010,²² and 15 tons in 2018, and would permit these levels to be exceeded if sources obtain pollution allowances that previously were banked (by sources who over-controlled in the program's early years) or if they purchased "safety valve" allowances at a pre-established price. EPA's own modeling reveals what pollution levels the agency thinks this program will produce; according to an IPM modeling run in the docket of this rulemaking labeled "Proposed Hg Trading Rule + IAQR," EPA predicts

²⁰ 42 U.S.C. § 7412(i)(3).

²¹ As noted above, pursuant to a settlement agreement with NRDC, EPA is presently under an obligation to promulgate final standards by March 15, 2005.

²² In fact, EPA declares that it is not certain what the first phase cap will be; it states that recent modeling indicates that emissions will be reduced to 34 tons per year as a co-benefit of NOx and SO2 controls, and proposes to find that such reductions constitute the best system of mercury emission reductions for the near term. *See* 69 Fed. Reg. at 4,698.

that mercury emissions from affected units under its preferred approach will be as follows.²³

Time Base: Seasonal/Annual	2005-2007	2008-2012	2013-2017	2018-2022	2023-2030
Standard - [Lb]	0.4000E+09	0.6800E+05	0.6800E+05	0.3000E+05	0.3000E+05
-Emissions at Affected Plants [Lb]	0.8226E+05	0.6089E+05	0.5513E+05	0.4997E+05	0.4444E+05
-Less Allowances Purchased [Lb] MER	0.000	0.000	0.000	0.000	-0.1444E+05
-Plus Allowances Sold [Lb] MER	0.000	0.000	0.000	0.000	0.000
-Plus Allowances Banked [Lb]	0.000	7109.	0.1287E+05	0.000	0.000
-Less Allowances Withdrawn [Lb]	0.000	0.000	0.000	-0.1997E+05	0.000
Total [Lb]	0.8226E+05	0.6800E+05	0.6800E+05	0.3000E+05	0.3000E+05

In brief, EPA expects actual emissions to be roughly 41 tons in 2005-2007, 30 tons in 2008-2012, 28 tons in 2013-2017, 25 tons in 2018-2022, and 22 tons in 2023-2030. As one can see from the chart reproduced above, EPA expects sources to bank an annual average of nearly 10 tons of allowances in the years 2008-2017, and to use them up in the years 2018-2022. The agency also anticipates that sources will purchase approximately 7 tons of allowances annually (presumably using the “safety valve” provisions) in the years 2023-2030.

A recent modeling analysis by the Energy Information Administration of the Clear Skies Act – which has mercury emissions caps and compliance schedules essentially the same as EPA’s section 111 proposal -- predicts even less of an emissions effect from the agency’s planned trading program. EIA finds that “the use of early credits allows [Utility Units] to delay meeting the 2010 34-ton mercury emissions cap until 2013. In the longer term, because of the mercury safety valve, mercury emissions are projected to remain above the 15-ton emission target that takes in effect in 2018 throughout the projections,” i.e. until at least 2025, the last year analyzed by EIA.²⁴ EIA

²³ U.S. EPA, “Proposed Hg Trading Rule + IAQR\IPM Run Output EPA216_PM54 -- Proposed Hg Trading Rule + IAQR -- Regional Summary Report,” Docket Item OAR-2002-0056-0338 (undated).

²⁴ Energy Information Administration, “Analysis of S.1844, the Clear Skies Act of 2003; S.843, the Clean Air Planning Act of 2003; and S.336, the Clean Power Act of 2003, at 31 (May 2004).

also states that “[i]n 2010 under the Inhofe bill [which mirrors the section 111 proposal], mercury emissions are expected to be 40 tons (versus a cap of 34 tons), while in 2025 emissions are 29 tons (versus a cap of 15 tons).”²⁵

The foregoing summary demonstrates how much weaker EPA’s proposed pollution program is than the MACT standard the law requires it to promulgate. However, to fully appreciate the difference between the two, one must consider the cumulative effect of decades of weak regulation, as mercury persists in the environment once it is released. Using EPA’s modeling, cumulative emissions from 2005-2025²⁶ would be 604 tons under the section 111 approach, and would be 260 tons under the MACT approach.²⁷

3. EPA acts arbitrarily and capriciously in implying that section 111 regulation, including a cap-and-trade approach, is adequate to address the harmful regional and local health and ecological impacts of HAP emissions from power plants.

EPA’s proposed section 111 regulation, including its cap-and-trade approach, will not adequately address the harmful regional and local health and ecological impacts of HAP emissions from power plants previously identified by the agency. The section 112(n)(1)(A) regulatory finding relied extensively and directly upon these local and

²⁵ *Id.* at vii.

²⁶ According to EPA, 2026 is the end year for the modeling, and should not be used for analysis. Thus, the above calculation stops at 2025. However, it is noteworthy that EPA’s modeling does not identify a date by which sources will reduce mercury pollution to the cap level of 15 tons. Even if sources do reach this level someday, it will still exceed the level that MACT will achieve in 2008, so emissions will remain higher under the EPA plan for the foreseeable future.

²⁷ This calculation assumes emissions of 48 tons from 2005-2008, and 4 tons from 2009-2025. However, because MACT is an emission rate limit, not a pollution cap, it is possible that these levels might be different as a consequence of new source construction and existing source retirement. There is not reason to believe these potential fluctuations will be material; as discussed above, our modeling of a stricter alternative to EPA’s proposed MACT floors results in 12 tons per year of mercury emissions, and that level remains constant through the modeling period. Indeed, because of CAA requirements to revisit pre-existing MACT standards to account for residual risk, 42 U.S.C. § 7412(f)(2) and to reflect “developments in practices, processes, and control technologies,” *id.* § 7412(d)(6), the MACT limit may well be revised in the future to require more significant pollution controls.

regional harms in finding it necessary and appropriate to regulate power plants under section 112, and in adding power plants to the list of source categories under section 112(c).²⁸

EPA previously has recognized the adverse impacts on local communities that could arise from a trading scheme, even were that trading to be implemented under section 112 (which it may not be lawfully), with source-by-source MACT:

The EPA, however, recognizes and shares concerns about the local impacts of mercury emissions and any regulatory scheme for mercury that incorporates trading or other approaches that involve economic incentives must be constructed in a way that assures that communities near the sources of emissions are adequately protected. Thus, in developing a standard for utilities, the EPA should consider the legal potential for, and the economic effects of, incorporating a trading regime under section 112 in a manner that protects local populations.

65 Fed. Reg. 79830, 79831 (Dec. 20, 2000).²⁹ These “concerns” and harms are amplified all the more in the cap-and-trade scheme proposed by EPA under section 111. EPA’s trading proposal does not and cannot safeguard populations against regional and local HAP emissions, and the proposal does not begin to offer evidence, much less make the case, to the contrary.

EPA’s proposal brushes past these local and regional adverse impacts and pretends that a cap-and-trade program for Hg emissions from utilities qualifies as the “best system of emission reductions” that “has been adequately demonstrated,” by pointing to experience under Title IV’s acid rain program and the NOx SIP Call’s cap-

²⁸ See e.g., 65 Fed. Reg. 79825 *et seq.* (Dec. 20, 2000); U.S EPA, *Mercury Study Report to Congress* (1997) (EPA 452/R-97-003), at 3-15 to 3-20, 3-32 (Vol. I); at ES-10 (Vol. II); & at ES-8, 3-25 (Vol. VI).

²⁹ As discussed elsewhere in these comments, EPA may not lawfully adopt a section 112 trading program – or any “system-wide or pooled performance standard,” 69 Fed. Reg. 4662 -- under section 112(d) or any other section 112 authority. It is incorrect and disingenuous for EPA to say merely that “EPA has not resolved” whether such approaches are allowed under section 112(d). To the contrary, EPA has *never* authorized or even proposed such approaches before – despite appeals from industry to do so – and this disallowance represents the resolution and the consistently followed position of the agency. Trading and the variations that EPA describes are simply not allowed under section 112.

and-trade program. But these are arbitrary and capricious comparisons that do not support EPA's pretense for the following reasons.

First and foremost, Title IV and the NOx SIP Call operate against a backdrop in which there are multiple federal, state and local control measures that apply to the regulated units beyond the cap and allowance system. Federal SIP measures, NSPS provisions, NSR requirements – all of these are part of the Clean Air Act fabric designed to safeguard local and regional air quality and public health while authorizing national or regional cap-and-trade programs to address national or regional emissions. EPA's section 111 (and section 112) trading proposals would begin operating without *any* of these local or regional HAP controls on power plants, so the experiences in which EPA purports to find reassurance in fact reinforce the conclusion that the proposed HAP trading approaches will not protect against local and regional harms.

Second, the proposal claims that EPA's experience with the acid rain program limiting SO₂ emissions leads the agency not to "anticipate" local health-based concerns under a national mercury trading program.³⁰ Yet experience with the acid rain program leads to just the opposite result. As revealed in the April 4, 2002 report "Darkening Skies: Trends Toward Increasing Power Plant Emissions,"³¹ significant numbers of power plants operating under the Title IV national cap have actually increased their SO₂ emissions even as the national cap declined. This has even translated to individual states experiencing overall increases in SO₂ emissions over extended time periods of concern – a concern exacerbated here by the bio-accumulative nature of mercury and other power plant HAPs. As the Executive Summary of this report states:

³⁰ 69 Fed. Reg. at 4702.

³¹ Hereby incorporated by reference, <http://www.cleanairnow.org/cleanairnow.asp?id2=6275>.

- From 1995 to 2000, over which time the national SO₂ cap took effect, 300 of the dirtiest 500 power plants increased their SO₂ emissions, even while the cap resulted in an overall decrease of about five percent. This means that residents of 300 local communities are being exposed to higher levels of soot from nearby facilities.
- There were seven states that had a net SO₂ increase of 20,000 tons or more over this six-year period. These “sooty seven” states are, from largest to smallest emission increases: North Carolina, New York, Mississippi, Georgia, Washington, South Carolina and Maryland.
- One plant, the EC Gaston plant in Alabama, increased its SO₂ emissions by 62,000 tons per year, a bigger jump than any other plant in the nation. This plant is just a few miles from Birmingham, Alabama.

Third, EPA’s proposal is arbitrary and capricious in finding a section 111 cap-and-trade approach to be adequate to address the harmful regional and local health and ecological impacts of HAP emissions from power plants, based upon the different and weaker standard for local impacts that the proposal employs:

In this discussion, we are assuming that a power plant may lead to a hot spot if the contribution of the plant’s emissions of Hg to local deposition is sufficient to cause blood Hg levels of highly exposed individuals near the plant to exceed the RfD. For the purposes of choosing a regulatory tool to address hot spots, the relevant question is what is the contribution of these plants to hot spots under a cap-and trade approach, relative to their current contribution and their projected contribution under a traditional section 112 approach.³²

In other words, EPA’s proposal is comparing not the total amount of local mercury emissions remaining under a section 111 trading scheme versus a section 112 MACT approach; rather the agency’s approach defines adverse local impacts (“hot spots”) to be only levels that “cause blood Hg levels of highly exposed individuals near the plant to exceed the RfD.” *Id.*

But this is an arbitrary comparison that ignores the nature, objectives and achievements of section 112 MACT standards: these are not health-based standards (in

the first instance), but technology-based standards that achieve the maximum reductions achievable by MACT within three years. In all cases, HAP reductions achieved by the lawful MACT emissions rates called for in these comments will out-perform the weaker reductions achieved by the proposal's section 111 approach (due to the weak caps and extended compliance time frames found in that approach). And any remaining risks following application of "traditional" MACT will be addressed by a mandatory, prescriptive and rigorous residual risk process that the section 111 trading proposal lacks altogether.

EPA may not lawfully find its section 111 proposal to be an adequate substitute for section 112 MACT regulation by resorting to a local impacts test that ignores (or excuses) the higher local HAP emissions that will result from that 111 approach. Indeed, EPA's sleight of hand is itself evidence that even the agency recognizes that higher levels of local mercury emissions will result from its section 111 approach than under MACT. Finally, EPA's own administrative record in developing this proposal reveals the relentlessly results-oriented nature of EPA's section 111 approach; the extent to which public health and environmental impacts from that weaker approach were an afterthought; and the fact that EPA was keenly aware of this and proceeded with its unlawful section 111 approach nonetheless. A November 26, 2003 draft of the section 111 proposal, a mere 19 days before the Administrator signed the proposal, contains the following astonishing indication of just how far agency officials were from developing any analysis to demonstrate that their preferred approach would protect public health:

Insert text explaining why regulation under section 111 adequately addresses the confirmed hazards to public health associated with Hg and Ni emissions and the

³² 69 Fed. Reg. at 4702.

environmental effects of Hg when the section 111 standards will be implemented somewhat later than the statutory compliance date for the MACT standards.³³

As already noted, EPA failed to develop the analysis or factual record to demonstrate that section 111 would adequately address the public health and environmental impacts of utility HAPs – a failing that is not altogether unsurprising in light of this notation’s proof that such concerns were nothing more than an afterthought. And of course what this passage refers to wanly as a “somewhat later” section 111 implementation timeframe is a delay of 8 years until the phase II cap requires any mercury controls beyond co-benefits; and a delay of at least 14 years or more until the phase II cap would be achieved in practice under EPA’s own modeling.

For all of these reasons, the EPA proposals are arbitrary and capricious in implying that a section 111 or section 112 cap-and-trade approach is adequate to address the harmful regional and local health and ecological impacts of HAP emissions from power plants.

4. EPA misreads the Clean Air Act as providing authority to adequately regulate mercury emissions section 111.

Lacking a factual foundation for its conclusion that section 111 regulation is “adequate” to protect public health from mercury pollution, EPA resorts to a legalistic

³³ “Proposed Revision of Regulatory Finding on the Emissions of Hazardous Air Pollutants from Electric Utility Steam Generating Units and Proposed Standards of Performance for Mercury and Nickel From New Stationary Sources and Emission Guidelines for Control of Mercury and Nickel From Existing Sources: Electric Utility Steam Generating Units; Proposed Rule,” at 58, November 26, 2003 (draft) (attached).

Indeed, as discussed elsewhere in these comments, the agency’s own professional staff in charge of the rulemaking were even unaware as late as September 2003 that administration political officials were planning to abandon section 112 rulemaking in favor of the unlawful and ill-considered section 111 approach. E-mail from William Maxwell, U.S. EPA, to Stephen Becker, Wholesale Markets Energy Group (September 26, 2003), attached as Appendix 8.

argument – it interprets section 111 in such a sweeping fashion that it concludes that section is “adequate” to deal with any concerns that may arise. Specifically, EPA notes that section 111 calls for “standards of performance,” which are to “reflect[] the degree of emission limitation achievable through the application of the best system of emission reduction (taking into account the cost of achieving such reduction and any non-air quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated.”³⁴ then goes on to argue:

The EPA believes that the gravamen of this definition is the phrase, “best system of emission reduction.” While the parenthetical following this phrase obligates EPA to consider the factors specified in that parenthetical, the term “best system” is not defined, and implicitly accords broad discretion to the Administrator, which includes the demonstration of such systems. The term “system” implies a broad set of controls, and the term “best” confers upon the Administrator the authority to promulgate regulations requiring controls that he considers superior.

* * *

This broad authority conferred on the Administrator means that section 111 constitutes an adequate mechanism for regulating Hg emissions from coal-fired Utility Units, and Ni from oil-fired units. Because the Administrator may consider a broad range of factors in developing standards of performance under section 111, the Administrator has the authority to develop control levels to address the emissions of Hg and Ni that warrant regulation.³⁵

EPA’s arguments are contrary to the Act and otherwise arbitrary and capricious and an abuse of the agency’s discretion. The proposed interpretation of the term “standard of performance” in section 111 is so broad that it conflicts with, or renders superfluous, other parts of the CAA. Moreover, EPA overlooks numerous provisions of the CAA that accord special priority to standards developed under section 112, but not section 111.

First, EPA’s interpretation proves entirely too much. As EPA interprets it, section 111 is so broad that it will always be an adequate substitute for section 112 regulation.

³⁴ 42 U.S.C. § 7411(a)(1).

³⁵ 69 Fed. Reg. at 4,686.

Because EPA finds in section 111 the ability to create any pollution control regime the Administrator deems “superior,” we are unable to conceive of a circumstance under which such a “superior” program will not be – at least in theory – “adequate” to the task of controlling power plant pollution. This is especially so where, as here, EPA interprets section 111 to permit the agency to revisit its control requirements if they prove in fact to be inadequate; after acknowledging that “the overall cap level may not eliminate the risk of unacceptable adverse health effects of Hg emissions,” EPA says that it “retains the authority to revise its conclusions as to what constitutes the ‘best system’ of emissions reductions for existing sources, and, therefore, to revise the standard of performance, to require additional reductions or controls to address such risks. . . .”³⁶ The agency’s interpretation of section 111 – which seems to assume that EPA may create any pollution control program to address any threat it identifies – is so broad that if it were upheld, EPA could never properly make the finding in section 112(n)(1)(A) that regulation under section 112 is “necessary.” However, it is a basic principle of statutory construction that one should not read a statutory provision in a way that renders another provision superfluous,³⁷ and EPA’s approach does just that.

Another reason not to accept the agency’s view of section 111 is that the terms to which EPA gives such broad meaning – “best” and “system” – appear elsewhere in the CAA, and if they are given the same interpretation in other sections, statutory requirements that have a widely-accepted meaning could be open to reinterpretation in ways that obviously undercut their purpose. For example, one of the clearest provisions of the CAA is the MACT floor requirement of section 112(d) – existing facilities must

³⁶ See 69 Fed. Reg. at 4,686-87.

³⁷ See, e.g., *Dastar Corp. v. Twentieth Century Fox Film Corp.*, 123 S.Ct. 2041, 2048 (2003).

clean up their pollution as well as the average of the least polluting 12 percent of sources. But this provision also uses the terms “best” and “system”; MACT is supposed to be achieved by the “application of measures, processes, methods, *systems* or techniques,” and is supposed to reflect the emissions achieved by the “*best performing*” sources. If “best” is understood to be qualitative (“controls that [the Administrator] considers superior”) instead of quantitative, and “system” can include a cap-and-trade program, then the MACT floor is a meaningless concept – EPA can determine that the best system for controlling HAPs from any given industry is to ignore what the cleanest sources in the industry are doing, and instead promulgate a trading scheme based on the emissions of the sources that EPA deems “best,” even if those sources are not the cleanest-operating facilities in the category.

Once one dispenses with EPA’s plainly overbroad interpretation of section 111, it becomes clear that section 111(d) is in no way an “adequate” substitute for section 112 regulation, because of the myriad ways in which the Act requires section 112 regulations to be more stringent than section 111 standards. First, of course, is the required stringency of standards under each section. Existing section 111 regulations establish a loose, flexible regulatory regime under which states may grant exceptions from applicable emissions guidelines under section 111(d) for “[u]nreasonable cost,” “[p]hysical impossibility,” and a catch-all category of “other factors specific to the facility (or class of facilities) that make application of a less stringent standard or final compliance time significantly more reasonable.”³⁸ This loose regulatory regime, known commonly as the best demonstrated technology (BDT) standard, is a far cry from the

³⁸ 40 C.F.R. § 60.24(f).

stringent and prescriptive (average of the best-forming 12 percent) MACT regime that Congress and EPA use to deal with HAPs—including mercury—under section 112.

The second obvious difference between section 111 and section 112 is the requirement in section 112(f) that EPA revisit the source categories regulated by MACT standards and reduce any residual risk to public health to ensure an adequate margin of safety. While EPA says that it “*retains the authority*. . . to require additional reductions or controls to address such risks” under section 111, 69 Fed. Reg. at 4,686-87 (emphasis added), the agency’s interpretation has the effect of circumventing the *mandatory* duties that the Act imposes upon EPA to protect public health with an ample margin of safety pursuant to section 112(f)’s residual risk program. There is no statutory obligation for the agency to even conduct or act upon such risk analysis under section 111; Congress did not intend for section 112(f)’s mandatory residual risk protections to be decided based upon some future administration’s good graces or whims, and that situation cannot lawfully be created by evading section 112 residual risk in favor of an optional section 111 process. EPA’s plaintive retention of authority argument amounts to an acknowledgment of the obvious -- that section 111 is by no means an adequate substitute for the mandatory, protective, specific and prescriptive measures in section 112, including section 112(f).

In addition, the optional risk review and revision process described by the agency under section 111 highlights another deficiency vis-à-vis section 112(f): EPA is subject to mandatory duty lawsuits for failure to undertake residual risk rulemakings within 8 years after promulgation of MACT standards (section 112(f)(2)(A)). By contrast, EPA’s invented “retention of authority to revise” argument releases the agency from this 8-year

statutory deadline, frees the agency from accountability to the public and courts, and allows unacceptable cancer risks and other health hazards to continue past the time that Congress intended.

Moreover, EPA lacks statutory authority under the general language of the “best system” standard to meet or exceed the protectiveness of the one in one million cancer standard of section 112(f)(2). Congressional application of the one in one million risk standard is very selective under the Act, and EPA lacks authority to invent that (or another) specific qualitative standard under the general “best system” language. EPA identifies no precedent for the agency resorting to creation of such a specific qualitative risk standard under section 111 or any other provision of the Act, and there is no such precedent. Finally, replication of or improvement upon the one in one million cancer risk standard under the guise of section 111’s “best system” language would not survive certain industry legal challenge, further demonstrating section 111’s inferiority to section 112.

A third difference between section 111 and section 112 is that under section 113 of the Act, an EPA compliance order under section 112 can take effect without giving the affected source an opportunity to consult with the Administrator; that is not true for other EPA compliance orders under the Act, including section 111.³⁹

Fourth, although the CAA generally restricts citizen suits until the alleged violator has been given 60 days prior notice, actions enforcing violations of section 112 can proceed immediately.⁴⁰

³⁹ 42 U.S.C. § 7413(a)(4).

⁴⁰ *Id.* § 7604(b).

Fifth, the CAA allows EPA to exempt sources in certain territories from a number of pollution control requirements, but not from section 112 standards.⁴¹

Finally, although the CAA exempts a number of “clean coal” technology projects from section 111 requirements, it contains no similar exemption from section 112 standards.

It is no response for EPA to recite excuses why the agency deems it acceptable as a matter of policy to abandon or ignore these section 112 prescriptions and protections: Congress – and the language and structure of the Act – have simply not given EPA that choice.

5. EPA’s regulatory determination was a singular event with legal consequences; it cannot simply rescind, or “un-make” that decision today, particularly where no new factual evidence supports such an action.

EPA’s rescission proposal rests on a fundamental fallacy – that it can undo history, based on no new scientific evidence, and change the determination that it made in December 2000 that regulating utility HAPs under section 112 is “appropriate and necessary.” The language of the CAA clearly describes the regulatory determination as a one-time event, a clear fork in the road of the regulatory process. EPA’s view that this determination can be re-opened and changed now (and presumably again later, and again after that) introduces a completely unreasonable layer of uncertainty into the CAA, and must be rejected as an illogical and arbitrary interpretation of the law.

Section 112(n)(1)(A) provides for a linear progression of events. First, EPA was required to study the pollutants emitted by power plants and to examine the hazards to public health that would occur, after other CAA requirements ran their course and – as a

⁴¹ *Id.* § 7625-1.

coincidental effect of controlling other pollutants – lowered HAP emissions. Second, EPA was obliged to submit a report to Congress incorporating the results of the study, and surveying “alternative control strategies.” Third, EPA was to make a finding regarding whether regulating Utility Units under section 112 is “appropriate and necessary.” Finally, if EPA found such regulation “appropriate and necessary,” the agency was required to regulate power plants under section 112.

EPA has completed the first three steps of this four-step process.⁴² In addition, as part of the third step in this Congressionally mandated process, the Agency codified its regulatory determination by adding Utility Units to the list of source categories subject to MACT, and defended its determination in court. Having done so, the agency has incurred a specific obligation under the Act – regulate Utility Units under section 112(d). The agency does not have the authority to revisit the regulatory determination, because the act of making that determination – as EPA did in December 2000 – has specific ramifications. In reviewing a similar set of actions taken by the Department of Energy (DOE), the U.S. Court of Appeals for the Second Circuit recently held that DOE could not withdraw a previously-issued efficiency standard for air conditioners, finding that a statutory prohibition on backsliding limited the authority of DOE to revisit prior conclusions.⁴³ The court noted that although administrative agencies can undertake regulatory proceedings to reverse prior decisions, they may be limited in how they can do so by other requirements of law.⁴⁴ Section 112 contains precisely such a provision – section 112(c)(9).

⁴² See 69 Fed. Reg. at 4,659-60 (summarizing EPA’s prior completion of first three steps).

⁴³ *Natural Resources Def. Council v. Abraham*, 355 F.3d 179 (2d Cir. 2004).

⁴⁴ *Id.* at 203.

Under the CAA, source categories that are listed for MACT regulation can only escape regulation if EPA finds that no individual source is a danger to health or the environment. Section 112(c)(9) states that an industry that is included on the § 112(c) list of industries for which MACT standards must be promulgated cannot be removed from the list unless EPA makes certain health and environmental findings; specifically, EPA must make:

In the case of hazardous air pollutants emitted by sources in the category that may result in cancer in humans, a determination that no source in the category (or group of sources in the case of area sources) emits such hazardous air pollutants in quantities which may cause a lifetime risk of cancer greater than one in one million to the individual in the population who is most exposed to emissions of such pollutants from the source (or group of sources in the case of area sources).

* * *

In the case of hazardous air pollutants that may result in adverse health effects in humans other than cancer or adverse environmental effects, a determination that emissions from no source in the category or subcategory concerned (or group of sources in the case of area sources) 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 (or from a group of sources in the case of area sources).⁴⁵

Thus, whether or not the Agency revises its Regulatory Determination, it cannot avoid the consequences of its decision to list, and any attempt to revisit its listing determination requires a demonstration that Utility Units are not a health or environmental concern.

Accordingly, EPA cannot now reverse course to regulate more weakly than the agency initially decided, because there is a statutory provision that limits whether EPA can reverse that decision. Of course, this kind of requirement also has a solid policy basis; as the Second Circuit observed in the air conditioner litigation discussed above, permitting the agency “unfettered discretion to amend standards . . . would completely undermine any sense of certainty on the part of manufacturers as to the required energy

⁴⁵ 42 U.S.C. §§ 7412(c)(9)(B)(i)-(ii).

efficiency standards at a given time.”⁴⁶ The same is true in the case of mercury regulation. Equipment vendors need to be able to make business decisions based on EPA’s regulatory commitments, and thus need to be sure that a change in political leadership will not strand their investments. Indeed, as discussed above, several companies have developed technologies, which they claim are capable of exceptional mercury removal and are ready for commercial use; EPA’s proposed annulment of its actions would interfere with the pollution control equipment market by driving down demand for mercury control technology.

EPA, however, proposes to assert that its December 2000 listing of the utility industry was “without proper foundation,” because “the statutory listing criteria were not met in December 2000.”⁴⁷ By this, the Agency obliquely references the section 112(n) “appropriate and necessary” finding. The Agency asserts that since it has now “concluded” that regulation under section 112(d) is not “necessary,” the December 2000 listing can now effectively be voided. But the Agency misreads the statute, and proposes to exert significantly more authority in this regard than the statute grants. The Agency completely ignores the point that the “statutory criteria” for listing an industrial category under section 112(c) are reflected in the language of section 112(c)(1), which requires the Administrator to publish and revise a list (based on new information) of “all categories and subcategories of major sources of the hazardous air pollutants listed in [section 112(b)].” So the threshold statutory criterion for listing an industry is simply whether or not there are major sources of HAP in the category. The definition of major source, furthermore, is a source that “emits or has the potential to 10 tons per year or more of any

⁴⁶ *NRDC v. Abraham*, 355 F.3d at 197.

⁴⁷ 69 Fed. Reg. at 4,689.

[HAP] or 25 tons per year or more of any combination of [HAPs].” 42 U.S.C.

§7412(c)(1). The utility industry easily meets these criteria.

Apparently, EPA believes that its obtuse (and, as discussed below, unlawful) reading of section 112(n) of the Act as containing additional “statutory criteria for listing” of the utility industry beyond those contained in 112(c), also confers on the Agency additional authority around the delisting. The Agency asserts that in this context it can simply remove utility units from the list because its decision to change the determination is analogous to the situations in which the Agency has previously delisted industrial source categories without undertaking a 112(c)(9) analysis. The Agency is simply wrong.

First, simply because EPA has previously taken an action does not make it lawful, and section 112(c)(9) contains the only express provisions for removing source categories from the regulatory list.⁴⁸ Second, to the extent that it is ever possible to delete a category from the section 112(c) list without following section 112(c)(9), the only conceivable statutory basis for doing so is the list revision authority in section 112(c)(1), and EPA’s proposal is inconsistent with that section. At most, EPA’s revision authority is coextensive with its obligations to list source categories pursuant to section 112(c)(1), and thus EPA may only use this authority to delete categories if they lack major sources or if they are categories of area sources for which the health and environmental conditions are not satisfied. EPA’s prior category deletion actions follow this model, inasmuch as they are premised upon changed factual circumstances particular to the listed

⁴⁸ Our research has identified no instance in which EPA’s prior deletions from the source category list were subject to judicial review.

industry.⁴⁹ EPA clearly cannot assert such circumstances here – indeed, the scientific evidence developed since December 2000 points in the direction of the need for more stringent controls on power plant HAP emissions, particularly emissions of mercury.

6. EPA adopts an arbitrary reading of section 112(n)(1)(A) in order to avoid regulation under section 112.

The proposal explains that EPA “interprets the language of CAA section 112(n)(1)(A) and the limited legislative history pointing to that provision as indicating Congress’ intent that Utility Units be regulated under section 112 only if the other authorities of the CAA, once implemented, would not adequately address those HAP emissions from Utility Units that warrant regulation.”⁵⁰ In other words, EPA believes that section 112 regulation is a last resort for utility units, to be invoked only if it cannot devise some alternate CAA authority to “adequately” deal with such units’ pollution. EPA offers three reasons in support of its interpretation, none of which bolster the agency’s approach, but rather reveal that interpretation to be arbitrary and, in fact, support the opposite conclusion – that EPA must regulate under section 112.

First, EPA argues that “its interpretation is supported by the first sentence of section 112(n)(1)(A), which requires EPA to conduct a study that focuses on the hazards to public health that would exist following implementation of the other authorities of the CAA.”⁵¹ Revealingly, EPA fails to quote the second sentence of this subsection, which directly undermines the agency’s conclusion.

⁴⁹ See 61 Fed. Reg. 28,197, 28,200-01 (June 4, 1996) (deleting source categories with no major sources and deleting asbestos processing area source category based on “new information showing that no source or group of sources in the category emits asbestos in quantities which may cause a lifetime risk of cancer greater than one in one million”); see also 67 Fed. Reg. 6,521 (Feb. 12, 2002) (delisting additional source categories because no major sources existed in the industrial category); 63 Fed. Reg. 7,155 (Feb. 12, 1998) (same).

⁵⁰ 69 Fed. Reg. at 4683-84.

⁵¹ *Id.* at 4684.

The first two sentences of section 112(n)(1)(A) read:

The Administrator shall perform a study of the hazards to public health reasonably anticipated to occur as a result of emissions by electric utility steam generating of pollutants listed under subsection (b) of this section after imposition of the requirements of this chapter. The Administrator shall report the results of this study to the Congress within 3 years after November 15, 1990.⁵²

EPA's proposal pretends that the first sentence provides support for its interpretation that Clean Air Act authorities other than section 112 can provide grounds in 2004 for adopting *prospective* regulation of HAPs from power plants as a *substitute* for section 112. This pretense is without merit. The first sentence addresses hazards from HAPs reasonably anticipated to occur after imposition of earlier or upcoming Clean Air Act requirements on utilities. The retrospective nature of this study, as well as the obligation to evaluate specific requirements that the Act imposes upon utilities, make clear that Congress was instructing EPA to study the residual public health hazards from HAPs following requirements that already had been imposed or would be adopted or proposed under the Act, by the time of the study period.⁵³ There is no support in this sentence for the view that Congress intended the "imposition of the requirements of this chapter" language to be an invitation to freewheeling and tortured interpretations of the statute to conceive of broad, prospective regulations beyond what was already plainly imposed by the statute or regulation. Specifically, Congress did not intend this study instruction to serve as an affirmative grant of authority to develop prospective HAP regulations as a substitute for section 112 regulation.

⁵² 42 U.S.C. § 7412(n)(1)(A).

⁵³ The most obvious example of such requirements is the acid rain trading program, which Congress had just imposed in the 1990 Amendments. Indeed, Congressman Oxley specifically pointed to the acid rain provisions in discussing the addition of section 112(n) to the Act. 136 Cong. Rec. at E3671.

It is the second sentence of section 112(n)(1)(A) that confirms the arbitrariness of EPA's reading. Congress mandated that the study be performed by November 15, 1993, placing an inherent boundary for consideration on the CAA requirements on utilities that would have applied – or been proposed or adopted – by that date. Numerous obvious historic points are worth making: by November 1993, neither EPA nor any other party anticipated or projected the adoption of a section 111 HAP control program for utilities; EPA did not identify a section 111 HAP control program for utilities as a “[requirement] of this chapter” that would affect reasonably anticipated utility hazards in its study to Congress; and EPA's December 2000 regulatory determination did not identify a section 111 HAP control program as a basis for avoiding section 112 regulation.

Indeed, the first *mention* by EPA of a section 111 HAP control program as a purportedly available statutory authority for addressing HAPs from utilities did not come until the instant proposal in December 2003.⁵⁴ It is obvious that this occurred in no small part because the new political administration had advanced -- and failed to achieve -- a 2002 and 2003 legislative agenda (the Clear Skies bill) that mirrors the section 111 proposal's design in all material respects.

With EPA itself not considering a section 111 HAP control program a “requirement of this chapter” in 1990, 1993, 1998, 2000 or up to just before December 2003, it is obvious that Congress did not envision section 111 as a basis for EPA to conclude in 1993 or today that EPA could avoid regulating utility HAPs under section 112. Congress intended MACT standards for utility units to be promulgated, at the very

⁵⁴ Indeed, as discussed elsewhere in these comments, even EPA's professional staff working on the proposal were unaware that section 111 regulation was being contemplated as late as just before the proposal's signature.

latest, by 2000,⁵⁵ with compliance three years following promulgation. It is arbitrary for EPA to conclude that Congress intended to allow EPA to avoid section 112 regulation by relying upon a regulatory approach stretched out to beyond 2025, and one that lacks all of the stronger measures mandated by section 112 discussed above.

A second reason offered by EPA to support its interpretation echoes the first. The proposal quotes a statement by Congressman Oxley for the proposition that “Congress sought to regulate under section 112 ‘only those units [Utility Units] that * * * (the Administrator) determines – after taking into account compliance with all other provisions of the act * * * -- have been demonstrated to cause a significant threat of serious adverse effects on public health.’”⁵⁶ But this statement merely recognizes the same conclusion drawn above about the Congressional study instruction: by November 1993, EPA’s study was to take into account “compliance” with provisions of the Act that either applied to Utility Units already or that would be known and identified by that date.⁵⁷ It is nonsensical to require EPA to factor in “compliance” with requirements that were not identified at that time, above all because EPA would have needed to quantify remaining HAP emissions to determine any threat of adverse effects. Certainly there is nothing in Oxley’s statement to suggest the intention for section 112(n) to serve as an affirmative grant of broad future authority to regulate utility HAP emissions outside of section 112, as EPA has done.

⁵⁵ See 42 U.S.C. § 7412(e)(1)(E).

⁵⁶ 69 Fed. Reg. at 4684 (internal citations omitted).

⁵⁷ In fact, this understanding is confirmed by a telling edit that EPA makes to Oxley’s statement, replacing it with a series of ellipses. The statement that the proposal selectively quotes in fact speaks of “taking into account compliance with all provisions of the act *and any other Federal, State or local regulation and voluntary emission reductions*. . . .” 136 Cong. Rec. at E3671 (omitted text italicized). This additional text makes clear that Oxley was referring to compliance with existing regulations, as well as new requirements specifically prescribed by the 1990 Amendments – such as the acid rain program – that EPA could competently evaluate in the 1993 study.

As the third and final reason in support of its interpretation that section 112 regulation is a last resort, EPA points to the final sentence of section 112(n)(1)(A), which, it says, “calls for regulation of Utility Units under section 112 only if, based on the results of the Study, EPA determines that it is both appropriate and necessary to regulate such units.”⁵⁸ The statutory provision reads:

The Administrator shall regulate electric utility steam generating units under this section, if the Administrator finds such regulation is appropriate and necessary after considering the results of the study required by this subparagraph.⁵⁹

EPA’s interpretation tramples on one of the more plain and obvious readings of this sentence – the agency has determined it to be appropriate and necessary to regulate HAP emissions from Utility Units, as evidenced by any one of EPA’s three regulatory proposals and EPA’s decision to proceed with regulation. Accordingly, EPA must regulate under section 112. The proposal offers no compelling statutory reason why “appropriate and necessary” should not be read according to this common understanding of these words.

EPA’s proposal instead reads “necessary” to allow the agency to evade section 112 regulation “if other authorities of the CAA exist to adequately address health hazards that occur as a result of HAP emissions.”⁶⁰ The agency seems to read the term “necessary” to refer back to the first sentence of section 112(n)(1)(A), which required EPA to examine the effect of other CAA requirements. However, it is more consistent with the provision’s focus on “regulation under this section” to conclude that once EPA finds that *any regulation* of HAPs is appropriate and necessary – as EPA most certainly has – then section 112 regulation is required.

⁵⁸ *Id.* at 4684.

⁵⁹ 42 U.S. § 7412(n)(1)(A).

Second, EPA’s reading of this sentence rests on the same erroneous conceit underlying the agency’s treatment of the first sentence of section 112(n)(1)(A) and Congressman Oxley’s statement – the position that if future authorities can be imagined to address utility HAPs prospectively, then EPA may deem it no longer “necessary” to regulate under section 112. But as discussed above, the November 1993 study -- like the appropriate and necessary finding – could consider only CAA requirements that either existed or had been specifically prescribed (like the acid rain program) at the time of the study. EPA’s three proposals rest on the implicit concession that existing and specifically prescribed CAA requirements – in 1993 and 2004 – still make it appropriate and necessary to regulate utility HAP emissions; so EPA is forced to manufacture the arbitrary conceit that the ability to imagine future authorities to regulate HAPs prospectively under section 111 justifies evasion of section 112 regulation.

For all the foregoing reasons, EPA’s interpretation is arbitrary, capricious and an abuse of discretion.

7. EPA cannot reverse its listing of Utility Units for MACT regulation because the plain language of the CAA requires that the list contain “all” major sources of HAPs.

Section 112(c)(1) states that EPA “shall” list “all” categories of major sources of hazardous air pollutants.⁶¹ The requirement that EPA list all major sources has an unmistakable, plain, and mandatory character.⁶² In proposing to delete Utility Units from

⁶⁰ 69 Fed. Reg. at 4684.

⁶¹ *Id.* § 7412 (c)(1).

⁶² In *NRDC v. Reilly*, 983 F.2d at 266-67, EPA attempted to argue that a requirement to promulgate rules requiring installation of on-board vapor recovery was ambiguous because another provision of the Act required a different control device until the promulgation of these rules and yet another required consultation regarding the safety of the devices. 983 F.2d at 267-271. The Court found that these requirements did not conflict with the statutory command to promulgate rules requiring on-board vapor recovery, and therefore did not render the command ambiguous.

the section 112(c) list, EPA would read the word “all” out of the statute. Such a construction is impermissible and entitled to no deference because it conflicts with plain statutory language and deprives a word in the statute of significance.⁶³

There is no dispute that large utility boilers constitute a category of major sources of HAPs within the meaning of section 112(c).⁶⁴ Indeed, electric utility boilers are significant sources of toxic metals listed as hazardous air pollutants under section 112(b). Utility boilers emit, in addition to metals, substantial amounts of organic hazardous pollutants.

In view of these facts and the statutory requirement to list “*all* categories” of major sources of hazardous air pollutants as source categories under section 112(c), EPA was obliged to list large utility boilers as a section 112(c) source category.⁶⁵ Nonetheless, in promulgating the initial source category list in 1992, EPA failed to list large utility boilers as a source category. Instead, EPA listed as source categories all boilers other than large utility boilers: that is, utility boilers under 25 megawatts, as well as all non-utility boilers.⁶⁶ EPA specifically excluded *large* utility boilers from the source categories. At that time, EPA argued that it was authorized not to list large utility boilers as a section 112(c) source category based on the requirement in section 112(n)(1) directing EPA to undertake a study of public health hazards from large utility boilers.⁶⁷

⁶³ *Public Employees Retirement Sys.*, 492 U.S. at 171; *United States v. Nordic Village Inc.*, 112 S.Ct. 1011, 1015 (1992) (every word in statute must be given some operative effect).

⁶⁴ See Report to Congress at ES-6, Table ES-2 (over 200 tons per year of selected HAPs estimated to be emitted from characteristic coal plants); see also 56 Fed. Reg. 28,550-51 (EPA’s request for comments assumes large utility boilers include major sources of hazardous air pollutants); 56 Fed. Reg. 28,552 (EPA’s proposal to list external combustion boilers, including large utility boilers, as a source category under Section 112(c)); 57 Fed. Reg. 31,584 (EPA’s preamble to final section 112(c) source category list assumes that large utility boilers meet the definition of a section 112(c) source category).

⁶⁵ See *Chevron*, 467 U.S. at 843.

⁶⁶ See 57 Fed. Reg. 31,584, 31,591 Table 1 & note (b) thereto.

⁶⁷ 42 U.S.C. § 7412(n)(1).

Today, EPA holds the same position, arguing in the proposal that “it would only be possible for EPA to list Utility Units under section 112(c) if it first made the section 112(n)(1)(A) finding that it was both appropriate and necessary to regulate such units under section 112, after EPA reviewed the results of its section 112(n)(1)(A) study concerning health effects and alternative control strategies.”⁶⁸ For the reasons stated below, the study required by section 112(n)(1) is not inconsistent with EPA’s listing obligation under section 112(c).

Section 112(n)(1) and section 112(c) have purposes that are independent. The two provisions are not inconsistent since EPA has an obvious course of action that fully complies with both sub-sections. Section 112(n)(1) required EPA to perform a study of public health hazards from large utility boilers by November 15, 1993.⁶⁹ The study was to address “the hazards to public health reasonably anticipated to occur as a result of emissions by [large utility boilers] after imposition of the requirements of [the Clean Air Act].”⁷⁰ The other provisions of the Clean Air Act applicable to large utility boilers include, for example, the acid rain provisions of the Act.⁷¹ Section 112(n)(1) contemplated that this study would be completed before EPA decides how to regulate hazardous air pollutants under section 112 from large utility boilers, as it states: “[t]he Administrator shall *regulate* [large utility boilers] under this section, if the Administrator finds such *regulation* is appropriate and necessary after considering the results of the study required by this subparagraph.”⁷²

There are two reasons why section 112(n)(1) on its face is not an alternative to

⁶⁸ 69 Fed. Reg. at 4,689.

⁶⁹ 42 U.S.C. § 7412(n)(1).

⁷⁰ *Id.*

⁷¹ *See, e.g.*, 42 U.S.C. § 7651f.

listing under section 112(c). First, section 112(n)(1) contemplates that EPA will consider the study when deciding how to *regulate* large utility boilers, not whether to *list* the boilers as a source category. Listing a source category is not equivalent to making a MACT determination for the category. The Act provides a detailed standard for determining MACT.⁷³ As a relative measure of the complexity of these two regulatory actions, it is noteworthy that Congress gave EPA only one year to list all source categories of hazardous air pollutants, but allowed it 10 years to complete MACT determinations for the categories.⁷⁴ Nothing in the language of section 112(n)(1) makes the public health study a precondition of EPA's listing decision under section 112(c). Furthermore, the purposes of the two provisions are independent and not inconsistent. The study required by section 112(n)(1) is meant to ensure that EPA considers information about public health hazards when, pursuant to section 112(d), it determines the content of hazardous air pollutant regulation for large utility boilers. Section 112(c) also provides the standard for EPA to exercise its discretion to delete large utility boilers as a source category of hazardous air pollutants, if the study or other information so warrants.⁷⁵ Section 112(n)(1) states that EPA shall regulate large utility boilers if it "finds such regulation appropriate and necessary."⁷⁶ This content-less standard, which is so much out of keeping with the specificity of standards that Congress imposed on EPA throughout the Act, can only be read to incorporate other applicable standards in the Act. Just as section 112(d) provides the basis for EPA to decide what type of regulation is warranted (taking into account the findings of the section 112(n)(1) study), so section

⁷² 42 U.S.C. § 7412(n)(1) (emphasis added).

⁷³ *See id.* § 7412(d).

⁷⁴ *Compare* 42 U.S.C. § 7412(c)(1) *with id.* § 7412(e)(1).

⁷⁵ *See* 42 U.S.C. § 7412(c)(9).

112(c)(9) provides the basis for EPA to decide whether no MACT regulation is warranted. Because these two provisions are overlapping but not inconsistent, section 112(n)(1) does not create ambiguity in the otherwise plain meaning of section 112(c).⁷⁷

For the foregoing reasons, EPA may not revoke its decision to add Utility Units to the section 112(c) source category list without following the section 112(c)(9) delisting process.

C. Even if EPA Finalizes Its Unlawful Section 111 Program, the “Best System of Emission Reduction” Would Require Much Deeper and Faster Pollution Controls.

Although the foregoing discussion shows how EPA’s proposed regulations under section 111 of the CAA are neither legally permissible nor an “adequate” substitute for section 112 MACT standards, it is clear that even if EPA were to continue on its ill-advised path, it should demand more and faster reductions from Utility Units than it has proposed to require. Even an examination of some of the more pessimistic predictions of future mercury control leads to a conclusion that EPA has chosen a regulatory program that falls far short of even the weak “best system of emission reduction” standard to which it proposes to hold itself.

EPA’s Office of Research and Development (ORD) recently surveyed the state of technology development and, even though it ignores many current claims of commercial availability and does not take account of how much faster controls could be deployed if EPA adopted technology-forcing regulations, it demonstrates that the agency’s section 111 program is terribly weak. ORD projects that activated carbon injection will be

⁷⁶ *Id.* § 7412(n)(1).

⁷⁷ *See NRDC v. EPA*, 983 F.2d at 266-71.

demonstrated and capable of 90 percent control on all coal ranks by 2010,⁷⁸ and estimates that ACI can be installed in one to two years.⁷⁹ The agency concedes that these predictions represent the timing “by which the demonstration of the most difficult case (e.g., lignite) for the particular technology would be completed,” so that Utility Units burning higher-rank coals could achieve such reductions earlier.⁸⁰ EPA likewise notes that the projected mercury removal rates “would add no more than about 3 mills/kWh to the annualized cost of power production.”⁸¹ In other words, by 2012, and in some cases before, EPA acknowledges that the entire coal-fired fleet of boilers could be stringently and affordably controlled.⁸² In light of these facts, EPA’s plan to make its second-phase cap effective in 2018, and to allow unrestricted pollution trading which will put off ultimate achievement of the cap level indefinitely, simply is too weak to meet even section 111’s more flexible control requirements. It certainly falls arbitrarily short of the “superior” system of control that EPA purports to find in section 111.

Even the Energy Information Administration (EIA) has published information that calls into question EPA’s apparent conclusion that its caps are the most it can reasonably ask of Utility Units. In a recent analysis, EIA compared several multipollutant legislative proposals pending before Congress, among them the Clear Skies Act introduced by Senator Inhofe and the Clean Air Planning Act introduced by

⁷⁸ U.S. EPA, Office of Research and Development, “Control of Mercury Emissions From Coal-Fired Electric Utility Boilers,” at 15 (2004).

⁷⁹ *Id.* at 14.

⁸⁰ *Id.*

⁸¹ *Id.*

⁸² *See also* Memorandum from William Maxwell to Utility MACT Project Files, "Meeting with Institute of Clean Air Companies," Docket Item OAR-2002-0056-2573, at 30 (June 7, 2004) ("Technology is available today for the range of US coals and equipment. . . . ICAC therefore believes 50-70% reduction by 2008 to 2010 is feasible").

Senator Carper.⁸³ The Clear Skies Act is the legislative twin of EPA’s mercury trading rule proposal under section 111 and the agency’s IAQR proposal, with the first phase mercury cap (beginning in 2010) set at the level to be achieved as a co-benefit of smog and soot controls, and the second phase cap (beginning in 2018) set at 15 tons. The Clean Air Planning Act, meanwhile, has a first-phase cap (beginning in 2009) of 24 tons, and a second-phase cap (beginning in 2013) of 10 tons, with minimum facility-specific requirements between 50 percent (from 2009 to 2012) and 70 percent (after 2012). EIA’s examination of these bills is instructive because it shows that the far more stringent Carper bill does not have significantly adverse economic effects when compared to the Inhofe bill. Specifically, EIA found:

Under the Carper Domestic case, the wholesale price index for all fuel and power is projected to rise by less than 5 percent above the reference case throughout the implementation period. The impact on the [Consumer Price Index] is less than 0.3 percent per year, and the impact on real [Gross Domestic Product] is less than –0.1 percent per year in general, with a maximum impact of –0.11 percent in 2014.

The wholesale price index for all fuel and power in the Inhofe bill rises by less than 2 percent above the reference case throughout the implementation period. The impact on the CPI is less than 0.2 percent per year, and the impact on real GDP is less than –0.06 percent per year.⁸⁴

Importantly, these estimates reflect the projected impacts of these bills’ multi-pollutant controls, so even the slight differences between the Inhofe and Carper bills noted above are not totally attributable to the Carper bill’s more stringent mercury requirements (the Carper bill also has tougher limits for nitrogen oxides and sulfur dioxide, and has a control program for carbon dioxide, unlike the Inhofe bill).

⁸³ Energy Information Administration, “Analysis of S.1844, the Clear Skies Act of 2003; S.843, the Clean Air Planning Act of 2003; and S.336, the Clean Power Act of 2003 (May 2004).

⁸⁴ *Id.* at 39.

A similar analysis of multipollutant strategies by the Center for Clean Air Policy (CCAP) reveals that more aggressive mercury controls can reasonably be required without significant adverse impacts on power production or prices. Specifically, CCAP concluded:

Tightening the mercury emissions-reduction cap from 15 tons in 2018 to 10 tons in 2018 is projected to increase total [three pollutant program] compliance costs by approximately 5 percent (\$3.1 billion in net present value terms). Further tightening the cap by advancing the compliance date to 2015 would add approximately another 5 percent to total 3P costs, and reducing the cap to 7.5 tons in the same compliance period would increase total 3P costs by an additional 4 percent. In addition, even the most aggressive of these options (7.5 tons cap in 2015) has almost no impact on wholesale electricity prices both nationally (within 0.2 percent) and regionally (-1.5 to 2.1 percent), reflecting how the cost may not be passed on directly to wholesale electricity consumers. Cumulative mercury emission reductions increase between 8 and 28 percent through 2022 with these more aggressive caps and timetables. Moreover, the impact of such changes on national and regional coal production is slight (-1 to 5 percent).⁸⁵

Note that these estimates reflect the net present value costs over the course of the program period from 2005 to 2030 and, therefore, annual costs will be a much smaller fraction of these totals.⁸⁶ Moreover, in contrast to EPA's claim that its trading scheme will result in the "promotion of innovation and continued evolution of production and pollution control technology," CCAP found:

If . . . the Phase 1 target is set at a pure "cobenefits" level (i.e., at the mercury-emission level expected to be achieved as a result of deployment of only scrubbers for SO₂ control and selective catalytic reduction for NO_x control), then it is difficult to see how, in the Phase 1 the "early learning" needed to advance the technology will occur.⁸⁷

These findings reinforce the conclusion that EPA's extended timeframes and inferior reduction targets fail to meet even the requirements of section 111.

⁸⁵ Center for Clean Air Policy, "Design of a Multipollutant Control Program: Stakeholder Analysis of Potential Policy Options," at 40 (May 2004).

⁸⁶ *See id.* at 15 n. 20.

⁸⁷ *Id.* at 40.

Therefore, EIA's and CCAP's projections confirm that significantly greater mercury reductions are economically reasonable, while EPA's own analysis shows that high levels of mercury control are technologically feasible. As a result, EPA must conclude – should it persist in its unlawful plan to regulate mercury more slowly and less aggressively under section 111 than it is required to do under section 112 – that deeper and faster emission reductions are possible and affordable, and thus represent the “best system of emission reduction” for mercury.