No. 12-1100 (and consolidated cases)

IN THE UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

WHITE STALLION ENERGY CENTER, LLC, et al.,
Petitioners,

v.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY,
Respondent.

On Petition for Review of Final Agency Action
77 Fed. Reg. 9,304 (Feb. 16, 2012)

SUPPLEMENTAL BRIEF FOR INDUSTRY PETITIONERS' SPECIFIC ISSUES

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CERTIFICATE AS TO PARTIES, RULINGS, AND RELATED CASES

Pursuant to Circuit Rule 28(a)(1), Petitioners state as follows:

A. Parties, Intervenors, and *Amici*

Petitioners:

Case No. 12-1100: White Stallion Energy Center, LLC

Case No. 12-1101: National Mining Association

Case No. 12-1102: National Black Chamber of Commerce and Institute for Liberty

Case No. 12-1147: Utility Air Regulatory Group ("UARG")

Case No. 12-1170: Eco Power Solutions (USA) Corporation. On 10/10/2012, Eco Power filed a motion for voluntary dismissal. As of October 23, 2012, the Court has not acted on this motion.

Case No. 12-1172: Midwest Ozone Group

Case No. 12-1173: American Public Power Association

Case No. 12-1174: Julander Energy Company

Case No. 12-1175: Peabody Energy Corporation

Case No. 12-1176: Deseret Power Electric Cooperative

Case No. 12-1177: Sunflower Electric Power Corporation

Case No. 12-1178: Tri-State Generation and Transmission Association, Inc.

Case No. 12-1180: Tenaska Trailblazer Partners, LLC

Case No. 12-1181: ARIPPA

Case No. 12-1182: West Virginia Chamber of Commerce Incorporated; Georgia Association of Manufacturers, Inc.; Indiana Chamber of Commerce, Inc.; Indiana Coal Council, Inc.; Kentucky Chamber of Commerce, Inc.; Kentucky Coal

Association, Inc.; North Carolina Chamber; Ohio Chamber of Commerce; Pennsylvania Coal Association; South Carolina Chamber of Commerce; The Virginia Chamber of Commerce; The Virginia Coal Association, Incorporated; West Virginia Coal Association, Inc.; and Wisconsin Industrial Energy Group, Inc.

Case No. 12-1183: United Mine Workers of America

Case No. 12-1184: Power4Georgians, LLC

Case No. 12-1185: State of Texas, Texas Commission on Environmental Quality, Texas Public Utility Commission, and Railroad Commission of Texas

Case No. 12-1186: The Kansas City Board of Public Utilities – Unified Government of Wyandotte County/Kansas City, Kansas

Case No. 12-1187: Oak Grove Management Company LLC

Case No. 12-1188: Gulf Coast Lignite Coalition

Case No. 12-1189: Puerto Rico Electric Power Authority

Case No. 12-1190: State of Arkansas, *ex rel.* Dustin McDaniel, Attorney General

Case No. 12-1191: Chase Power Development, LLC

Case No. 12-1192: FirstEnergy Generation Corp.

Case No. 12-1193: Edgecombe Genco, LLC; Spruance Genco, LLC

Case No. 12-1194: Chesapeake Climate Action Network, Conservation Law Foundation, Environmental Integrity Project, and Sierra Club

Case No. 12-1195: Wolverine Power Supply Cooperative, Inc.

Case No. 12-1196: States of Michigan, Alabama, Alaska, Arizona, Florida, Idaho, Indiana, Kansas, Mississippi, Missouri, Nebraska, North Dakota, Ohio, Oklahoma, South Carolina, Utah, West Virginia, Wyoming; Commonwealths of Pennsylvania and Virginia; Terry E. Branstad, Governor of the State of Iowa, on behalf of the People of Iowa; and Jack Conway, Attorney General of Kentucky

Respondent:

The U.S. Environmental Protection Agency is the Respondent in all of these cases.

Lisa Jackson, Administrator, U.S. Environmental Protection Agency, is also named as a Respondent in Nos. 12-1174, 12-1189, and 12-1191.

Intervenors:

The Commonwealth of Massachusetts and the States of Connecticut, Delaware, Illinois, Iowa, Maine, Maryland, New Hampshire, New Mexico, New York, Rhode Island, Vermont and the District of Columbia and the City of New York are intervenor-respondents in No. 12-1100.

The American Academy of Pediatrics, American Lung Association, American Nurses Association, American Public Health Association, Chesapeake Bay Foundation, Citizens for Pennsylvania's Future, Clean Air Council, Conservation Law Foundation, Environment America, Environmental Defense Fund, Izaak Walton League of America, Natural Resources Council of Maine, Natural Resources Defense Council, Ohio Environmental Council, Physicians for Social Responsibility, Sierra Club, and Waterkeeper Alliance are intervenor-respondents in No. 12-1100.

Calpine Corporation, Exelon Corporation, and Public Service Enterprise Group, Inc. are intervenor-respondents in No. 12-1100.

The State of North Carolina is an intervenor-respondent in No. 12-1147.

National Grid Generation LLC is an intervenor-respondent in No. 12-1147.

Utility Air Regulatory Group and Oak Grove Management Company LLC are movant intervenor-respondents in Nos. 12-1170, 12-1174, and 12-1194. On August 24, 2012, the Court issued an Order referring this motion to intervene to the merits panel. The Order further stated that UARG and Oak Grove may participate as movant-intervenors. As of October 23, 2012, the merits panel has not acted on the motion.

White Stallion Energy Center, LLC; Deseret Power Electric Cooperative; Sunflower Electric Power Corporation; Tri-State Generation and Transmission Association, Inc.; Tenaska Trailblazer Partners, LLC; and Power4Georgians, LLC are intervenor-respondents in No. 12-1174.

Eco Power Solutions (USA) Corporation is an intervenor-respondent in No. 12-1194.

National Black Chamber of Commerce and Institute for Liberty are intervenor-respondents in No. 12-1194.

Peabody Energy Corporation is an intervenor-respondent in Nos. 12-1174 and 12-1194.

National Mining Association is an intervenor-respondent in Nos. 12-1174 and 12-1194.

Sunflower Electric Power Corporation is an intervenor-respondent in No. 12-1194.

Gulf Coast Lignite Coalition and Lignite Energy Council are intervenor-respondents in No. 12-1194.

The States of California, Minnesota and Oregon, the County of Erie in the State of New York, the City of Baltimore in the State of Maryland, and the City of Chicago in the State of Illinois are intervenor-respondents in No. 12-1100.

The National Association for the Advancement of Colored People are intervenor-respondents in No. 12-1100.

White Stallion Energy Center, LLC is an intervenor-respondent in No. 12-1194.

Chase Power Development, LLC is an intervenor-respondent in No. 12-1194.

***Amici*:**

The Institute for Policy Integrity at New York University School of Law is an *amicus curiae* in support of respondent in No. 12-1100.

The Chamber of Commerce of the United States of America is a movant *amicus curiae* in No. 12-1100.

B. Rulings Under Review

These petitions challenge EPA's final rule, "National Emission Standards for Hazardous Air Pollutants From Coal- and Oil-Fired Electric Utility Steam Generating Units," 77 Fed. Reg. 9,304 (Feb. 16, 2012).

C. Related Cases

Each of the petitions for review consolidated under No. 12-1100 is related. These cases consist of Case Nos. 12-1101, 12-1102, 12-1147, 12-1172, 12-1173, 12-1175, 12-1176, 12-1177, 12-1178, 12-1180, 12-1181, 12-1182, 12-1183, 12-1184, 12-1185, 12-1186, 12-1187, 12-1188, 12-1189, 12-1190, 12-1191, 12-1192, 12-1193, 12-1195, and 12-1196. The consolidated cases on review have not previously been reviewed by this or any other Court.

Case No. 12-1272—which focuses on two issues of the rule involving new units—was severed from the cases consolidated under Case No. 12-1100 on June 28, 2012. *See* Order Severing New Source Issues (Doc. No. 1381112). Briefing in that case is currently being held in abeyance pending administrative reconsideration proceedings. *See* Order Holding Case in Abeyance (Doc. No. 1394140).

Case No. 12-1166, which challenges the New Source Performance Standards ("NSPS") issued in the same *Federal Register* notice as the rule under review in this case, was deconsolidated from Case No. 12-1100 on August 24, 2012. *See* Order Deconsolidating NSPS Issues (Doc. No. 1391295).

CORPORATE DISCLOSURE STATEMENTS

Industry Petitioners submit the following statements pursuant to Rule 26.1 of the Federal Rules of Appellate Procedure and Circuit Rule 26.1:

ARIPPA is a non-profit trade association that represents a membership primarily comprised of electric generating plants using environmentally-friendly circulating fluidized bed ("CFB") boiler technology to convert coal refuse and/or other alternative fuels such as biomass into alternative energy and/or steam, with the resultant alkaline ash used to reclaim mine lands. ARIPPA was organized in 1988 for the purpose of promoting the professional, legislative and technical interests of its member facilities. ARIPPA has no outstanding shares or debt securities in the hands of the public and does not have any parent, subsidiary, or affiliate that has issued shares or debt securities to the public.

Chase Power Development, LLC is a Texas limited liability company engaged in the development of electrical power generation facilities in Texas. Chase Power Development, LLC has no parent companies. Furthermore, no publicly held corporation has a 10 percent or greater ownership interest in Chase Power Development, LLC.

FirstEnergy Generation Corporation is a wholly-owned subsidiary of FirstEnergy Solutions Corp. FirstEnergy Solutions Corp. is a wholly-owned subsidiary of FirstEnergy Corp., a diversified energy company whose ten electric utility operating companies comprise one of the nation's largest investor-owned electric systems, serving customers in Maryland, New Jersey, Ohio, Pennsylvania, Virginia, and West Virginia. FirstEnergy Corp. is a publicly-held corporation incorporated under the laws of Ohio. No company owns more than 10 percent of the stock of FirstEnergy Corp.

Gulf Coast Lignite Coalition ("GCLC") is a non-profit corporation organized under the laws of the State of Texas and comprised of individual electric generating and mining companies located in Texas, Louisiana, and Mississippi. GCLC participates on behalf of its members collectively in proceedings brought under United States environmental regulations, and in litigation arising from those proceedings, which affect electric generators and mines. GCLC has no outstanding shares of debt securities in the hands of the public and has no parent company. No publicly held company has a 10% or greater ownership interest in GCLC.

Kansas City Board of Public Utilities-Unified Government Wyandotte County/Kansas City, Kansas ("BPU") is not required to provide a Corporate Disclosure Statement pursuant to Federal Rule of Appellate Procedure 26.1 because it is a governmental entity organized under the laws of the State of Kansas. Accordingly, no Corporate Disclosure Statement has been provided.

Oak Grove Management Company, LLC ("OG") is a Delaware wholly-owned subsidiary of Luminant Holding Company LLC which is a Delaware LLC and is a wholly-owned subsidiary of Texas Competitive Electric Holdings Company LLC ("TCEH"). TCEH is a Delaware LLC and is a wholly-owned subsidiary of Energy Future Competitive Holdings Company ("EFCH"), which is a Texas corporation and a wholly-owned subsidiary of Energy Future Holdings Corp. ("EFH Corp.") which is a Texas corporation. No publicly-held entities have a 10% or greater ownership interest in EFH Corp.

Puerto Rico Electric Power Authority ("PREPA") is not required to provide a Corporate Disclosure Statement pursuant to Federal Rule of Appellate Procedure 26.1 because it is a governmental entity organized under the laws of the Commonwealth of Puerto Rico. Accordingly, no Corporate Disclosure Statement has been provided.

Tri-State Generation & Transmission Association, Inc. ("Tri-State") is a wholesale electric power supply cooperative which operates on a not-for-profit basis and is owned by 1.5 million member-owners and 44 distribution cooperatives. Tri-State issues no stock and has no parent corporation. Accordingly, no publicly held corporation owns 10% or more of its stock.

Wolverine Power Supply Cooperative, Inc. ("Wolverine") states that it is a not-for-profit, member-owned, electric generation and transmission cooperative headquartered in Cadillac, Michigan. Wolverine has no parent company, and no publicly-held company has a 10% or greater ownership interest in Wolverine.

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GLOSSARY OF TERMS

ACI	Activated Carbon Injection
CAA	Clean Air Act
BPU	Kansas City Board of Public Utilities – Unified Government Wyandotte County/Kansas City, Kansas
BTFL	Beyond-the-Floor Limit
CFB	Circulating Fluidized Bed
DOE	United States Department of Energy
DSI	Dry Sorbent Injection
EFCH	Energy Future Competitive Holdings Company
EGU	Electric Utility Steam Generating Units
EFH	Energy Future Holdings
EPA	United States Environmental Protection Agency
GCLC	Gulf Coast Lignite Coalition
HAP	Hazardous Air Pollutant
HCl	Hydrogen Chloride
ICR	Information Collection Request
J.A.	Joint Appendix
LONC	Liquid Oil-Fired Non-Continental Unit
LULO	Limited-Use Liquid Oil-Fired Unit
MACT	Maximum Achievable Control Technology
MATS	Mercury Air Toxics Standards
NSPS	New Source Performance Standards
OG	Oak Grove

PC	Pulverized-Coal
PREPA	Puerto Rico Electric Power Authority
UARG	Utility Air Regulatory Group

PERTINENT STATUTES AND REGULATIONS

All applicable statutes, as well as relevant regulations, are contained in the Joint Brief of State, Industry, and Labor Petitioners.

INTRODUCTION

In setting emission standards under MATS[1] for all electric generating units ("EGUs"), EPA's evaluation focused almost entirely on conventional pulverized-coal ("PC") units. Consequently, MATS imposes arbitrary and unlawful requirements on certain non-traditional EGUs. "Industry-Specific Petitioners" operate or propose to operate such EGUs and raise additional issues that are distinct from those raised by other Petitioners.

Except as noted, Industry-Specific Petitioners incorporate by reference the "Pertinent Statutes and Regulations," "Statement of Jurisdiction," "Statement of the Case," "Standing," and "Standard of Review" from State/Industry/Labor Petitioners' brief.

STATEMENT OF ISSUES

1. Whether EPA arbitrarily refused to create separate standards for circulating fluidized bed ("CFB") units despite recently determining in another rule that CFBs require separate standards because of their unique characteristics.

[1] 77 Fed. Reg. 9,304 (Feb. 16, 2012) (J.A. __).

2. Whether EPA improperly calculated maximum achievable control technology ("MACT") floors for lignite plants and then set unlawful and unachievable "beyond-the-floor" standards for them.

3. Whether EPA violated notice-and-comment and standard-setting requirements for certain unconventional EGUs.

4. Whether EPA acted unlawfully by failing to address publicly-owned utilities' unique concerns.

STATEMENT OF THE CASE

EPA has historically recognized fundamental differences between traditional PC EGUs and unconventional EGUs. In MATS, EPA largely ignored these differences for certain fundamentally different source types (discussed below) and imposed identical requirements for them as for PC EGUs. Because EPA ignored factors distinguishing these non-traditional EGUs from conventional PC units, many unconventional EGUs will be forced to shut down if MATS is upheld as applied to them. Moreover, even where EPA *did* recognize fundamental differences among types of EGUs, it set illegal standards for two unique subcategories.

SUMMARY OF ARGUMENT

MATS imposes arbitrary and unlawful requirements on unconventional EGUs. The Court should remand MATS with instructions to establish revised MATS standards for unconventional EGUs, consider the factors that distinguish certain unconventional EGUs from PC units, and address public power's State law concerns.

STANDING

Industry-Specific Petitioners' standing is clear on the record. *See, e.g.,* J.A. ___, ___, ___.

ARGUMENT

I. EPA UNLAWFULLY REFUSED TO CREATE A CFB SUBCATEGORY

EPA has long recognized the need to create subcategories with different hazardous air pollutant ("HAP") standards for different types of facilities. Here, EPA arbitrarily refused to create a CFB subcategory, even though it recently created one in another HAP rule.

CAA §112(d)(1) directs EPA to "promulgate regulations establishing emissions standards for each category or subcategory of . . . hazardous air pollutants," and allows EPA to "distinguish among classes, types, and sizes of sources within a category or subcategory in establishing such standards . . . ." In MATS, EPA expressly recognized its authority to establish subcategories. 77 Fed. Reg. at 9,376 (J.A. __). Subcategorization is appropriate particularly where differences in class, type, or size prevent units from achieving the same level of emissions reductions. *See id.* (J.A. __); 77 Fed. Reg. at 9,379 (J.A. __); *see also Sierra Club v. EPA*, 479 F.3d 875, 885 (D.C. Cir. 2007) *(Williams, J., concurring)* (a "legitimate basis for creating additional subcategories must be the interest in keeping the relation between 'achieved' and

'achievable' in accord with common sense and the reasonable meaning of the statute.").

A. EPA Must Create a CFB Subcategory.

EPA and the Department of Energy ("DOE") have long recognized that CFBs are fundamentally different from conventional PC units. CFBs were developed with DOE support to control emissions by injecting limestone in the combustion zone rather than using the PC method of add-on emission controls.[2] However, MATS disregards these fundamental differences, regulating CFBs the same as conventional PC units. Now, companies that were encouraged to invest in more expensive CFBs for environmental reasons are faced with arbitrary environmental requirements that will render their CFBs uneconomic.

EPA's contemporaneous "Boiler MACT," also promulgated under §112, explicitly distinguished CFBs from other types of fossil fuel-fired combustion units. 76 Fed. Reg. 15,608 (Mar. 21, 2011) (J.A. __). Boiler MACT includes multiple subcategories for different types of fossil fuel-fired combustion units, including a separate CFB subcategory.[3]

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[2] *See, e.g.,* 70 Fed. Reg. 9,706, 9,711 (Feb. 28, 2005) (J.A. __); DOE, Fluidized Bed Technology, http://www.fossil.energy.gov/programs/powersystems/combustion/fluidizedbed_overview.html.

[3] On reconsideration, EPA actually proposed sixteen Boiler MACT subcategories. *See* 76 Fed. Reg. 80,508, 80,660 (Dec. 23, 2011) (J.A. __).

Industry-Specific Petitioners' CFBs reflect the same distinctions in design, fuel type and operational practices that EPA determined warranted subcategorization under Boiler MACT, and are generally similar in size to the sources regulated under Boiler MACT. However, because Petitioners' CFBs generate electricity for sale to the grid, they are subject to MATS rather than Boiler MACT. In MATS, EPA arbitrarily refused to subcategorize CFBs. *See* 77 Fed. Reg. at 9,397 (J.A. __). Whether electricity is used on-site or sold to the grid bears neither upon the emission profile of, nor the control alternatives available to, CFBs. Such an arbitrary distinction constitutes a clear abuse of EPA's discretion and is not contemplated by §112.

B. The Record Does Not Support the HCl Limit for CFBs.

In MATS, EPA "acknowledge[d] that there are design and operation differences between conventional PC fired EGUs and [CFBs]," but asserted that "HAP emissions levels and characteristics" for CFBs are not "sufficiently distinct" from other coal-fired units to warrant different treatment. 77 Fed. Reg. at 9,397 (J.A. __). Whatever its merits for other pollutants, this conclusion is *not* true for HCl.

The record shows that CFBs cannot attain the MATS 0.002 lbs/mmBtu HCl limit by injecting more limestone in the combustion zone. Physical and design constraints limit how much limestone can be injected, and increases in limestone only marginally reduce HCl while increasing mercury emissions. ARIPPA Comments, EPA-HQ-OAR-2009-0234-17754 at 22 ("ARIPPA Comments") (J.A. __). Separately, CFBs using non-coal fuels (*e.g.*, petroleum coke ("pet-coke"), coal refuse, or biomass)

have very different emissions profiles. 70 Fed. Reg. 28,606, 28,613 (May 18, 2005) (J.A. __). EPA arbitrarily disregarded data showing that the final HCl standard would not be achievable at certain CFBs. ARIPPA Comments at 23-25 (J.A. __). Moreover, installing add-on controls to pursue that limit is inconsistent with fundamental CFB design. Even if add-on controls can physically be retrofitted to existing CFBs, their cost would force many CFBs to shut down - as EPA recognized in Boiler MACT but disregarded in MATS.[4]

C. EPA Must Set Separate Coal-Refuse-Fired CFBs Standards.

Historical coal-mining operations throughout Pennsylvania have created millions of tons of coal refuse.[5] ARIPPA Comments at 1-2 (J.A. ___). Enormous waste-coal piles prevent the productive use of land and also contaminate thousands of miles of surface waters. CFBs are the only facilities that can combust waste coal, and many CFBs were built *for the specific purpose* of combusting otherwise unusable coal and preventing further contamination. *Id.*

For this and other reasons,[6] ARIPPA plants *cannot* switch fuels to satisfy MATS. Coal refuse exhibits higher chloride concentrations and substantially-lower heating values than traditional coal, making it virtually impossible for waste-coal

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[4] *Compare* 76 Fed. Reg. 15,608 (J.A. __) *with* 77 Fed. Reg. at 9,397 (J.A. __).

[5] The MATS definition of "coal refuse" fails to reflect the inherent characteristics of coal refuse by restricting ash content and heating value and must be revised. ARIPPA Comments at 14-16 (J.A. __).

[6] PURPA and contractual commitments. *See* ARIPPA Comments at 3 (J.A. __).

plants to meet the HCl limit. *Id.* at 22 (J.A. __). Furthermore, the HCl control method identified in MATS for sources that cannot effectively utilize back-end technology – dry sorbent injection ("DSI") – would also be unavailable to the ARRIPA plants because it would prevent them from beneficially utilizing their alkaline ash to reclaim acidic abandoned mine lands. *Id.* at 24 (J.A. __).

EPA recognized DSI would likely increase the quantity of ash generated, thereby increasing waste disposal costs. 77 Fed. Reg. at 9,413 (J.A. __). However, coal refuse exhibits higher fuel ash content – 65%-75%, compared with the maximum 12% identified by EPA. *Id.* (referencing a Sargent & Lundy evaluation); *see also* Documentation Supplement for EPA Base Case v.4.10_PTox-Update for Proposed Toxics Rule, EPA-HQ-OAR-2009-0234-3048 ("EPA Base Case") at 91-94, 102-103 (Mar. 2011) (J.A. __, ___). Moreover, EPA's analysis does not reflect that coal-refuse-fired CFBs do not landfill ash, but use it in beneficial mine reclamation.

EPA recognized that the addition of sodium sorbents would likely alter the leaching characteristics of the ash, thus preventing its beneficial use in mine reclamation, because the concentration of sulfate in the ash would no longer satisfy applicable beneficial reuse standards. 77 Fed. Reg. at 9,413 (J.A. __); *see also* 25 Pa. Code, Chapter 290 (establishing maximum-concentration standards for various pollutants contained in coal ash, including sulfate, applicable to beneficial use of ash) (J.A. ___). Instead, ARIPPA's ash would necessarily be redirected to lined landfills. *See* 77 Fed. Reg. at 9,413 (J.A. __); EPA Base Case at 91-94, 102-03 (J.A. __, __).

Thus, EPA's regulatory analysis of DSI to reduce HCl is also inapplicable to coal-refuse-fired CFBs because introducing sodium-based sorbents would likely render the ash unsuitable for beneficial use.[7]

The record shows that EPA: (1) derived the HCl limit for existing coal-fired EGUs based on analyses inconsistent with coal-refuse-fired CFBs and, (2) in analyzing HCl control options, overlooked the loss of significant environmental benefits yielded by these coal-refuse-fired CFBs. EPA acted arbitrarily in failing to evaluate these distinguishing characteristics in deriving an HCl limitation for coal-refuse-fired CFBs.

II. WHERE SUBCATEGORIES WERE PROPERLY CREATED, EPA SET UNLAWFUL AND UNACHIEVABLE EMISSION STANDARDS

MATS did establish appropriate subcategories for certain types of EGUs, but certain emission limits for those subcategories do not comply with the detailed §112(d) requirements for setting MACT limits. First, EPA must establish a MACT "floor" based on the "average emission limitation *achieved* by the best-performing 12 percent" of sources, or for categories/subcategories with fewer than 30 sources, the "best performing 5 sources." CAA §112(d)(3)(A). EPA "may not deviate from [§112](d)(3)'s requirement that floors reflect what the best performers *actually achieve* . .

[7] The MATS definition of "dry flue gas desulfurization" must be revised to include sorbent injection within the combustion chamber, and appears to require the use of a back-end control, inconsistent with the preamble. ARIPPA Comments at 21 (J.A. __).

. ." *Cement Kiln Recycling Coal. v. EPA*, 255 F.3d 855, 861 (D.C. Cir. 2001) (emphasis added).

Then, EPA may set a more stringent "beyond-the-floor" limit ("BTFL"), but only if such limit is "achievable," considering the cost, energy requirements, applicable emission control techniques, and other factors. CAA §112(d)(2); *see also Med. Waste Inst. & Energy Recovery Council v. EPA*, 645 F.3d 420, 423 (D.C. Cir. 2011). A BTFL must be "achievable" "under most adverse conditions which can reasonably be expected to recur." *Nat'l Lime Ass'n v. EPA*, 627 F.2d 416, 431 n.46 (D.C. Cir. 1980).

A. The Emission Standards for Lignite-Fired EGUs are Unlawful.

Recognizing the fundamental differences between lignite-fired and conventional plants, EPA properly established a subcategory for lignite-fired EGUs. However, rather than setting the mercury limit at the MACT "floor," EPA set a more stringent mercury BTFL for lignite units. The record shows, however, that this limit is not "achievable" as defined by this Court. The BTFL is also flawed because the MACT floor for mercury was improperly calculated, and EPA may not set a BTFL based on an improper MACT floor.

1. The Mercury BTFL is Unlawful Because it is Not Achievable.

A BTFL may be more stringent than the MACT floor, but only if "achievable" "under most adverse conditions which can reasonably be expected to recur." *Nat'l Lime*, 627 F.2d at 431 n.46. EPA's mercury BTFL does not meet this standard.

First, EPA based the BTFL on the lowest data point from the single best-performing unit in the subcategory ("OG1"). *See* Oak Grove Comments, EPA-HQ-OAR-2009-17904, at 28-29, 37 ("OG Comments") (J.A. __, __). But this does not represent what is "achievable" for all existing units "under most adverse conditions." Congress relied on a single source to drive the standard for an entire subcategory only as the *new* unit standard—§112(d)(3). But Congress did not instruct EPA to set limits for existing sources in this way.

In any event, the BTFL is not consistently achievable even at OG1 —EPA's selected best performing unit. OG1 would have violated the BTFL *91 operating days* annually, or 25% of the time. *See* OG Comments at 38-40 (J.A. __). That is, EPA used OG1 to justify a more stringent standard that even OG1 cannot consistently meet. This is arbitrary and capricious.

As this confirms, a single, snapshot test cannot account for the inherent and significant variability of lignite coal from one coal seam to the next. Because EPA erroneously ignored this variability, the so-called "achievable" subcategory-wide standard was not achieved by the best-performing unit 25% of the time. Even EPA's own dubious treatment of variability (the upper prediction limit), when applied to the available continuous mercury data for OG1, supports a much higher BTFL of 7 lb/Tbtu. *Id.* at 44-45 (J.A. __).

EPA attempts to justify its BTFL by presuming that OG1 (and other lignite-fired units) can achieve better mercury control by injecting more activated carbon

("ACI"). 76 Fed. Reg. 24,976, 25,046 (May 3, 2011) (J.A. __); Memorandum from Shelly Johnson to Bill Maxwell (Mar. 14, 2011), EPA-HQ-OAR-2009-0234-2924 (J.A. __). This presumption violates EPA's §112(d)(2) obligation to consider "applicable control techniques" because the record shows that increased ACI does not necessarily correlate with increased mercury removal from lignite plants. *See* OG Comments at 41-44 (J.A. __). Mercury removal for ACI injection is significantly adversely affected by higher temperature, mercury fuel variability, lower chloride levels, and low levels of unburned carbon. Lignite-fired boilers exhibit all of these characteristics. *See id.* By ignoring this information, EPA violated §112(d)(2).

EPA's BTFL is flawed for other reasons, including EPA's failure to consider a cost-benefit analysis. The potential incremental emission reduction by going beyond the MACT floor for lignite would be less than 0.1% of EGU mercury emissions. *See id.* at 47 (J.A. __). No claim is made that this inconsequential reduction justifies the cost of the BTFL, notwithstanding §112(d)(2)'s mandate that EPA do so before setting "beyond the floor" standards. *See Davis Cnty. Solid Waste Mgmt. v. EPA*, 101 F.3d 1395, 1400 (D.C. Cir. 1996).

2. The Mercury MACT Floor for Lignite EGUs Was Calculated Improperly.

This Court has recognized "[EPA's] beyond-the-floor determinations cannot be evaluated if . . . the MACT floors themselves were improperly set." *Northeast Md.*

Waste Disposal Auth. v. EPA, 358 F.3d 936, 955 (D.C. Cir. 2004). Because the mercury MACT floor for lignite EGUs was improperly set, the BTFL is similarly flawed.

The floor is flawed because EPA (1) used levels achieved by the top 6% of sources instead of the top 12% in violation of §112(d)(3)(A); (2) cherry-picked only the lowest value from the ICR test runs to establish the "average emissions" for each category; and (3) failed to account for the inherent variability in lignite. These flaws and others discussed in the record establish that EPA's "floor" does not represent what the best-performing 12% of sources actually achieve. *See* OG Comments at 27-31 (J.A. __). These clear errors taint EPA's MACT floor calculation and render the BTFL unlawful.

B. EPA's Standards for Pet-Coke-Fired EGUs Are Unlawful.

1. EPA Did Not Make a §112(n)(1) Finding for Pet-Coke-Fired EGUs.

EGUs were to remain exempt from regulation under CAA §112, unless and until EPA "finds such regulation is appropriate and necessary." CAA §112(n)(1)(A). EPA purported to make such a finding in December 2000 with respect to a limited subset of EGUs, adding coal- and oil-fired EGUs to the list of sources subject to regulation under CAA §112 ("Listing Decision"). 65 Fed. Reg. 79,825-31 (Dec. 20, 2000) (J.A. __). EPA did not include pet-coke-fired EGUs in the Listing Decision. *See* 69 Fed. Reg. 4,652, 4,674 (Jan. 30, 2004) (characterizing pet-coke as a "non-regulated" fuel) (J.A. __). Because EPA has failed to make the prerequisite finding

under CAA §112(n) that it is "appropriate and necessary" to regulate pet-coke-fired EGUs, EPA's regulation of such units as "solid oil-derived fuel-fired" EGUs in MATS is unlawful.

2. The PM Standards for Pet-Coke Units Are Unlawful.

EPA's emission standard of 0.008 lbs/mmBtu for pet-coke units is arbitrary and capricious. In calculating the MACT floor, EPA ignored 32 of the 47 data sets in the record showing higher emissions at existing pet-coke units.[8] Including these data sets would have yielded an emissions standard roughly four times higher (0.031 lbs/mmBtu – nearly identical to EPA's 0.030 lbs/mmBtu standard for coal EGUs). EPA cannot cherry-pick data that it prefers without explaining why it disregarded almost 70 percent of available data, and none is forthcoming here. *See Business Roundtable v. SEC*, 647 F.3d 1144, 1150-51 (D.C. Cir. 2011) (agency unlawfully ignored "numerous studies ... that reached the opposite result"). Nor does EPA explain its decision to subject coal and pet-coke to such disparate treatment. *See Burlington N. & Santa Fe Ry. Co. v. Surface Transp. Bd.,* 403 F.3d 771, 777 (D.C. Cir. 2005).

3. EPA Violated Notice-and-Comment Requirements When Promulgating Final Pet-Coke Standards.

The final pet-coke standards are not a logical outgrowth of the proposal, which violates Petitioners' right to notice and comment. 5 U.S.C. §553. First, EPA initially

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[8] *See* "EGU_ICR_PartI_and_PartII" and "EGU ICR PartIII," *available at* http://www.epa.gov/ttn/atw/utility/utilitypg.html (providing information EPA obtained through MATS ICR No. 2362.01; OMB Control No. 2060-0631), (J.A. __).

proposed an attainable *output-based* PM emission standard of 0.20 lbs/mmBtu, but the final rule abruptly adopted a much more stringent *input-based* emission standard of 0.008 lbs/mmBtu. Second, under the proposed MATS, units primarily firing pet-coke remained "EGUs designed to burn solid oil derived fuel" even if they co-fired more than 10% coal. 76 Fed. Reg. at 25,027 (J.A. __). The final rule, however, dramatically altered the sub-category definitions applicable to such pet-coke units, transforming them into "coal-fired" units, subject to different emission standards than other units firing pet-coke.[9] EPA justified this change as addressing "inconsistencies" in the proposed rule, while ignoring the substantive effect. 77 Fed. Reg. at 9,376 (J.A. __).

Neither change was a "logical outgrowth" of the proposal. Petitioner FirstEnergy could not have anticipated that EPA would use a fundamentally different, and significantly more burdensome, methodology for calculating PM emissions. *Horsehead Resource Dev. Co. v. Browner*, 16 F.3d 1246, 1267-68 (D.C. Cir. 1994) (inadequate notice where final rule adopted different emissions calculation methodology). Also, arguable inconsistencies in proposed rule language do not provide Petitioner Wolverine notice of EPA's intent to rewrite key definitions. *See Shell Oil Co. v. EPA*, 950 F.2d 741, 746-47 (D.C. Cir. 1991) ("unexpressed intention cannot convert a final rule into a 'logical outgrowth' that the public should have anticipated").

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[9] *Compare* §63.10042, 76 Fed. Reg. at 25,121-124 (J.A. __) *with* §63.10042, 77 Fed. Reg. at 9,484-87 (J.A. __).

C. EPA Set Improper LONC Limits.

The final MATS added new subcategories for "liquid oil-fired, non-continental" ("LONC") units and "limited-use liquid oil-fired" ("LULO") units.[10] Neither the scope of these two new subcategories nor, in the case of the LONC subcategory, the final emission limits were opened for public comment.

Under CAA §112(d)(3), existing-source limits for a subcategory with 30 or more units must be based on the average emission limitation achieved by the best-performing 12% of sources in the subcategory. A subcategory with fewer than 30 sources must set limits using the average emission limitation achieved by the best-performing five units.

Because EPA used 31 LONC units to set MACT, it applied the 12% requirement to the 15 units for which it had data, meaning that MACT was based on two units. However, at least two PREPA units will be in the LULO, not the LONC, subcategory, leaving at most 29 units in the LONC subcategory. Thus, MACT should have been set using the limits achieved by the best-performing five units of the 15 units with data. Setting limits based on just two units instead of five violated CAA §112(d)(3). Moreover, it was arbitrary and capricious not to assess whether creating the LULO subcategory would reduce the LONC subcategory, and thus require recalculation of the LONC limits. These changes, not made until the final rule,

[10] 77 Fed. Reg. at 9,379 (J.A. __).

should have been subject to public comment. *See Small Refiner Lead Phase-Down Task Force v. EPA,* 705 F.2d 506, 546-47 (D.C. Cir. 1983).

III. EPA ERRED BY IGNORING STATE LAWS APPLICABLE TO PUBLIC POWER

Public power (city- and other publicly-owned utilities) demonstrated that they could not meet the MATS compliance deadlines because of State laws requiring competitive bidding for major pollution control or repowering projects. APPA's Comments, EPA-HQ-OAR-2009-0234-17868 at App. G (J.A. ___) (survey indicating *on average* it would take 77 months to comply). Commenters also presented a compliance alternative that would allow public power entities more time by including in their operating permits a federally-enforceable compliance schedule that factors in these State laws. EPA unlawfully failed to address either issue.

A. EPA Violated CAA §307(d)(6)(B) by Ignoring Significant Comments.

CAA §307(d)(6)(B) requires EPA to respond to significant comments. *Northeast Md. Waste Disposal,* 358 F.3d at 950 (*citing Appalachian Power Co. v. EPA*, 249 F.3d 1032, 1051 (D.C. Cir. 2001) (court will uphold EPA action "only where the EPA adequately responded to comments and explained the basis for its decisions")). As EPA's failure to address public power entities' impossibility argument is "of such central relevance to the rule that there is a substantial likelihood that the rule would have been significantly changed if such errors had not been made"(*see Chem. Mfrs.*

Ass'n v. EPA, 28 F.3d 1259, 1262 (D.C. Cir. 1994)), this issue should be remanded for EPA to consider an alternative MATS compliance path for public power entities.

EPA's permitting regulations provide for compliance plans that meet future applicable requirements. *See* 57 Fed. Reg. 32,250, 32,274 (July 21, 1992) (J.A. __) ("future-effective requirements" are applicable permit requirements). EPA's failure to explain its rejection of compliance plans with federally-enforceable milestones as a means of establishing realistic MATS compliance deadlines for public power entities violates CAA §307(d)(6)(B).

B. EPA Erroneously Denied An Extension to Public Power.

BPU requested, pursuant to CAA §112(i)(3)(B), a blanket one-year compliance deadline extension for public power entities to accommodate statutory obligations to obtain prior political and regulatory approval for funding compliance projects. EPA's Responses to Public Comments, Vol. 2 (Dec. 2011), EPA-HQ-OAR-2009-0234-20126 at 313 (J.A. __). Although recognizing that public power utilities "may have challenges privately owned facilities do not have," including statutory obligations that on average require two years for completion, *id.* at 343 (J.A. __), EPA refused to grant the extension.

EPA asserts that CAA §112(i)(3)(B) precludes the requested blanket one-year extension because it "applies to individual sources and, furthermore, the D.C. Circuit Court has determined that EPA does not have authority to provide a compliance period in excess of three [years]. *See NRDC v. EPA*, 489 F.3d 1364, 1373-74 (D.C.

Cir. 2007)." *Id.* at 313 (J.A. __). Reliance on *NRDC* is misplaced because "EPA d[id] not rely" on §112(i)(3)(B), which, the Court noted, "authorize[es] EPA to make source-by-source extensions" beyond CAA §112(i)(3)(A)'s three-year limit. 489 F.3d at 1373-74. Likewise, EPA's claim that §112(i)(3)(B) can be applied only in individual source cases is belied by EPA's past interpretation that the reference to a singular "source" does not preclude a general waiver for all similarly situated sources if certain conditions are met. *See* 76 Fed. Reg. 29,032, 29,064 (May 10, 2011) (reasonable interpretation of such language allows "plenary finding, rather than utilizing a facility-by-facility application process, when the facts are already known a category-wide adjudication is therefore possible") (J.A. __); *see also, e.g.*, 60 Fed. Reg. 12,723, 12,724 (Mar. 8, 1995) (J.A. __); 55 Fed. Reg. 8,332 (Mar. 7, 1990) (J.A. __).[11] Here, the known statutory obligations facing public power entities justify such a plenary finding.

CONCLUSION

The Court should remand MATS as applied to unconventional EGUs.

[11] Given the evidence and comments submitted along with the potential penalties should public power entities not achieve compliance by the proposed deadline, the issue of whether a general one-year extension for those entities can be granted *now* is ripe. *South Coastal Air Quality Mgmt. Dist. v. EPA*, 472 F.3d 882, 903 (D.C. Cir. 2006).

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CERTIFICATE OF COMPLIANCE

Pursuant to Rule 32(a)(7)(C) of the Federal Rules of Appellate Procedure and Circuit Rules 32(a)(1) and 32(a)(2)(C), I hereby certify that the foregoing Supplemental Brief for Industry Petitioner-Specific Issues contains 3,990 words, as counted by a word processing system that includes headings, footnotes, quotations, and citations in the count, and therefore is within the 4,000 word limit set by the Court.

Dated: October 23, 2012

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I hereby certify that, on this 23rd day of October 2012, a copy of the Supplemental Brief for Industry Petitioner-Specific Issues was served electronically through the Court's CM/ECF system on all ECF-registered counsel. I further certify that a copy has been served by first-class US mail on the following:

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