

WHY I WORRY ABOUT *UARG*

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<i>Introduction</i>	9
<i>I. Background on EPA’s 111(d) Proposed Rule</i>	11
<i>II. UARG’s Implications for EPA’s Power Plant Rule</i>	14
<i>Conclusion</i>	20

INTRODUCTION

When the Supreme Court decided *Utility Air Regulatory Group v. EPA* (“*UARG*”)¹ in June of 2014, it was both a victory and a loss for the U.S. Environmental Protection Agency (“EPA”). The Court largely upheld EPA’s authority to regulate greenhouse gases (“GHGs”) from stationary sources under the Clean Air Act’s (“CAA”)² Prevention of Significant Deterioration (“PSD”) program.³ The government and environmental groups aggressively spun the decision as a near-total vindication of the Agency’s strategy to implement the CAA to control GHGs, playing down the one legal issue on which the Agency had lost: whether GHG emissions alone could trigger the permitting requirements of the program.⁴ This mattered little, Agency supporters said, since the largest emitters would be triggered into the program because of their emissions of conventional pollutants, at which point their GHGs would need to meet control requirements anyway.⁵ As the story goes, EPA won what it needed to win to address GHGs under this permitting program, and lost on an issue that, secretly, many in the Agency wanted to lose.⁶ The media bought the spin.⁷ The result could not have been better.

My reaction to the case was different. While the short-term outcome was favorable to EPA, *UARG* struck me as a decision laced with the legal equivalent

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¹ 134 S. Ct. 2427 (2014).

² 42 U.S.C. §§ 7401–7671q (2012).

³ *Id.* §§ 7470–7492. For a more detailed description of the case, see Cecilia Segal, *Climate Regulation Under the Clean Air Act in the Wake of Utility Air Regulatory Group v. EPA: Introduction*, 39 HARV. ENVTL. L. REV. 1, 5–6 (2015).

⁴ The Court held that the phrase “any air pollutant” in the definition of what qualifies as a “major emitting facility” for purposes of the PSD program does not include GHGs. *UARG*, 134 S. Ct. at 2442, 2449.

⁵ When the decision was announced, Justice Scalia said, “EPA is getting almost everything it wanted in this case.” Robert Barnes, *Supreme Court: EPA Can Regulate Greenhouse Gas Emissions, with Some Limits*, WASH. POST (June 23, 2014), <http://perma.cc/JBB4-UPDK>.

⁶ When the decision was pending, I argued that this mixed outcome would be the best result for EPA, and noted that the government had signaled as much in its merits brief. See Jody Freeman, *Symposium: Soft Landings and Strategic Choices*, SCOTUSBLOG (Feb. 5, 2014), <http://perma.cc/87TL-4ECG>.

⁷ See, e.g., Adam Liptak, *Justices Uphold Emission Limits on Big Industry*, N.Y. TIMES (June 23, 2014), <http://perma.cc/3GJX-DYB7>; David G. Savage, *Supreme Court Upholds Rules Curbing Greenhouse Gases from Power Plants*, L.A. TIMES (June 23, 2014), <http://perma.cc/F6JW-C6BG>.

of improvised explosive devices. First, the Court appears to have qualified its earlier holding in *Massachusetts v. EPA*⁸ by making clear that whether EPA has the authority to control GHGs will be determined program-by-program.⁹ Although this could be helpful to EPA in defending its decision not to set a National Ambient Air Quality Standard (“NAAQS”)¹⁰ for GHGs,¹¹ it nevertheless invites more legal challenges should EPA choose to take further action on GHGs under other CAA programs.

Second, and more troubling, are the potential implications for EPA’s currently pending GHG proposals. Justice Scalia’s majority opinion contains unmistakable warnings to EPA about not overstepping its regulatory authority, which, read in light of EPA’s plans to regulate carbon emissions from power plants, should be reason for concern. In rejecting the Agency’s view that the word “pollutant” includes GHGs under the PSD program, the Court said:

EPA’s interpretation is also unreasonable because it would bring about an enormous and transformative expansion in EPA’s regulatory authority without clear congressional authorization. Where an agency claims to discover in a long extant statute an unheralded power to regulate a significant portion of the American economy, we typically greet its announcement with a measure of skepticism. We expect Congress to speak clearly if it wishes to assign to an agency decisions of vast “economic and political significance.”¹²

One might view such admonitions as mere rhetorical flourishes—the kind of “red meat” references to potential government overreach that some Justices toss to their conservative audiences.¹³ Yet five Justices signed onto this language, including Justice Kennedy, who was the crucial fifth vote in favor of EPA authority to regulate GHGs in *Massachusetts*. The Court’s reproach in *UARG* was, moreover, entirely gratuitous, making it all the more notable. It would be a mistake to overlook or underplay this sort of cue—if nothing else it reflects the mood of the majority. Given that EPA had proposed its controversial new rule to regulate carbon emissions from existing power plants only

⁸ 549 U.S. 497 (2007).

⁹ See *UARG*, 134 S. Ct. at 2439–42. In *Massachusetts*, the Court held that GHGs are “air pollutants” under the CAA, suggesting that they would be subject to regulation without the Agency having to make repeated determinations that they were “air pollutants” for purposes of each program. See 549 U.S. at 528–29.

¹⁰ 42 U.S.C. § 7409 (2012).

¹¹ See CTR. FOR BIOLOGICAL DIVERSITY, PETITION TO ESTABLISH NATIONAL POLLUTION LIMITS FOR GREENHOUSE GASES PURSUANT TO THE CLEAN AIR ACT (2009), <http://perma.cc/75C7-REU9>. EPA has not responded.

¹² *UARG*, 134 S. Ct. at 2444 (citations omitted) (quoting *FDA v. Brown & Williamson Tobacco Corp.*, 529 U.S. 120, 159 (2000)).

¹³ For example, see Chief Justice Roberts’ dissenting opinion in *City of Arlington v. FCC*: “The Framers could hardly have envisioned today’s ‘vast and varied federal bureaucracy’ and the authority administrative agencies now hold over our economic, social, and political activities. [T]he administrative state with its reams of regulations would leave them rubbing their eyes.” 133 S. Ct. 1863, 1878 (2013) (citations omitted).

three weeks earlier,¹⁴ and that the potential expansiveness of its proposal had been widely discussed in the media for months,¹⁵ it is simply not tenable that these five Justices were unaware of the context in which their words would be received. The passage is an unmistakable warning shot across EPA's bow.

I. BACKGROUND ON EPA'S 111(D) PROPOSED RULE

EPA's proposed rule for carbon emissions from existing power plants (EPA's "111(d)" or "power plant" rule) sets carbon intensity standards for each state,¹⁶ which if achieved would result in a 30% reduction in electricity sector carbon dioxide ("CO₂") emissions by 2030, compared with 2005 levels.¹⁷ EPA's legal authority to set these standards derives from section 111(d) of the CAA, which requires the states to set performance standards, subject to EPA guidelines, for existing sources of any air pollutant not otherwise regulated as a NAAQS or emitted from a source regulated under the hazardous air pollutant provisions of the Act.¹⁸ Section 111(a) defines performance standard in terms of the level of pollution reduction achievable by the "best system of emission reduction" ("BSER") that the Administrator has determined is adequately demonstrated.¹⁹ The hard question is whether EPA's approach to setting these performance standards, and particularly its interpretation of the "best system," will persuade judges on the D.C. Circuit and perhaps, ultimately, Justices on the Supreme Court.²⁰

Under its 111(d) proposal, EPA defines the "best system" of reduction more broadly than traditional end-of-stack pollution controls or efficiency improvements at individual electricity generating units. Because these units are part of an integrated electricity grid, EPA believes the "best system" of reduction extends to what can be achieved across the network, through fuel substitution, energy efficiency, and other measures that would reduce demand for coal-fired power. As a result, EPA's methodology for establishing the state-by-state targets uses a combination of four strategies, or "building blocks": (1) improving the efficiency of coal plants by at least 6%; (2) running existing natural gas plants more, up to 70% utilization; (3) using more "clean" energy, such as by relying on new renewable energy sources and by keeping existing nuclear plants from retiring; and (4) reducing demand through end-use energy effi-

¹⁴ Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 79 Fed. Reg. 34,830 (June 18, 2014) [hereinafter Clean Power Plan Proposed Rule].

¹⁵ See, e.g., Juliet Eilperin & Steven Mufson, *EPA is Readying Climate Rule for Existing Power Plants as Deadline Approaches*, WASH. POST (May 21, 2014), <http://perma.cc/R3UT-9R2T>; Coral Davenport, *President Said to be Planning to Use Executive Authority on Carbon Rule*, N.Y. TIMES (May 28, 2014), <http://perma.cc/8B6G-TJ54>.

¹⁶ See Clean Power Plan Proposed Rule, 79 Fed. Reg. at 34,837.

¹⁷ *Id.* at 34,839.

¹⁸ 42 U.S.C. § 7411(d) (2012).

¹⁹ *Id.* § 7411(a).

²⁰ EPA has developed a detailed legal foundation for the proposed rule. See generally EPA Legal Memorandum for Proposed Carbon Pollution Emission Guidelines for Existing Electric Utility Generating Units (2014) [hereinafter EPA Legal Memorandum], <http://perma.cc/F6KB-HCWQ>.

ciency measures adopted outside power plants by at least 1.5% annually.²¹ The stringency of the targets varies considerably across the states (ranging from 11% to 72%), depending on each state's current energy mix, and the extent to which emissions reduction opportunities are projected to be reasonably available using the four strategies described above.²² While EPA sets the targets, states may rely on any combination of the four building blocks, use alternative strategies,²³ adopt market-based strategies such as cap-and-trade programs,²⁴ and file multi-state or regional plans.²⁵ In adopting this approach, the Agency has sought to be reasonably ambitious about stringency while being mindful of both cost considerations and federalism principles.

EPA's interpretation of BSER using the four building blocks is novel and far-reaching. Although the Agency has set performance standards for other sources and pollutants under section 111(d) several times before,²⁶ these rulemakings do not approach the scope and complexity of EPA's proposal for existing power-plant emissions of GHGs.²⁷ There is simply no precedent on the fundamental interpretive issue, which concerns the breadth of BSER.²⁸ On its

²¹ Clean Power Plan Proposed Rule, 79 Fed. Reg. at 34,851.

²² See generally EPA, GOAL COMPUTATION TECH. SUPPORT DOC. (2014), <http://perma.cc/C7VF-N4WR>.

²³ Alternative strategies include combined heat and power projects, efficiency upgrades to transmission distribution lines, and carbon capture and sequestration. Clean Power Plan Proposed Rule, 79 Fed. Reg. at 34,876, 34,888.

²⁴ *Id.* at 34,887. Although EPA does not use the term "cap-and-trade," it certainly suggests that mass-based trading systems are an acceptable compliance option. *Id.* The proposal also mentions the Regional Greenhouse Gas Initiative, a cap-and-trade regime, roughly thirty times. See, e.g., *id.* at 34,834, 34,848.

²⁵ *Id.* at 34,897.

²⁶ Previously regulated sources include municipal waste combustors, sulfuric acid plants, and phosphate fertilizer plants. KATE KONSCHNIK & ARI PESKOE, HARVARD LAW SCH. ENVTL. LAW PROGRAM, EFFICIENCY RULES: THE CASE FOR END-USE ENERGY EFFICIENCY PROGRAMS IN THE SECTION 111(D) RULE FOR EXISTING POWER PLANTS 4–5 (2014), <http://perma.cc/8KKJ-7AWX>. Only two section 111(d) performance standards have explicitly authorized states to adopt emissions trading plans. *Id.* at 5. During the George W. Bush Administration, EPA promulgated the Clean Air Mercury Rule using section 111(d) to create a cap-and-trade regime for mercury and other pollutants. See generally Standards of Performance for New and Existing Stationary Sources: Electric Utility Steam Generating Units, 70 Fed. Reg. 28,606 (May 18, 2005). The D.C. Circuit struck down the rule on other grounds without reaching the question of whether a cap-and-trade approach would be lawful under section 111(d). See *New Jersey v. EPA*, 517 F.3d 574, 578 (D.C. Cir. 2008).

²⁷ See KONSCHNIK & PESKOE, *supra* note 26, at 4–5.

²⁸ There is, in addition, a prior and crucial threshold question about whether EPA may regulate GHGs from sources already regulated under section 112 of the CAA. The statute is unclear on this point because a peculiar drafting error led Congress to adopt, and the President to sign, two versions of the same provision, one that precludes regulation of "pollutants" already regulated under section 112 and one that precludes regulation of "sources" already regulated under section 112. Kate Konschnik, Harvard Law Sch. Envtl. Law Program, Regulating Existing Power Plants under The Clean Air Act 4–5 (Nov. 1, 2014) (working draft), <http://perma.cc/9RN7-LTYK>. EPA argues that these versions can be reconciled to eliminate any conflict, and that even if they cannot, EPA's view (that Congress meant to prevent duplicative regulation of *pollutants*, not *sources*), is entitled to deference. *Id.* at 7. A case raising this threshold issue was pending in the D.C. Circuit at the time of writing. See *Petition for Extraordinary Writ, Murray Energy Corp. v. EPA*, No. 14-1112 (D.C. Cir. filed June 18, 2014).

face, however, the plain meaning of “best system” would appear to encompass an interconnected network such as the electricity grid. Legislative history also supports EPA’s view that a performance standard in this context need not be based on “equipment” add-ons alone.²⁹ It is conceivable then, that EPA’s plain meaning argument will meet with judicial approval.

Yet a reviewing court might well conclude that the meaning of “best system” is ambiguous, in which case EPA can muster strong arguments for deference. For instance, the Agency can defend its approach as reasonable given the unique characteristics of CO₂ pollution, the absence of readily available control technology such as “scrubbers,” and the integrated nature of the electricity system, which allows greater utilization of some electric generating units to reduce the need for others without affecting the amount of electricity delivered. It is at least arguably reasonable (perhaps eminently so) for EPA to conclude that if measures *outside* the fence-line of a unit can reduce its emissions, those measures should be relevant not just for achieving compliance, but also for determining stringency and BSER.³⁰ Moreover, the Agency has taken pains to respect principles of federalism (by affording states considerable compliance flexibility) and to control costs (by incentivizing least-cost emissions reduction).³¹ The government will no doubt rely heavily on *EPA v. EME Homer City Generation, L.P.* (“*EME Homer*”),³² the 2013 Term’s other blockbuster air pollution case, in which the Court upheld the Agency’s Cross-State Air Pollution Rule, granting the Agency considerable deference.³³

Still, even EPA’s sound legal arguments are not certain winners. To prevail, EPA must overcome certain textual obstacles, such as the reference in 111(d)(1) to standards “for any existing source,”³⁴ and the plausibly natural reading of the definition of performance standard in 111(a) as one that is “achievable” [by the source] through “application” [by the source]³⁵—a reading that would tie the standard closely to the source, perhaps foreclosing EPA’s

²⁹ While the definition once referred to the “best technological system”—the phrase was introduced in 1977 and applied only to standards for new sources under section 111(b)—Congress removed the limiting reference in 1990. *See* Clean Air Act Amendments of 1990, Pub. L. No. 101-549, 104 Stat. 2399 (codified at 42 U.S.C. §§ 7401–7671q (2012)); H.R. 3316, 101st Cong., at 12–13 (1989) (proposing that emissions reductions be achieved through the use of technological systems, clean coal projects, fossil fuel switching, coal switching, retirement, changes in utility dispatch, precombustion cleaning of fuels, emissions trading, and other methods).

³⁰ *See* KONSCHNIK & PESKOE, *supra* note 26, at 5–6 (explaining the symmetry principle).

³¹ EPA Legal Memorandum, *supra* note 20, at 18.

³² 134 S. Ct. 1584 (2014).

³³ *Id.* at 1608–09. The majority opinion, authored by Justice Ginsburg, stated: “The [Clean Air Act] requires EPA to seek downwind attainment of NAAQS notwithstanding the uncertainties . . . Required to balance the possibilities of under-control and over-control, EPA must have leeway in fulfilling its statutory mandate.” *Id.* at 1609.

³⁴ “The Administrator shall prescribe regulations . . . under which each State shall submit . . . a plan which . . . establishes standards of performance for any existing source. . . .” 42 U.S.C. § 7411(d)(1) (2012).

³⁵ “The term ‘standard of performance’ means a standard for emissions of air pollutants which reflects the degree of emission limitation achievable through the application of the best system of emission reduction” *Id.* § 7411(a)(1).

reliance on building blocks two through four. Industry and state challengers also will no doubt emphasize the rule's many "firsts": this is the first time EPA is setting performance standards for the existing fleet of power plants, which have largely been protected from the most stringent regulations under the CAA; the first time the Agency is using section 111(d) for a pollutant as pervasive as CO₂;³⁶ the first time the Agency is purporting to set performance standards based not—as it typically has done—on technological improvements on-site but by reductions that could be obtained if certain measures were taken outside the source;³⁷ and the first time that EPA is establishing emission targets for every state based on a fact-intensive assessment of each state's potential to affordably transition to a cleaner energy mix—decisions about energy supply that normally rest with state utility regulators.³⁸ The fact that the rule is novel does not make it unlawful, however, and the textual arguments against EPA's interpretation can be overcome. Still, the risk remains that at least some judges will view section 111(d) as simply too weak a reed to support such a far-reaching program, and conclude that EPA has found an "elephant in a mousehole."³⁹

II. *UARG*'S IMPLICATIONS FOR EPA'S POWER PLANT RULE

UARG contains some worrying indications about the Supreme Court's comfort level with standards that go beyond consideration of traditional equipment upgrades at the affected source. On the second merits issue—whether the Best Available Control Technology ("BACT") requirement can apply to GHGs once a source has otherwise triggered PSD review—petitioners had urged the Court to hold that EPA could never apply BACT to GHGs. BACT, they argued, has historically been about "end-of-stack"⁴⁰ controls and not "regulating energy use,"⁴¹ which would allow regulators to control "every aspect of a facil-

³⁶ See Clean Power Plan Proposed Rule, 79 Fed. Reg. at 34,845 (noting that section 111(d) guidelines are "necessarily geared toward the pollutants and industries regulated" and that the Clean Power Plan must take into account the "particular characteristics of carbon pollution"); SUSAN F. TIERNEY, ANALYSIS GRP., GREENHOUSE GAS EMISSION REDUCTIONS FROM EXISTING POWER PLANTS: OPTIONS TO ENSURE ELECTRIC SYSTEM RELIABILITY 9 (2014), <http://perma.cc/GBR5-5YR3>.

³⁷ *But see* Standards of Performance for New and Existing Stationary Sources: Electric Utility Steam Generating Units, 70 Fed. Reg. at 28,606 (attempting to establish a trading scheme for mercury emissions); Standards of Performance for New Stationary Sources and Emission Guidelines for Existing Sources: Large Municipal Waste Combustors, 71 Fed. Reg. 27,324 (May 10, 2006) (arguably relying on demand reduction by diverting toxic waste from combustors).

³⁸ One could say, however, that EPA has done something of at least comparable complexity in assigning state emission "budgets" in the Cross-State Air Pollution Rule. See Federal Implementation Plans: Interstate Transport of Fine Particulate Matter and Ozone and Correction of SIP Approvals, 76 Fed. Reg. 48,208, 48,212 (Aug. 8, 2011) [hereinafter Cross-State Air Pollution Rule].

³⁹ "Congress . . . does not alter the fundamental details of a regulatory scheme in vague terms or ancillary provisions—it does not, one might say, hide elephants in mouseholes." *Whitman v. Am. Trucking Ass'n*, 531 U.S. 457, 468 (2001).

⁴⁰ *UARG*, 134 S. Ct. 2427, 2447 (2014).

⁴¹ *Id.*

ity's operation and design,' right down to the 'light bulbs in the factory cafeteria.'"⁴² Writing for five Justices on this issue,⁴³ Justice Scalia's opinion concluded that petitioners' concerns about such "'unbounded' regulatory authority" were unfounded because "BACT is based on 'control technology' for the applicant's 'proposed facility'" and "it has long been held that BACT cannot be used to order a fundamental redesign of the facility."⁴⁴ Regulatory overreach would be mitigated, he said, because according to EPA's own guidance, "BACT may not be used to require 'reductions in a facility's demand for energy from the electric grid'" and "should not require every conceivable change that could result in minor improvements in energy efficiency, such as the aforementioned light bulbs."⁴⁵

One might be tempted to dismiss this passage as limited to BACT in the context of the PSD program. Perhaps the Court would condone the efficiency measures that EPA is contemplating under section 111(d) because section 111(a) explicitly calls for performance standards based not on technology but on the "best system."⁴⁶ However, EPA's power plant rule goes well beyond requiring mere energy efficiency improvements. The "building block" approach to setting stringency envisions not only at-the-unit equipment upgrades and other measures to improve operational efficiency, but also substitution of natural gas for coal-fired generation and greater integration of renewables and energy efficiency—all of which will reduce the utilization of coal-fired units. Lowering the hours of operation and thus, at least potentially, the profitability of a power plant would seem far more onerous than a requirement pertaining to the plant's cafeteria light bulbs. Indeed, opponents will no doubt characterize EPA's approach as boundless because it is based on a legal theory that any measure that reduces emissions can be the basis for establishing BSER.⁴⁷

In any event, the above excerpt from *UARG* is entirely gratuitous, and at a minimum suggests that the Court is accustomed to thinking of technology-based performance standards as requiring mostly modest equipment upgrades at the source. This mindset may require some effort to change. It also suggests that far-reaching regulation will attract close scrutiny. It is hard to miss the

⁴² *Id.* (quoting Brief of Petitioners in No. 12-1254, the Energy-Intensive Manufacturers Working Group on Greenhouse Gas Regulation and the Glass Packaging Institute at 7, *UARG*, 134 S. Ct. 2427 (No. 12-1146)). This matter also arose at oral argument in an exchange between Solicitor General Verrilli and the Chief Justice, who asked whether BACT for GHGs could require regulation of "energy consumption" and "light bulbs" versus what the Chief Justice called "particulate emission." Transcript of Oral Argument at 50–51, *UARG*, 134 S. Ct. 2427 (No. 12-1146).

⁴³ The Chief Justice and Justice Kennedy joined Justice Scalia's opinion in full. Justices Thomas and Alito joined as to this part. *UARG*, 134 S. Ct. at 2432.

⁴⁴ *Id.* at 2448.

⁴⁵ *Id.*

⁴⁶ Compare 42 U.S.C. § 7475(a)(4) (2012) ("best available control technology") with *id.* § 7411(a)(1) ("best system of emission reduction"). Yet it does seem somewhat counterintuitive that 111(d) standards might be more demanding than BACT standards, given that the BACT provisions apply only to new and modified sources (for which energy efficiency investments at the moment of construction or upgrade ought to be relatively affordable), while 111(d) applies to existing sources for which retrofits to improve efficiency may be far more costly.

⁴⁷ EPA Legal Memorandum, *supra* note 20, at 51–52.

implications for EPA's power plant proposal when the Court insinuates in *UARG* that it will look askance at regulation "of a significantly different character" than what EPA has traditionally adopted; or which depends upon the cooperation of "previously unregulated entities"; or which amounts to what in the Court's view is an "unreasonable and unanticipated" degree of regulation.⁴⁸

It was especially surprising to see the prominent reference in *UARG* to *FDA v. Brown & Williamson Tobacco Corp.*,⁴⁹ since the Supreme Court had explicitly rejected the analogy to that case in *Massachusetts*, when it was urged upon the Justices as a reason to find that the CAA definition of air pollutant does not include GHGs. Justice Stevens's majority opinion (which Justice Kennedy of course joined) held that *Brown & Williamson* was simply inapposite.⁵⁰ Unlike in that case, where Congress had passed a raft of legislation suggesting that nicotine was not a "drug" subject to regulation under the Food, Drug, and Cosmetic Act, there had not been decades of legislation suggesting that GHGs were not pollutants under the CAA.⁵¹ Thus, the conditions that led the Court in *Brown & Williamson* to announce the so-called "major questions" canon, requiring matters of social and economic importance to be returned to Congress for a "clear statement" of agency authority, were simply not present.⁵² The major questions canon appeared to be dead, or at least in repose, after *Massachusetts*.

This is why I reacted to its prominent resurrection in *UARG* with such concern. The proposed rule for existing power plants is a creative and bold assertion of EPA's regulatory authority. Relying on a relatively little-used provision of the CAA, the Agency has proposed a rule with the potential to transform the electricity sector and reshape the nation's energy mix. The rule would be the first federal regulatory driver for state renewable energy and energy efficiency programs. Total compliance costs have been estimated to be \$7.3 billion in 2030, while the net benefits have been projected to be between \$48 billion and \$82 billion in 2030.⁵³ The rule also comes in the wake of Congress's failure to pass legislation to create an economy-wide cap on carbon that would have incentivized many of the same changes in the utility sector. All of which is why

⁴⁸ *UARG*, 134 S. Ct. at 2448–49.

⁴⁹ 529 U.S. 120 (2000).

⁵⁰ *Massachusetts v. EPA*, 549 U.S. 497, 530–31 (2007).

⁵¹ *Id.* at 531.

⁵² That the Court would arrive at this outcome was not obvious at the outset. In *Massachusetts*, unlike in *Brown & Williamson*, both the major questions canon and *Chevron* deference appeared to pull in the same direction—against the finding that the CAA covered GHGs. See Jody Freeman & Adrian Vermeule, *Massachusetts v. EPA: From Politics to Expertise*, 2007 SUP. CT. REV. 51, 76 (2007). The Court made short work of both, finding that the CAA was clear on its face. *Massachusetts*, 549 U.S. at 531.

⁵³ Clean Power Plan Proposed Rule, 79 Fed. Reg. at 34,839 (assuming states choose to comply with the guidelines collaboratively). Incidentally, this dwarfs the economic consequences of the rule in *Brown & Williamson*, although many air pollution regulations do. Total compliance costs of FDA's proposed tobacco rule were estimated to be between \$174 million to \$187 million in one-time costs, and from \$149 million to \$185 million in annual operating costs. See Regulations Restricting the Sale and Distribution of Cigarettes and Smokeless Tobacco to Protect Children and Adolescents, 61 Fed. Reg. 44,396, 44,568–70 (Aug. 28, 1996).

EPA's power plant rule might plausibly be considered even more economically and politically significant than the FDA's regulation of nicotine would have been under the Food, Drug, and Cosmetic Act, which was at issue in *Brown & Williamson*.

It is tempting to waive away the analogy to *Brown & Williamson*. After all, in *Massachusetts*, the Supreme Court did not require Congress to speak clearly about the seemingly far more important *threshold* matter of whether the CAA covers GHGs. Why would it invoke the "major questions" canon for a secondary question concerning the application of performance standards in a specific statutory program? The simplest answer is a non-legal one concerning the changed composition of the Court. Justice Stevens, who authored *Massachusetts* (and who so effectively secured Justice Kennedy's vote⁵⁴), is no longer on the Court. Moreover, in *Massachusetts*, Justice Kennedy was no doubt moved, at least in part, by the fact that a state (indeed numerous states) sought redress for harms they could not remedy without EPA's help.⁵⁵ Yet federalism concerns might weigh against EPA in the case of the 111(d) rule if Justice Kennedy can be persuaded that the burden on states is overly intrusive.⁵⁶ In addition, while Justice Souter has retired, Justice Kagan has joined the Court, and it is hard to predict what she might do in a case like this.⁵⁷

Another reason I worry about the power plant rule is that, in light of the Court's reproving language in *UARG*, industry and state challengers will have a powerful narrative for explaining why EPA's approach goes too far: they will say that the rule will "bring about an enormous and transformative expansion"⁵⁸ in EPA's traditional regulatory authority by positioning the Agency as an energy regulator rather than a pollution regulator. My concern is that some members of the Court may be receptive to this narrative because they consider environmental and energy regulation to be about different things (in the words of the Chief Justice, "particulate emission" versus "light bulbs"⁵⁹), and regard

⁵⁴ Freeman & Vermeule, *supra* note 52, at 67–68.

⁵⁵ *Id.* at 68.

⁵⁶ See Neela Banerjee, *12 States Sue the EPA over Proposed Power Plant Regulations*, L.A. TIMES (Aug. 4, 2014), <http://perma.cc/3EQ9-NKJS>.

⁵⁷ Justice Kagan was in the majority in *City of Arlington v. FCC*, in which the Court held that even agency interpretations of their own jurisdiction are subject to *Chevron* review. 133 S. Ct. 1863, 1865, 1874–75 (2013). She also joined Justice Ginsburg's opinion in *EME Homer*. See 134 S. Ct. 1584, 1590 (2014) and *supra* text accompanying note 33. Yet, even that combination does not provide sufficient basis for predicting how she would react to the power plant proposal, which is at least arguably a more far-reaching assertion of authority than what the agencies had purported to do in either of those two cases. Obviously, Justice-specific considerations such as these only apply as long as the Court's current composition holds steady—and by the time the power plant rule reaches the Court, assuming it does, its membership may well have changed again. Still, based on what we know now, concern about the loss of Justice Stevens, the mercurial views of Justice Kennedy, and the uncertainty about Justice Kagan seems fair enough.

⁵⁸ *UARG*, 134 S. Ct. 2427, 2444 (2014).

⁵⁹ Transcript of Oral Argument, *supra* note 42, at 50–51.

the latter as beyond EPA's purview. This argument will require a forceful response to correct its essential misconception.⁶⁰

In reality, air pollution regulation, focused on public health and welfare, cannot help but affect the nation's energy mix. Complying with CAA standards necessarily affects investment and operational decisions in the utility sector because it raises the cost of using fuels, like coal, that produce significant amounts of both conventional and toxic pollution.⁶¹ Congress surely knew this when the statute was passed in 1970, but even if legislators did not fully appreciate the potential energy impacts then, they most certainly did when amending the CAA in 1977. Among other things, those amendments charged the newly established Clean Air Science Advisory Committee with advising EPA on the "energy effects" of various strategies for achieving and maintaining attainment of the NAAQS.⁶² In addition, Congress provided for short and temporary emergency reprieves from applicable requirements due to energy crises, though in very narrow circumstances.⁶³ Congress also added "energy requirements" to the list of things EPA must consider when setting New Source Performance Standards ("NSPS") and emission standards for hazardous air pollutants.⁶⁴

Yet, even as energy impacts became an explicit feature of the statute, Congress mandated only that they be considered or evaluated. Nothing suggests that EPA should shrink from its public health and environmental mission out of concern for the composition of the nation's energy mix. In fact, over the years, Congress has continued to demand even more from the utility sector under the CAA. Congress added a new air toxics program to the Act in 1990.⁶⁵ Those provisions identified 189 specific pollutants for which EPA was to set strict standards that all major sources would be required to meet.⁶⁶ The standards

⁶⁰ By contrast, the argument that the power plant proposal is unconstitutional has no basis in constitutional precedent and is largely hyperbolic. See Laurence H. Tribe, *The Clean Power Plan is Unconstitutional*, WALL ST. J. (Dec. 22, 2014), <http://perma.cc/ZNN9-HS57>. EPA's legal authority to regulate GHGs under the existing CAA has been ratified three times by the Supreme Court; industry does not have a constitutionally protected property right under the Fifth Amendment to mine and sell coal regardless of its adverse impacts on public health; and nothing in the power plant rule unconstitutionally "commandeers" state institutions in violation of the Tenth Amendment.

⁶¹ For example, the NAAQS for sulfur dioxide, which the Agency first set in 1971 and revised in 2010, have an outside impact on the utility sector because coal-fired combustion is responsible for 73% of sulfur dioxide pollution. *Sulfur Dioxide*, EPA, <http://perma.cc/SQ52-SR7V>. See also Part 50—National Primary and Secondary Ambient Air Quality Standards: Sulfur Oxides, 38 Fed. Reg. 25,678, 25,678 (Sept. 14, 1973); Primary National Ambient Air Quality Standard for Sulfur Dioxide, 75 Fed. Reg. 35,520, 35,520 (June 22, 2010).

⁶² 42 U.S.C. § 7409(d)(2) (2012).

⁶³ See, e.g., *id.* § 7410(f).

⁶⁴ See *id.* §§ 7411(a), 7412(d)(2) (requiring the Administrator to consider the "cost of achieving such emission reduction" and "energy requirements"). See also *id.* § 7521(a)(3)(A) (governing standards for mobile sources, and instructing the Administrator to give appropriate consideration to "cost, energy, and safety factors" when establishing technology-based standards).

⁶⁵ Clean Air Act Amendments of 1990, Pub. L. No. 101-549, § 301, 104 Stat. 2399, 2531 (codified at 42 U.S.C. § 7412).

⁶⁶ See 42 U.S.C. § 7412(b), (d)(2).

would further burden electric generating units, both new and existing,⁶⁷ because these units emit high quantities of mercury and other hazardous pollutants.⁶⁸ In addition, EPA's Cross-State Air Pollution Rule, which is authorized by the CAA's "good neighbor" provision,⁶⁹ and which was upheld by the Supreme Court in *EME Homer*,⁷⁰ also affects the electricity sector by requiring power plants to reduce emissions that interfere with downwind states' attainment of the NAAQS.⁷¹

Moreover, Congress's 1990 Clean Air Act Amendments explicitly target the electric utility sector's emissions of sulfur dioxide and nitrogen oxide, the constituents of acid rain.⁷² Congress for the first time adopted a market-based mechanism to control air pollution, establishing an absolute cap on emissions of sulfur dioxide from several hundred fossil fuel-fired sources, distributing pollution allowances among them, and authorizing them to buy and sell the allowances to achieve compliance with the cap.⁷³ Congress also set a stringent intensity-based limit on nitrogen oxides.⁷⁴ It did not escape Congress's notice that these environmental constraints would affect economic decisions in the utility industry, potentially leading to shifts in the energy supply. To ease the economic impact, Congress issued free allowances to the regulated sources⁷⁵ and phased the program in over time.⁷⁶ Notably, Congress explicitly allowed renewable energy and energy efficiency to be used as credits in the system, signaling clearly its understanding that lowering electricity demand can reduce pollution.⁷⁷ Congress also sought to ensure that nothing in these provisions would trample on the authority of the Federal Energy Regulatory Commission ("FERC") or the states.⁷⁸ But otherwise, the trading scheme was left to play out. Utilities would have to choose among different compliance options: install

⁶⁷ *Id.* § 7412(d)(3). Congress directed EPA in § 7412(n)(1)(A) to determine whether such regulation was "appropriate and necessary" for power plants, which EPA did find. Regulatory Finding on the Emissions of Hazardous Air Pollutants from Electric Utility Steam Generating Units, 65 Fed. Reg. 79,825, 79,826 (Dec. 20, 2000).

⁶⁸ For instance, power plants are responsible for 50% of U.S. mercury emissions, 62% of arsenic emissions, 60% of sulfur dioxide emissions, 28% of nickel emissions, 22% of chromium emissions, and 13% of nitrogen dioxide emissions. *Cleaner Power Plants*, EPA, <http://perma.cc/TF3X-BU7U>.

⁶⁹ 42 U.S.C. § 7410(a)(2)(D).

⁷⁰ 134 S. Ct. 1584, 1593.

⁷¹ Cross-State Air Pollution Rule, 76 Fed. Reg. 48,208, 48,208 (Aug. 8, 2011).

⁷² *Reducing Acid Rain*, EPA, <http://perma.cc/WJ3N-KYMQ>.

⁷³ *See id.*; Clean Air Act Amendments of 1990, Pub. L. No. 101-549, § 401, 104 Stat. 2399, 2584 (codified at 42 U.S.C. § 7651).

⁷⁴ *See* 42 U.S.C. § 7651f(b).

⁷⁵ *See* Paul L. Joskow & Richard Schmalensee, *The Political Economy of Market-Based Environmental Policy: The U.S. Acid Rain Program*, 41 J.L. & ECON. 37, 49-55 (1998) (referring to Senate negotiations over allocating emission allowances in the acid rain bill).

⁷⁶ *Acid Rain Program*, EPA, <http://perma.cc/4JE5-LL5F>.

⁷⁷ 42 U.S.C. § 7651c(f)(2).

⁷⁸ *See id.* § 7651b(f) (stipulating that the program not interfere with state regulation of "electric utility rates and charges," "modif[y] the Federal Power Act," "affect[t]" FERC's authority under that law, or "impair any program for competitive bidding for power supply" in states in which such programs were established).

pollution control equipment; switch to cleaner burning fuels; shift production capacity to cleaner units; or purchase excess allowances. Conceivably, some units might be retired. Indeed these possibilities were explicitly imagined as compliance strategies.⁷⁹ Of course, from an environmental perspective, shifting to cleaner burning fuels and retiring old coal-fired plants to address the severe consequences of acid deposition is good policy. What is less visible but equally true is that it constitutes energy policy as well.⁸⁰

Thus, as tempting as the narrative about regulatory overreach by usurping energy policy might be, it is a mirage. The truth is that environmental regulation and energy regulation are not easily separated.⁸¹ Recall that EPA's power plant proposal sets standards by considering not only what sources might achieve through a variety of improvements on-site, but also by considering that through other interventions elsewhere on the grid, these sources might be deployed less. This approach *embodies* the integration of environmental policy and energy policy because the environmental goal of pollution reduction requires changing the energy mix in the power sector—but this is neither surprising nor new.

Finally, EPA cannot be “preempted” from executing its statutory responsibilities simply because FERC and state energy regulators must perform theirs. Just as the Supreme Court in *Massachusetts* held that both EPA and the Department of Transportation could carry out their respective statutory duties simultaneously when implementing, respectively, GHG and fuel-efficiency standards (which they accomplished through joint rulemaking⁸²),⁸³ so can EPA, FERC, and state energy regulators carry out their duties quite compatibly to implement the power plant rule.

CONCLUSION

In a way, the Supreme Court's decision in *UARG* was anticlimactic. From the moment certiorari was granted, EPA had won. The Court had chosen to

⁷⁹ See Joskow & Schmalensee, *supra* note 75, at 41 (“[T]he 1990 law gave utilities with multiple fossil-fired generating units enormous and unprecedented flexibility in complying with emissions limits even if they traded no allowances at all with other utilities.”).

⁸⁰ Congress also sought to mitigate any adverse effects on the reliability of the electricity system. See 42 U.S.C. § 7651b(d).

⁸¹ If other examples were needed, EPA directly regulates the fuels used in the transportation sector. In addition to requiring gasoline in especially polluted areas to meet certain minimum requirements, the Agency administers the Renewable Fuel Standard. *Renewable Fuel Standard (RFS)*, EPA, <http://perma.cc/9TPY-NPKJ>. In addition, in 2010, EPA set GHG emission standards for passenger cars and trucks. See generally Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards, 75 Fed. Reg. 25,324 (May 7, 2010).

⁸² Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards, 75 Fed. Reg. at 25,324; Jody Freeman, *The Obama Administration's National Auto Policy: Lessons from the “Car Deal,”* 35 HARV. ENVTL. L. REV. 343, 358–64 (2011) (describing the joint rulemaking).

⁸³ 549 U.S. 497, 532 (2007).

review only the question of the PSD program's applicability to GHGs.⁸⁴ The Agency's endangerment finding for GHGs, the legal predicate for its regulation of mobile source emissions and the legal basis for its regulation of stationary source categories, was safe. EPA's overriding goal was to emerge from the *UARG* litigation without having compromised its pending proposal to use the NSPS program's section 111(d) to pursue the greater prize: reducing emissions from the nation's fleet of old and dirty coal-fired power plants. It had essentially achieved this already because of the narrowness of the cert. grant. Winning on the "anyway" issue while losing on the applicability issue was in fact the best possible result.⁸⁵ This explains why EPA greeted *UARG* with considerable relief and enthusiasm. The public might not understand just how good it was, but the government did.

Yet, this reading of the case, as I have argued here, provides false comfort. In fact, the decision is worse than anticipated because it is full of troubling hints and clues as to the Court's skeptical mood—legal improvised explosive devices that may well have been planted with the power plant rule in mind. This explains why what engulfed me upon reading *UARG* was not relief, but unease.

A successful defense of EPA's 111(d) rule is entirely achievable, but the government must do at least three things: (1) defend the reasonableness of its approach to BSER by differentiating the unique characteristics of the energy grid; (2) provide a limiting principle to bound its assertion of authority by identifying emission-reduction measures that would *not* be a permissible basis for setting standards; and (3) counter the alluring narrative about regulatory overreach by explaining that pollution standards already significantly impact energy markets.⁸⁶

EPA has enjoyed a remarkable winning streak recently in a series of CAA challenges in the D.C. Circuit and the Supreme Court.⁸⁷ But as all sports fans and Supreme Court watchers know, past wins cannot guarantee future victories. Perhaps Justice Scalia has done EPA a great favor by writing an opinion in *UARG* that cannot help but check any overconfidence in its tracks. And perhaps

⁸⁴ See *UARG*, 134 S. Ct. 418 (2013) (granting certiorari in part).

⁸⁵ The authority to control GHGs from sources subject to the PSD program "anyway," due to their emissions of large quantities of criteria pollutants, is still important to the Agency, however, because the PSD program is an important supplement to the NSPS program. EPA must revise NSPS standards only every eight years. 42 U.S.C. § 7411(b)(1)(b). In between revisions, states issue PSD permits and establish BACT standards for new and modified sources, filling a temporal gap between NSPS revisions. This helps to ensure that technology-based standards are continually increasing in stringency.

⁸⁶ On the crucial threshold issue, discussed *supra* note 28, EPA must convincingly reconcile the two versions of 111(d), which Congress passed and the President signed, as most sensibly prohibiting only duplicative regulation of pollutants.

⁸⁷ See, e.g., *Ctr. for Biological Diversity v. EPA*, 749 F.3d 1079 (D.C. Cir. 2014) (upholding EPA's decision not to set new NAAQS for sulfur oxides and nitrogen oxides because of uncertainties); *WildEarth Guardians v. EPA*, 751 F.3d 649 (D.C. Cir. 2014) (denying review of EPA's decision not to add coal mines to list of categories under CAA section 111); *Nat'l Ass'n of Mfrs. v. EPA*, 750 F.3d 921 (D.C. Cir. 2014) (rejecting challenges to EPA's revised primary NAAQS for fine particulate matter); *White Stallion Energy Ctr., LLC v. EPA*, 748 F.3d 1222 (D.C. Cir. 2014) (upholding Mercury and Air Toxics Rule).

the title of this essay should be, "Why I Am Grateful for *UARG*." My message is not that EPA is on shaky legal ground, just that the government has its work cut out for it.