ORAL ARGUMENT NOT YET SCHEDULED
Nos. 22-1030; 23-1285; 23-1337

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

AMERICAN GAS ASSOCIATION; AMERICAN PUBLIC GAS ASSOCIATION; NATIONAL PROPANE GAS ASSOCIATION; THERMO PRODUCTS, LLC; SPIRE INC., SPIRE ALABAMA INC.; SPIRE MISSOURI INC.,
Petitioners,

v.

U.S. DEPARTMENT OF ENERGY; OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY, DEPARTMENT OF ENERGY; JENNIFER M. GRANHOLM, SECRETARY, U.S. DEPARTMENT OF ENERGY,
Respondents.

On Petitions for Review of Final Rules of the
U.S. Department of Energy

JOINT PETITIONERS' PRELIMINARY REPLY BRIEF (DEFERRED APPENDIX APPEAL)

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APGA	American Public Gas Association
Br.	Petitioners' Joint Opening Brief
Commercial Water Heater Rule	Energy Conservation Program: Energy Conservation Standards for Commercial Water Heating Equipment, 88 Fed. Reg. 69,686 (Oct. 6, 2023)
Consumer Furnace Rule	Energy Conservation Program: Energy Conservation Standards for Consumer Furnaces, 88 Fed. Reg. 87,502 (Dec. 18, 2023)
December 2021 Interpretive Rule	Energy Conservation Program for Appliance Standards: Energy Conservation Standards for Residential Furnaces and Commercial Water Heaters, Notification of Final Interpretive Rule, 86 Fed. Reg. 73,947 (Dec. 29, 2021)
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Summary of Argument

I. Millions of American homes and businesses use noncondensing consumer furnaces and commercial water heaters. The Department concedes the Final Rules will eliminate those appliances from the market. And it "recognize[d]" that means millions of consumers replacing noncondensing appliances will be forced to undergo "difficult" installations that can require "relocat[ing]" their appliances or venting, resorting to "interior wall displacement," or making other "changes to the living space." Consumer Furnace Rule, 88 Fed. Reg. 87,502, 87,503-04, 87,564-65 (Dec. 18, 2023); December 2021 Interpretive Rule, 86 Fed. Reg. 73,947, 73,955 (Dec. 29, 2021); *see also* Commercial Water Heater Rule, 88 Fed. Reg. 69,686, 69,740, 69,782 (Oct. 6, 2023). Noncondensing appliances benefit consumers because they perform in their existing buildings without renovation. That performance characteristic is protected from elimination by the plain text of EPCA.

The Department concluded instead that "design parameters impacting installation complexity" do not qualify as performance characteristics under EPCA. 86 Fed. Reg. at 73,951. To start, that is a legal question of statutory

interpretation, not a "factual determination." *Contra* Resp. 27-28. And the statute makes clear that "performance characteristics" include design- and installation-related compatibilities. Br. 44-55.

The Department attempts to defend its view that "performance characteristics" include only a product's "basic functionality," but it does not explain how that squares with the statute's nonexclusive examples of "performance characteristics," many of which are unrelated to a product's "basic functionality." It admits that Congress has established product categories that turn on "where [the product] can be installed." Resp. 44. And it cannot distinguish its many past rulemakings, which repeatedly considered space constraints and installation requirements in establishing separate product classes. Respondent-Intervenors, for their part, resort to non-legislator testimony from 1986 discussing new standards that did not eliminate noncondensing appliances. That history says nothing about Congress's views on the utility provided by noncondensing technology.

Rather than square its contrary view with the statute, the Department tries to manufacture a factual dispute over the *extent* to which

noncondensing appliances benefit consumers. But as noted above, the Department has admitted that 39% of consumers with noncondensing furnaces will face a "difficult" replacement installation, which may require relocating their appliance or venting, "interior wall displacement," or "other changes to the living space." The Department now argues *some* consumers do not face those problems and that replacing a noncondensing appliance with a condensing appliance is not *impossible*. But the fact that noncondensing appliances allow millions of consumers to avoid challenging and intrusive replacements is legally sufficient to establish that noncondensing appliances provide a performance characteristic protected by EPCA.

II. The Department's defense of its economic justifications fails, too. By randomly assigning appliances to buildings in its model without regard for cost, the Department assumed that 60% of consumers who replace furnaces in existing homes and 80% of the homebuilders who install noncondensing furnaces in new buildings will make the wrong economic choice. Br. 82-84. But even though the Department admits that reliance on real-world "data" is important, Resp. 49, the Department never identified any such data

demonstrating that random assignment reasonably models real-world consumer decisionmaking.

The Department contends it gathered all the data it could, but this Court has already rejected that excuse because the Department bears the burden of establishing economic justification. And the Department provides no support for its made-for-litigation assertion that "well over half" of consumer decisions reflect market failures. That's not surprising. The Department did not rely on that assertion in the Proposed or Final Rules.

The Department also contends that it reasonably accounted for fuel switching even while its economic justification for the Final Rules did not depend on it. Regardless, the statutory language prohibiting consideration of fuel switching confirms it cannot economically justify the new standards. Because "savings" from fuel switching account for over half of the economic justifications for the Consumer Furnace Rule, and the remainder is a result of the flawed use of random assignment, vacatur is necessary.

III. The Department argues that the minimal notice-and-comment period for the Consumer Furnace Rule was harmless. But the Department

chose a deeply technical analytical method that required special software, denied stakeholders the raw data necessary to analyze it for most of the comment period, and yet now contends that the data were not "critical." For the Commercial Water Heater Rule, the Department has never released the relevant data. That is precisely the kind of gamesmanship the APA's notice and comment requirements should prevent.

IV. Finally, this Court should reject the Department's audacious request for remand without vacatur. The legal flaws in the Final Rules run through their cores. And given the Department's dawdling in promulgating new standards, it cannot now contend that new standards are urgently needed. By contrast, remand without vacatur would deprive Petitioners or their members of revenue and force consumers replacing noncondensing furnaces to forgo a noncondensing furnace. EPCA forbids that result.

Argument

I. The Final Rules Exceed the Department's Authority Because They Make Noncondensing Technology Unavailable to Consumers.

Restating the basics: EPCA prohibits amended standards that are likely to eliminate generally available performance characteristics from the

market. 42 U.S.C. § 6313(a)(6)(B)(iii)(II)(aa); *id.* § 6295(o)(4). The plain meaning of "performance characteristic" includes any product attributes that provide utility to the consumers. Br. 45-46. Noncondensing appliances provide utility to consumers because they satisfy the distinct "design requirement" of performing in the millions of existing buildings with unpowered venting (which noncondensing appliances use) rather than powered venting (which condensing appliances require). Br. 11-12, 47-50 (quoting 78 Fed. Reg. 64,068, 64,077 (Oct. 25, 2013)). The Department therefore may not establish standards that eliminate noncondensing technology. Br. 57-62.

The Department nevertheless contends that the Final Rules do not violate the unavailability provisions because "determining whether a more efficient design would compromise a product's performance characteristics or features is a fact-intensive inquiry," and because condensing and noncondensing technology "do not differ in the heating functions they perform or in how well they perform those functions." Resp. 27, 33. That attempt to deny that noncondensing technology provides performance characteristics is wrong from top to bottom.

A. The proper interpretation of "performance characteristic" is a legal question of statutory interpretation.

There is no dispute that noncondensing technology is designed for and performs with the unpowered venting already present in millions of consumers' buildings. Resp. 9, 37; Br. 3. The "question at hand" is therefore "whether non-condensing technology (and associated venting) is or is not a [performance characteristic]" under the statute. 88 Fed. Reg. at 87,512; §§ 6313(a)(6)(B)(iii)(II)(aa), 6295(o)(4).

The Department mischaracterizes that question as a "factual determination." Resp. 27-28. But the proper "meaning of a statutory term" is a "question of law." *Grand Canyon Tr. v. Bernhardt*, 947 F.3d 94, 96-97 (D.C. Cir. 2020). The Department recognized as much when it issued an "interpretive rule" adopting the new view "that utility is determined through the benefits and usefulness the feature provides to the consumer while interacting with the product, not through design parameters impacting installation complexity." 86 Fed. Reg. at 73,951.

The Department relied on this new *legal* interpretation to conclude that "non-condensing technology (and associated venting) is not a performance-

related 'feature'" under EPCA. *Id.* at 73,967. Indeed, the Department admits that "little has changed in terms of the technology or operation of the products/equipment" since the prior rule. *Id.* at 73,952. It thus reached this contrary conclusion by "revis[ing] its interpretation … of the requirements in EPCA." *Id.* at 73,948, 73,951. That question of statutory interpretation is neither a factual question nor a question on which the Department is entitled to deference. *See* Br. 63; *Loper Bright Enter. v. Raimondo*, No. 22-451, Slip Op. at 35 (U.S. June 28, 2024) ("Courts must exercise their independent judgment in deciding whether an agency has acted within its statutory authority, as the APA requires."); *id.* at 24 ("Congress expects courts to handle technical statutory questions.").

B. The Department's legal interpretation of "performance characteristic" cannot be squared with the statute or its prior rulemakings.

1. The Department claims "performance characteristic" means only "what the consumer perceives" as the "product's basic functionality … during the operation of the appliance." Resp. 25, 26. In this case, that would be producing hot air or water, meaning the Department may eliminate any

other product characteristic without violating EPCA. That view contravenes the statute's text and the Department's own prior rulemakings.

Start with ordinary meaning. The Department relies on definitions of "performance" and "feature," which together cover any "distinctive or characteristic part" of a product that affects its "operation." Resp. 25. Those definitions only prove Petitioners' case: Noncondensing technology *has* a distinctive characteristic—operating using unpowered, vertical venting. The Department then abandons its own dictionary definitions when it contends, instead, that "performance characteristics" are limited to "what the consumer *perceives* as the *function* of the product." Resp. 25 (emphasis added). But nothing in the text suggests that "performance characteristics" are limited to a consumer's subjective, post-installation perception of a product's basic functionality. In any event, a consumer will perceive that a condensing appliance will not function if installed with unpowered venting.

By contrast, Petitioners' interpretation is based on "[t]he literal language" of the statute, as even Intervenors concede. Intervenors 7 (citation omitted); *see* Br. 45-46. And while the Department focuses exclusively on the

term "feature," Resp. 25, Congress listed "features" as only one of many examples of "performance characteristics." §§ 6295(o)(4), 6313(a)(6)(B)(iii)(II)(aa).

Those non-exhaustive examples confirm that "performance characteristics" include much more than "what the consumer perceives as the function of the product" after installation and during operation. Resp. 25 (quoting 86 Fed. Reg. at 73,948); *see* Br. 46-50. The inclusion of "size"—as distinguished from "capacity" and "volume"—confirms that performance characteristics include whether a product fits in an existing space without modification. Likewise, Congress's listing of "reliability" means performance characteristics include not just a product's *function* but how often it breaks down and inconveniences consumers. The Department admits these statutory examples "illustrate" that the scope of "performance characteristics" includes not only what a product does but "whether and how well" the product works. Resp. 26. The Department does not square that admission with its

repeated assertion that "performance characteristics" include only a product's "basic functionality." Resp. 5.[1]

Section 6295(q)(1)(B) confirms that Congress was concerned about more than a product's basic functionality. That provision requires the Department to consider "the utility to the consumer" of any "performance-related feature" when determining whether that characteristic "justifies the establishment of a higher or lower standard." Br. 51. Section 6295(q)(1)(B) then directs the Department to consider *any* "factors the Secretary deems appropriate" when subdividing product classes. It does not limit performance characteristics to only a product's primary function or post-installation features with which a consumer directly interacts.

Nor does the Department meaningfully grapple with the product categories that Congress established. *See* Br. 53-55. Congress intentionally

[1] Intervenors argue that "performance characteristics" include only the "specific product elements" mentioned "in the text of the unavailability provision." Intervenors 15. But "the use of the word 'includes' indicates that [the statute's] list of [examples] is non-exhaustive." *United States v. Philip Morris USA Inc.*, 566 F.3d 1095, 1114 (D.C. Cir. 2009). And even if it were an exhaustive list, noncondensing technology is a "feature" under the plain meaning of the term. *See supra* 9.

preserved furnace categories that satisfy distinct physical installation requirements, § 6295(f)(1)-(2), categories of air conditioners designed to fit in particular spaces, § 6295(d)(4)(A)(ii), and categories of refrigerators and freezers with different types of condensing units, § 6313(c), (d)(1). The Department admits these statutory categories turn on "where [the product] can be installed," arguing only that Congress did not intend to bind the Department "by the same criteria." Resp. 44. But those defined product classes offer contextual evidence of the *kinds* of product attributes that Congress meant to preserve. *See Util. Air Regul. Grp. v. EPA*, 573 U.S. 302, 321 (2014) (an agency's interpretation must "account for both 'the specific context in which … language is used' and 'the broader context of the statute as a whole.'" (citation omitted)); *Nat. Res. Def. Council v. EPA*, 489 F.3d 1364, 1371 (D.C. Cir. 2007) (agencies may not "end-run around the statutory scheme enacted by Congress"). By prohibiting the Department from promulgating standards that render performance characteristics unavailable, Congress confirmed that the Department may not eliminate other, similar product classes even if Congress did not expressly define them. Noncondensing appliances offer the

same kind of design- and installation-related utility that the statutorily defined product classes offer, and so the Department may not eliminate them.

2. The Department contends its past rules have understood "performance characteristics" to refer only "to an appliance's functionality," Resp. 41. This is demonstrably wrong.

For instance, the Department admits that "oven-door windows" are a performance characteristic, Resp. 41. But windows are irrelevant to an oven's basic functionality of heating food. It likewise admits refrigerator icemakers provide a "performance characteristic," Resp. 6, even though icemakers are irrelevant to a refrigerator's "basic functionality" of cooling food, Br. 54-55. The Department's own brief therefore tacitly concedes that performance characteristics encompass more than just "basic functionality."

Perhaps most tellingly, the Department has recognized that noncondensing and condensing furnace fans provide important "performance-related features" to consumers. Br. 58-59 (quoting 79 Fed. Reg. 38,130, 38,142 (July 3, 2014)). Both types of fans provide the same basic functionality. The difference is that condensing furnace fans require greater power. Resp. 45.

That design difference does not change the product's basic functionality (blowing air), and a consumer never directly interacts with the furnace's fan. Rather, separate product categories are necessary because condensing furnaces will not work with noncondensing furnace fans. In precisely the same way, a condensing furnace will not work with unpowered venting.

With its interpretation in shambles, the Department falls back on the assertion that, whatever "performance characteristic" means, it has never treated "the manner of installation … as a protected product attribute." Resp. 41. Wrong again. Condensing furnaces, after all, can't be installed with furnace fans designed for noncondensing furnaces, so the Department preserved this less-efficient category of fans. And the Department has repeatedly considered "space constraints and similar limitations … when setting product classes." January 2021 Interpretive Rule, 86 Fed. Reg. 4,776, 4,782 (Jan. 15, 2021). While front-loading and top-loading washers both provide the basic functionality of washing clothes, Resp. 43, one of the relevant performance characteristics is that front-loading washers are designed "to be installed in confined spaces," 84 Fed. Reg. 37,794, 37,797 (Aug. 2, 2019).

That is not the only time the Department preserved separate product categories to accommodate "installation limitations," *id.*, and "design requirements," 78 Fed. Reg. at 64,077. Ventless dryers provide a performance characteristic because "a substantial subset of consumers" live in residences where vented dryers "are impossible to install," including because of "venting restrictions." 86 Fed. Reg. at 73,949. Noncondensing appliances provide the same performance characteristic. Br. 60. The Department distinguishes this past rule only by arguing, incorrectly, that "condensing units can be installed in the same places as non-condensing variants." Resp. 42-43. Not only is that wrong, Br. 49-50; *infra* 21, it fails to distinguish ventless dryers where consumers, too, could use a vented dryer if they altered their home, Br. 60.

Likewise, the Department has preserved separate categories of "manufactured home" furnace fans because they "meet certain design requirements," like the ability to be installed in "more compact" areas. 78 Fed. Reg. at 64,077. Weatherized and non-weatherized appliances also provide the same basic functionality, but weatherized appliances must satisfy different

design requirements because they are installed outside. 79 Fed. Reg. at 38,142.

The Department similarly admits that products designed to fit in differently sized spaces provide distinct performance characteristics. Resp. 43-44. The Department argues only that these past rulemakings are distinguishable because noncondensing and condensing appliances are approximately the same size. Once again, the Department misunderstands. Congress was not concerned about size for size's sake. Size allows the consumer to install an appliance that fits within the constraints of their existing building, which is why Congress included "size" *and* "volume" and "capacity" as examples of performance characteristics.

With the statute against them, Intervenors resort to legislative history. Intervenors 9-12. But "legislative history" should "never … be used to 'muddy' the meaning of 'clear statutory language.'" *Food Mktg. Inst. v. Argus Leader Media*, 588 U.S. 427, 436 (2019) (citation omitted). That is particularly true here, where Intervenors rely on "excerpts from committee hearings"

where non-legislators spoke. *Id.* at 437 (citation omitted). This is "among the least illuminating forms of legislative history." *Id.* (citation omitted).

Regardless, Intervenors are simply wrong that Congress's failure "to establish a separate class or other protection" for noncondensing venting means anything. Intervenors 9-12. Intervenors cite testimony during the 1986 congressional hearings where witnesses raised concerns that the new standard would eliminate natural draft appliances in small buildings. Intervenors 9-10. But that standard did not eliminate noncondensing appliances—they're around to this day. Congress therefore had no need to distinguish between condensing and noncondensing furnaces in 1986. *See also* Resp. 41-42 (noting that the Department has not established different standards for condensing and noncondensing appliances in the past but ignoring it has never proposed standards that would have eliminated noncondensing appliances); Intervenors 24-26 (same). This attempt to interpret congressional "inaction" is a "particularly dangerous ground" from which to derive meaning. *Pension Ben. Guar. Corp. v. LTV Corp.*, 496 U.S. 633, 650 (1990).

In short, both the statute and the Department's past rulemakings confirm that "performance characteristics" include design-related features that permit consumers to install and operate appliances in existing spaces that will not easily accommodate other types of the covered product. Br. 49.

C. Noncondensing appliances offer performance characteristics that condensing appliances do not.

Because the Final Rules will eliminate noncondensing appliances, Br. 10, the only remaining question is whether noncondensing appliances offer design- and installation-related features that condensing appliances cannot. They do. Only noncondensing appliances work in millions of buildings with unpowered venting. Condensing appliances will function (if they function at all) in those buildings only after time-consuming renovation in many cases, which is disruptive, expensive, and may require sacrificing windows, balconies, or other usable space. Br. 14-15, 49-50. Because noncondensing appliances allow consumers to avoid those harms, noncondensing technology qualifies as a performance characteristic.

1. The Department claims this question "implicates the Department's technical expertise" arguing it is "the agency's role to" make "factual

determinations regarding the appliances it regulates" and therefore to "identify performance characteristics." Resp. 27-28, 34. But EPCA requires the Department to determine whether "interested persons"—not the Department—"established by a preponderance of the evidence" that a standard is "likely to result in the unavailability" of "performance characteristics." §§ 6313(a)(6)(B)(iii)(II)(aa), 6295(o)(4).

"[I]nterested persons" thus need only make the modest showing that a standard is more likely than not to render the distinct utility provided by a certain product class unavailable. The Department's role is limited to determining whether interested persons met that evidentiary standard. *Id.* If they did, the Department "may not" prescribe the standard anyway simply because it disagrees that the performance characteristic is worth saving. *Id.*; *contra* Resp. 33-34 (asserting the Department "considered and properly rejected" Petitioners' arguments during the rulemaking).

Moreover, the Department did *not* rely on factual findings that noncondensing furnaces offer no utility. Rather, the Department determined that the utility noncondensing technology provides does not fit within its

updated "reading" of "performance characteristic." *See supra* I.A-I.B; 86 Fed. Reg. at 73,951. The Department's attempt to expand the basis for its decision by claiming its conclusion was based on its technical factual findings is a *post-hoc* rationalization that should be rejected. *See SEC v. Chenery Corp.*, 318 U.S. 80, 87 (1943).

Even if the Department could point to a "technical" determination, its conclusions turn on the Department's new, misplaced reading of the statute, and the Department identifies no basis for the Court to defer to this reading. "Congress expects courts to handle technical statutory questions." *Loper Bright*, Slip Op. at 24. Indeed, "many statutory cases call upon courts to interpret the mass of technical detail that is the ordinary diet of the law." *Id.* (cleaned up). The Department's attempt to couch its interpretation as a fact finding cannot save it or gain it deference.

2. Petitioners easily established that the Final Rules will more likely than not make the performance characteristics provided by noncondensing technology unavailable to consumers. They explained that "more than half" of existing buildings were built before condensing technology became

available and thus were designed to support noncondensing technology. Br. 13 (citing AGA Joint Comments, IR.CI-135 at 5 & n.7). Many of those buildings cannot install a powered venting system for condensing appliances because there is no exterior wall available for horizontal venting. Br. 14-15. For other buildings, code restrictions—which prohibit venting near sidewalks, windows, or other places people gather—prevent horizontal venting unless the building owner sacrifices a window or balcony. Br. 14-15. As the Department "recognize[d,]" the Final Rules would therefore require some homeowners to "relocate" their appliances or venting, resort to "interior wall displacement," or make other "changes to the living space." 88 Fed. Reg. at 87,564-65; 86 Fed. Reg. at 73,955.

Given these facts, condensing and noncondensing appliances plainly do not offer "substantially the same" performance characteristics. *Contra* Intervenors 20-24. Noncondensing appliances are different because they actually work in millions of buildings' ventilation systems without renovation.

3. None of the Department's arguments show otherwise. The Department claims it found that "in all cases" a condensing appliance *could* be

installed. Resp. 34. This is wrong twice over. *First*, the Department misrepresents its findings in the December 2021 Interpretive Rule. The Department actually said that consumers with buildings designed with unpowered venting could "in all cases" either install a condensing appliance or *switch* to "an electric appliance." 86 Fed. Reg. at 73,957. It thus concluded that the consumers facing challenging installations would have to switch to electric appliances.

And although the Department summarized comments *claiming* that "replacement of non-condensing units with condensing units is possible in all cases," it did not affirmatively find that was true. *Id.* at 73,962. The Department also acknowledged that *other commenters* said replacement is not always possible. *See, e.g.*, *id.* at 73,963 ("Bradford White commented that a non-condensing commercial gas-fired water heater installed in a high-rise building … would not be able to be replaced with a condensing equivalent … due" to building codes). And the Department expressly admitted that such replacements would sometimes be "impracticable" and so consumers would instead "choose to replace the existing appliance with one utilizing a

different fuel type." *Id.* If installing a gas appliance is so "impracticable" that consumers will switch to an electric appliance, the gas appliance is unavailable.

The Department's similar argument that it "credited a manufacturer's submission" that it is always "technologically feasible" to conduct noncondensing-to-condensing replacements in "commercial settings," and that it relied on a study finding it is "always possible" to install a condensing appliance, suffers from the same flaws. Resp. 34. Once again, the Department cherry-picks quotes from its *summary* of comments, not from *findings* the Department itself made. *See* 86 Fed. Reg. at 73,960-61. The Department ignores contrasting comments. *See, e.g.*, *id.* at 73,961 ("In contrast, … AGA et al. pointed to … a survey from installation contractors that … showed that atmospheric [unpowered] venting systems often prevent use of condensing furnaces."). And because the Department's bottom-line conclusion did not turn on that question, the Department never resolved that factual dispute. These *post hoc* attempts to expand the basis for the Department's decision should be rejected. *Chenery Corp.*, 318 U.S. at 87.

Second, the Department's focus on whether a consumer *can*, with enough money and time, replace a noncondensing appliance with a condensing appliance misses the point. Sure, there are consumers—whose buildings are designed for powered venting or whose appliance closet and building structure happen to be compatible with a condensing replacement—who can replace a noncondensing unit more easily. *See* Resp. 36-37. By focusing on these examples of easy installations, the Department simply minimizes consumers for whom noncondensing appliances provide important performance characteristics. *See also* Resp. 35-37 (contending that only 5% of condensing appliance installations were challenging by including in the denominator consumers replacing a condensing appliance with another condensing appliance).

But of the millions of consumers who own noncondensing furnaces, 39% will face "difficult" installations if they must replace it with a condensing appliance. 88 Fed. Reg. at 87,564; Intervenors 18-19. These "difficult" installations are not just expensive and time-consuming. They often require design changes (sacrificing a window or balcony), giving up usable space

(installing venting along the ceiling of existing rooms), or other structural changes ("interior wall displacement" or "equipment relocation"). 88 Fed. Reg. at 87,565; Br. 14-15.[2] Even now the Department concedes that renovations are necessary for "concealing venting pipes" and "accounting for commonly-vented" appliances. Resp. 32. The changes required to fit a condensing appliance in a building designed for noncondensing appliances often impose nearly $1000 or more in additional and otherwise unnecessary costs, while saving the consumer on average only $16 a year (using the Department's inflated calculation that includes fuel switching). 88 Fed. Reg. at 87,564; Br. 97. Even setting aside the costs, the permanent loss of space or desirable building features and the time and quality-of-life burdens experienced during renovation are easily avoided if consumers have access to

[2] The Intervenors wrongly contend Petitioners did not give "examples" of how installing noncondensing venting would deprive consumers of "windows, balconies, or other aesthetic features of a residence" or why building codes would prevent their installation. Intervenors 20. Petitioners and other commenters repeatedly demonstrated this point to the Department. *See* AGA Comments, IR.CI-44 at 6; AGA Comments, CWH.CI-34 at 9; WM Techs. Comments, CWH.CI-25 at 5-6; Air Conditioning Contractors of Am. Comments, CF.CI-398 at 3.

noncondensing appliances. Anyone who has needed to unexpectedly replace a major appliance quickly—like right before family visits for the holidays or during the dead of winter—knows the benefit of straightforward installations.

The Department further contends that noncondensing and condensing appliances themselves do not have meaningfully different "space requirements." Resp. 35. But the problem is not that the units themselves require different amounts of space. It's that the appliances have different *venting* requirements, which require renovations to the existing building just like an appliance that has greater space requirements.

Relatedly, the Department claims that replacing noncondensing appliances with condensing appliances is *possible*. Resp. 34-35. That is not true when building codes prohibit horizontal venting or installation would require infringing on someone else's property (as is often the case in condos and townhouses that share walls). AHRI Comments, IR.CI-139 at 2. Regardless, even if doing so might be theoretically possible, noncondensing appliances provide important "utility" to millions of consumers by allowing them

to install appliances that work within their existing house without requiring them to endure lengthy renovations, suffer through extended periods without the appliance, sacrifice windows, move walls, or give up usable space.[3]

The Department also accuses Petitioners of suggesting that lowered installation costs qualify as performance characteristics. Resp. 38-39. But it is the Department that misconceives all of the harms its new standards will impose as mere "cost issues." 86 Fed. Reg. at 73,959-60. The Department never denies that some consumers might undergo lengthy renovations that, beyond costing money, mean consumers lose time, go without an appliance, and may permanently be deprived of windows, balconies, or usable space.

Finally, the Department appeals to the statute's purpose of promoting energy efficiency. Resp. 39-40. But Congress has already balanced the interests here. Br. 69-71. The statute's prohibition on eliminating that technology does not "forever preserve" inefficient appliances, *contra* Resp. 40. It

[3] The Department also suggests that "developing technology" offers a "proof-of-concept" that might give a "*potential* solution[] that *could emerge* to *mitigate* installation issues related to venting." 86 Fed. Reg. at 73,962 (emphases added); Resp. 35. That speculation falls far short of negating commenters' preponderance of evidence.

preserves products, like noncondensing appliances, that provide important utility to consumers, as Congress intended.

* * *

Ultimately, the Department's attempt to manufacture a factual controversy just confirms that the real point of contention between the parties is whether the design-related benefits provided by noncondensing technology qualify as a performance characteristic under the statute. The Department admits that the new standards mean 39% of consumers with noncondensing furnaces will face challenging installations before a condensing appliance will function within their buildings. The Department does not deny that noncondensing appliances allow consumers to avoid these harms.

Rather, the Department contends only that the installation- and design-related features provided by noncondensing appliances cannot constitute a "performance characteristic"—no matter how disruptive, detrimental, or difficult installing a condensing furnace in a consumer's building might be. *See, e.g.*, 88 Fed. Reg. at 87,535-36. Because that interpretation of the statute is incorrect, the Final Rules must be vacated.

II. The Department's Defense of its Flawed Economic Analysis Fails.

The Department has never identified evidence establishing that random assignment reasonably models real-world consumer behavior. And although the Final Rules also repeatedly cite the "benefits" of forcing large amounts of consumers to switch from gas appliances to electric appliances under the new standards, the Department now contends that it did not rely on fuel switching. Because both economic justifications for the new standards have disappeared, the Final Rules must be vacated.

A. The Department has not shown that random assignment reasonably models market failures.

By randomly assigning appliances to buildings without regard for "life-cycle costs," the Department "assume[d] a purchaser's decisions will not align with its economic interests." *APGA v. DOE*, 22 F.4th 1018, 1027 (D.C. Cir. 2022) ("*APGA I*"). The Department attempts to justify this assumption because consumers *sometimes* act against their economic interest. The question nonetheless remains: what proportion of consumers do so? Evading the issue, the Department arbitrarily assumed consumers disregard economics and assigned furnaces to individual buildings at random. As a result,

the Department's model arbitrarily assumed that 60% of consumers who replace furnaces in existing homes and 80% of for-profit builders who install noncondensing furnaces in new buildings make economically irrational choices. Br. 83, 86; Consumer Furnace Life-Cycle Cost (LCC) Results Spreadsheet ("LCC Spreadsheet"), CF.CI-4104. The Department never identified any evidence demonstrating the extent of market failures, much less market failures to *this* extent; instead, it arrived at these numbers randomly. Because these random assumptions greatly inflate the Final Rules' projected cost savings, the Department's economic justification analysis is unlawful.

1. The Department never addresses its failure to establish an empirical basis for random assignment. Rather, it muddies the water by arguing that it *did* rely on "real-world data" in *other* aspects of its economic justification analysis. Resp. 52. Petitioners agree that the Department used real-world data to identify the market shares for appliances of varying efficiencies and weighted the share of those appliances in its model by type of construction, type of building, and region. Br. 23-25; *see* Resp. 47-52, 63-64; Intervenors 32. As the Department admits, it did so because those shares reflect the "weight

that consumers have actually placed" on choosing an appliance that best balances "initial costs as compared with operating costs," Resp. 49.

The problem is that despite allocating appliances so that the model's *overall* market share matched the real world, it then assumed that *individual* consumers choosing an appliance for a *particular* building would not show any preference for installing the appliance with the lowest life-cycle cost and/or initial cost. Br. 25-28. That resulted in the model repeatedly assigning a noncondensing furnace even if that particular building's characteristics meant that a condensing furnace would offer a far cheaper total life-cycle cost (or vice versa). Br. 25-28. The Department's reliance on real-world data to model consumer preference at the market-wide level thus reveals the arbitrariness of its reliance on random assignment to model consumer preference at the building level.

As this Court has previously explained when reviewing similar rules, the random "assignment of efficiencies to the buildings in the sample was a crucial part of the analysis supporting [the Department's] conclusion that a more stringent standard was warranted." *APGA I*, 22 F.4th at 1027. The

Department does not contest that "80% of the time the Consumer Furnace model assigned new home builders a noncondensing furnace when a condensing furnace would have been cheaper to install." Br. 77-78; LCC Spreadsheet, CF.CI-4104. It contends only that such installations constitute a small percentage of all the buildings in the model, Resp. 65-66—ignoring they account for a disproportionate amount of the model's projected savings, Br. 99. The Department likewise admits that "the Department's analysis randomly assigned 60% of the replacement furnace installations for existing homes to the less economically rational option." Br. 84; LCC Spreadsheet, CF.CI-4104; *see also* Resp. 66.

As this Court has explained, such use of random assignment thus "inflated the economic value of a more stringent standard" by assuming consumers would act irrationally and the new Rule would force them to fix that irrationality. *APGA I*, 22 F.4th at 1027. That is, the Department credited its new standard with the supposed savings from fixing these irrationally assigned appliances by "assign[ing] the benefits of that choice to its rule, rather than attributing it, correctly, to the purchaser's rational decision making."

Id.; *see also* Br. 26-27. The irrational assignment of furnaces in new buildings accounted for a significant portion of the Department's projected life-cycle cost savings that are not from fuel switching. Br. 99. Had the Department rationally (rather than randomly) assigned furnaces to existing buildings and not relied on fuel switching, the Furnace Rule would impose a *net cost* of $2,538,205 on consumers. Br. 99. Again, the Department disputes none of this. *See* Resp. 65-66.

Rather, the Department merely argues this Court cannot consider these numbers because they were not submitted during the notice and comment period. Resp. 65. But these numbers are from the Department's *own* spreadsheet. *See* LCC Spreadsheet, CF.CI-4104; *contra* Resp. 65 (citation omitted). Petitioners' declaration merely pinpoints where in that sprawling spreadsheet these tallied numbers can be found. The Department cannot hide its analysis within complex, voluminous spreadsheets and then fault Petitioners for explaining what that data shows to the Court. Indeed, the Department *itself* offers new "figure[s] … derived" from raw data in its brief, but without showing its work. *See* Resp. 58-59 & n.2, n.3.

And, to be clear, Petitioners *did* raise objections to the use of random assignment during the notice and comment period, arguing that the Department's use of random assignment is "overestimating the proposed standards' benefits." AGA Comments, CF.CI-405 at 58; *see also* Spire Comments, CF.CI-413 at 22-43 ("over 62%" of the projected savings for the proposed Consumer Furnace Rule in the data accompanying the proposed rule came from random assignments that assumed consumers would select a furnace with higher installation *and* operating costs); APGA Comments, CF.CI-387 at 22 ("Random assignment … inflates [life-cycle cost] benefits."). Petitioners' critique of the Department's random assignment analysis cannot possibly be surprising to the Department, especially because it does not deny Petitioners' numbers are accurate. The Department had more than enough notice of the substance of Petitioners' criticisms. *See Ohio v. EPA*, No. 23A349, Slip Op. at 15-17 (U.S. June 27, 2024).

More importantly, the Department never justified using the numbers Petitioners flag. It merely doubles down on its assertion that consumers sometimes act against their economic interest. Resp. 13-14, 19-20, 54-57.

Despite the Department's misrepresentations, Petitioners have never argued consumers are "perfectly rational." *See* Br. 80 (admitting "consumers are not perfectly rational"); *contra* Resp. 52 (misrepresenting Petitioners' brief).

As Petitioners previously stated, "[t]he question is not whether market failures exist to some extent, but whether random assignment reasonably simulates those failures." Br. 80. The Department *never* identified any real-world data estimating the frequency of these market failures, much less demonstrated that assuming consumers act randomly, as if they *never* consider their economic interests, is a reasonable way to approximate real-world consumer behavior. *See also* Intervenors 30 (same failure).

Intervenors contend that the Department used the Monte Carlo statistical method, which is "a reliable way to evaluate risk." Intervenors 27-28. But they cite examples of the technique being used in other contexts, not to model consumer decisionmaking. An otherwise valid statistical technique may produce arbitrary results when misused. *See* Br. 75. Here, the Department's use of random assignment resulted in a model where 80% of the non-condensing furnaces assigned to new construction and 60% of all

replacement furnace installations for existing homes represented a market failure. It is arbitrary and capricious for the Department to assume, without data, that market failures are that prevalent.

2. Try as it might, the Department cannot explain away the missing empirical support for its use of random assignment.

First, the Department's contention that it "gathered all the data it could" plainly does not justify its irrational assumptions. Resp. 60. This Court has already found that the Department's argument that "it did the best it could with the data it had" is "not enough to justify assuming a purchaser's decisions will not align with its economic interests." *See APGA I*, 22 F.4th at 1027. The Department bears the burden of producing substantial evidence supporting its determination that the Consumer Furnace Rule is economically justified. Br. 72; § 6295(o)(2)(A). And the Department must establish by "clear and convincing evidence" that the Commercial Water Heater Rule is economically justified. § 6313(a)(6)(A)(ii)(II).

Thus, the Department and Intervenors are incorrect in their repeated attempts to place the burden on Petitioners. *See, e.g.*, Resp. 60 (asserting that

Petitioners, not the Department, must establish the degree to which consumers act irrationally); Resp. 64 ("Petitioners fail to identify data demonstrating a significant correlation between furnace purchase decisions and any variable that is not included in the model."); Intervenors 31 (suggesting Petitioners had the burden of "offering … evidence" that random assignment does not reasonably model consumer decisionmaking). These are tacit admissions that the Department cannot point to real-world data—much less substantial or clear and convincing evidence—establishing that its use of random assignment reasonably approximated real consumer behaviors.

In any event, the Department's assertion that it is unaware of any evidence that considering economic incentives would "meaningfully improve the model" is plainly wrong. Resp. 52. The Department's own shipping data reveals a 99% correlation between condensing furnace market share and economic incentives. Br. 85 (citing AGA Comments, CF.CI-405 at 61). It admits that the real-world appliance market share varies depending on the size of building in which the appliance is installed, how much of the year a building needs heat, and whether the building is a new construction or existing

building. Resp. 31, 49-51; *see also* Br. 84-86. That data plainly shows not only that consumers account for the trade-offs between "operating costs" and "initial costs" when choosing an appliance, Resp. 49, but also that "many consumers … make the choice that is cost-justified in the long run," Resp. 61. The Department thus acknowledged that overall market distribution reflects consumer consideration of economic incentives, but then assigned appliances to individual buildings without regard for those economic incentives.

Nor would it have been difficult for the Department to adjust the model to consider economic incentives. The Department did exactly that when accounting for potential fuel switching. Br. 95-96; 88 Fed. Reg. at 87,588.

Second, the Department resorts to *new* justifications not given in the Final Rules. But "[a]n agency must defend its actions based on the reasons it gave when it acted." *DHS. v. Regents of the Univ. of California*, 140 S. Ct. 1891, 1909 (2020). It "may not provide new ones." *Id*. at 1908.

Specifically, the Department argues for the first time that "market failures infect well over half of the relevant consumer decisions." Resp. 58-60.

The Final Rules say nothing of this sort. Instead, the Rules admit the Department found "no studies … specific to how consumer furnaces are purchased," *see* 88 Fed. Reg. at 87,580, and that the Department made "assumptions regarding market failures," 88 Fed. Reg. at 69,760.

The Department appears to derive this number by citing data about the number of buildings owned by consumers who are susceptible to "misaligned incentives," and then leaping to the assumption that because market failures *can* occur in those cases, they *always* occur. Resp. 58-60. The Department has never before suggested that a market failure occurs with every landlord, contractor, and emergency installation. The Department cites nothing establishing how prevalent those market failures are, let alone that they always occur. The Department simply asks Petitioners, and this Court, to take its word for it, but "courts may not accept appellate counsel's *post hoc* rationalizations for agency action." *Burlington Truck Lines, Inc. v. United States*, 371 U.S. 156, 168 (1962).

In reality, the Department's model relied on random assignment, *not* the newly minted assumption that "well over half" of furnace and water

heater installations involve market failures, to guess at the extent of market failures. Because the Department's use of random assignment was improper, the Final Rules must be vacated.

B. The Department no longer relies on fuel switching and, in any event, its defense of fuel switching fails.

Over half of the Department's modeled savings for the Consumer Furnace Rule come from fuel switching. Br. 95. Yet the Department has now disclaimed reliance on fuel switching to justify the Final Rules. Resp. 71. That alone unravels the Rules. The Department calculates that the Consumer Furnace Rule will cost consumers facing "difficult" installations about $900 more in upfront costs. 88 Fed. Reg. at 87,559, 87,564. Meanwhile, the Rule's purported "savings," without fuel switching (but with random assignment), shrink to $8 per year. That's like spending $900 to get a "free" footlong Cold Cut Combo® from Subway annually. After correcting the Rule's random assignment *and* eliminating fuel switching, the Rule winds up *costing* consumers millions.

The Department's only explanation for why the Final Rules remain economically justified is that, if the Department is allowed to use random

assignment, their savings remain positive (meaning that even one penny of savings could justify them). Resp. 70-71. If that were enough, Congress would not have provided seven factors for the Department to consider as part of its economic analysis, Br. 92-93, nor would it have created a rebuttable presumption that a standard is justified if the consumer will break even within the first three years. Br. 98. The Department needed to explain why the Final Rules would be justified without fuel switching. It did not, so the Rules must be vacated. Even if it had, because any remaining savings of the Rules without fuel switching are a result of random assignment, if Petitioners are correct that random assignment is unlawful, then the Rules must be vacated as well. Br. 99.

To the extent the Department continues to rely on fuel switching, its defense of that assumption fails.[4]

[4] The Department's use of fuel switching also improperly permeated other parts of its analysis that it does not address. For example, the National Impact Model, used to project total energy savings, relied on the purported benefits from fuel switching. *See* Technical Support Document, CF.CI-4100 at 10A-2.

1. The Department has no meaningful response to Petitioners' argument that the statute requires the Department to consider the economic impact on "consumers of the products *subject to [the amended] standard*." Br. 92-93 (quoting § 6295(o)(2)(B)(i) (emphasis added)). The Department argues only that the statute "permits the agency to consider the economic effect of a decision to switch from gas to electric appliances." Resp. 70. Rather than engaging with the relevant statutory text and context, the Department simply quotes two factors and makes the blanket assertion that they "permit[] the agency to consider the economic effect of a decision to switch from gas to electric appliances." Resp. 70. That is pure *ipse dixit*.

The Intervenors, in turn, point to two factors that permit the Department to consider "the need for national energy and water conservation" and "other factors the Secretary considers relevant." §§ 6295(o)(2)(B)(i)(VI), 6313(a)(6)(B)(ii)(VII). Neither establishes that the Department can rely on fuel switching, and the Department expressly stated that "no other factors" were relevant. 88 Fed. Reg. at 87,637; Br. 97-98 n.9.

Nor does the Department address other provisions in EPCA that require the Department to set standards that neither rely on nor produce significant shifts from gas products to electric products. Section 6295(q)(1)(A) requires the Department to set different standards for covered products that "consume a different kind of energy from that consumed by other covered products within such type (or class)." *See* Br. 93-94. The Department has recently admitted that this section establishes a policy of "fuel neutrality" by requiring the Department to "consider[] the improvement in energy efficiency feasible and justified for electric products *separately from gas- or oil-fueled products*." 89 Fed. Reg. 35,384, 35,591 (May 1, 2024) (emphasis added). And, as Intervenors further admit, Congress's initial standards for furnaces prohibited the Department from establishing a standard for small furnaces that would "result in a significant shift from gas heating to electric resistance heating." § 6295(f)(1)(B)(iii).[5]

[5] Intervenors contend that Congress's express prohibition on fuel switching in the small furnaces context means it did *not* intend to prohibit consideration of fuel switching for other standards. Intervenors 35-36. That argument ignores the broader statutory context, which clarifies that the prohibition in

With the statute squarely against it, the Department instead argues it has "long considered fuel switching in rulemakings." Resp. 69. But the Department fails to identify any rule where it interpreted the statute and determined that considering the "benefits" of fuel switching was permissible. *See Vill. of Barrington, Ill. v. Surface Transp. Bd.*, 636 F.3d 650, 660 (D.C. Cir. 2011) (prior agency statutory interpretations relevant only if "the agency has offered a reasoned explanation for why it chose that interpretation"). The Department's references to fuel switching during its economic justification violated the statute.

2. The Department's assumption that consumers will choose to fuel switch when it is economically rational but will otherwise ignore economics remains arbitrary and capricious, too. Br. 95-96.

The Department contends that it merely "'estimate[d] an outer bound' for the 'maximum' amount of fuel switching that might occur as a result of amended standards." Resp. 61 (quoting 88 Fed. Reg. at 87,587). That is

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§ 6295(f)(1)(B)(iii) is just one part of EPCA's greater policy of "fuel neutrality." 89 Fed. Reg. at 35,591.

precisely the problem. The Department assumed that consumers would always fuel switch when rational to do so, thus more than doubling the Department's projected life-cycle cost savings from the rule. Br. 99; LCC Spreadsheet, CF.CI-4104. When assigning appliances to buildings, however, the Department did not assume consumers would act rationally. The Department thus arbitrarily assumed consumers would or would not act rationally depending on what assumption would most inflate the projected cost savings for the Consumer Furnace Rule.

3. The Department's contention that the Consumer Furnace Rule would be economically justified even without fuel switching highlights the problem with random assignment. Resp. 71; Intervenors 38. If the Department's use of random assignment was unlawful, the Consumer Furnace Rule must be vacated. That is because without the "savings" from making consumers buy electric appliances, the Rule imposes millions of dollars of net costs after correcting the randomly assigned appliances. *Supra* 41. The Department has therefore not shown "it was reasonable for the [Department] to conclude the Final Rule[s were] supported by" sufficient evidence of

economic justification. *APGA v. DOE*, 72 F.4th 1324, 1343 (D.C. Cir. 2023) (quoting *APGA I*, 22 F.4th at 1022).[6]

III. The Department's Arguments Confirm the Procedural Defects in the Consumer Furnace Rule.

The Department asserts the Consumer Furnace Rule's truncated notice and comment period was harmless. Resp. 74-75. But the Department denied commenters access to the raw data it relied on to conclude the Final Rules are economically justified.

The Department gave stakeholders only 60 days—rather than the 75-day minimum contemplated by the Department's own implementing regulation—to comment on the proposed Consumer Furnace Rule. Br. 102. Yet the Department did not initially disclose the raw data underlying its economic justification analysis, denying commenters the ability to meaningfully review the Department's exceedingly technical analysis. Br. 102. The Department eventually released updated information at Petitioners' request but

[6] The Department makes a passing reference to climate benefits, Resp. 78, but the Final Rules explicitly disavowed reliance on any "other factor," including the purported climate benefits, as establishing economic justification. 88 Fed. Reg. at 87,637; Br. 97-98 n.9.

gave commenters only 37 days to review it. Br. 102-03. Worse, for the Commercial Water Heater Rule, the Department has *never* provided the raw data necessary to analyze the Department's use of random assignment in the economic analysis. *See* Br. 87-88; *Vinyl Inst., Inc. v. EPA*, No. 22-1089, 2024 WL 3308356, at *4 (D.C. Cir. July 5, 2024) (EPA's reliance on "non-public … spreadsheets" violated "a bedrock principle of administrative law: agency action is upheld only 'upon the validity of the grounds upon which the [agency] itself based its action.'" (quoting *Chenery Corp.*, 318 U.S. at 88)).

The Department denies that these data were "critical factual information." Resp. 74. But this information is integral to Petitioners' ability to quantify the extent to which the Department's use of random assignment inflates its economic justifications. *See* Br. 87-88. Indeed, the Department separately faults Petitioners for not earlier describing the absurdities in the Department's data (data which are different from its proposed data and were never released until the Final Rule). *See* Resp. 64-65; *supra* 33-35.

In sum, the Department chose an analytical method (random assignment) that required special software, Resp. 73-74, denied stakeholders access

to the underlying raw data for almost two-thirds of the comment period, and now—when confronted with an explanation of what that raw data shows—argues both that the raw data is not "critical factual information" *and* that Petitioners should have explained how the data demonstrates their methodological flaws earlier. This is precisely the kind of "failure to provide an opportunity for comment on the model's methodology" that "constitutes a violation of the APA's notice-and-comment requirements." *Owner-Operator Indep. Drivers Ass'n, Inc. v. Fed. Motor Carrier Safety Admin.*, 494 F.3d 188, 201 (D.C. Cir. 2007).

IV. Vacatur is the Appropriate Remedy.

The APA requires the Court to "hold unlawful and set aside agency action" that is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706. "The ordinary practice … is to vacate unlawful agency action," *Standing Rock Sioux Tribe v. United States Army Corps of Eng'rs*, 985 F.3d 1032, 1050 (D.C. Cir. 2021) (cleaned up), and remand without vacatur is appropriate, if at all, only in "limited circumstances." *Am. Hosp. Ass'n v. Becerra*, No. 18-2084, 2022 WL 4534617, at *2 (D.C. Cir. 2022)

(cleaned up). In determining whether those circumstances exist, this Court "considers first, the seriousness of the [action's] deficiencies, and, second, the likely disruptive consequences of vacatur." *Id.* Neither consideration favors remand without vacatur here.

First, the defects in the Final Rules are fundamental. Despite the Department's best efforts to deny it, the Department's determination that non-condensing technology is not a "performance characteristic" turned on a question of statutory interpretation. *Supra* I.A. The Department is wrong on that point, and no further "explanation" could "cure [that] defect." *Heartland Reg'l Med. Ctr. v. Sebelius*, 566 F.3d 193, 198 (D.C. Cir. 2009). Likewise, the Department's reliance on random assignment and fuel switching accounts for *all* the Department's projected cost-savings to consumers in the Consumer Furnace Rule. The Department has never offered an economic justification that did not depend on random assignment. If the Department improperly relied on those analytical techniques, its economic justification analysis is flawed to the core.

Second, vacatur would have no disruptive consequences, but remanding without vacatur *would*. The Department concedes its standards for consumer furnaces have been unchanged since 2007 and that its standards for commercial water heaters have been unchanged since 2015. Resp. 78. Given this lengthy period of inaction, it cannot now reasonably argue that requiring the Department to take the time necessary to promulgate legally compliant standards will unduly harm consumers. Moreover, the Department also concedes that condensing appliances already form a growing share of the market, Resp. 31, so vacating the Final Rules will not drastically impact energy efficiency.

By contrast, vacatur is necessary to provide Petitioners (and consumers) full relief. Petitioners have members (and customers) across the country. *See, e.g.*, Lani Decl., ¶ 4; Dill Decl., ¶ 3; Nussdorf Decl., ¶ 4. If those Final Rules are remanded without vacatur, Petitioners will irretrievably lose annual revenue and manufacturers will be forced to make potentially irreversible changes to their operations by removing the option of manufacturing and selling noncondensing appliances. Murray Decl., ¶ 10; Gallard Decl.,

¶ 7; Nussdorf Decl., ¶ 8; Keuhl Decl., ¶ 7. Nationwide vacatur is thus necessary to give full relief to the "parties in [this] case." *Contra* Resp. 77 n.5.

Worse, remand without vacatur could deprive Petitioners the ability to remedy future flaws in the Department's rationale. *See Ohio v. EPA*, 98 F.4th 288, 302 (D.C. Cir. 2024) (holding fuel suppliers lacked standing to challenge fuel economy standards because they could not show manufacturers, who were already complying with the challenged standards, would re-convert their product lines). Thus, remand without vacatur would be highly prejudicial to Petitioners absent a guarantee that the remand and subsequent judicial review would be complete in time for Petitioners to meet the compliance deadlines.

And if the Department's Final Rules are unlawful, consumers should not be required to incur the tremendous costs associated with replacing their noncondensing appliances with condensing appliances. A consumer that is forced to replace a noncondensing appliance while the unlawful rule is remanded to the agency cannot simply switch back if the Department ultimately concludes there should be separate efficiency standards for

noncondensing appliances. This Court should vacate the Final Rules so that Petitioners and consumers are protected from the significant and irreparable costs the new standards would otherwise impose.

Conclusion

This Court should vacate the December 2021 Interpretive Rule, Consumer Furnace Rule, and Commercial Water Heater Rule.

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Respectfully submitted,

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Certificate of Compliance

I hereby certify that the foregoing brief complies with the requirements of Federal Rule of Appellate Procedure 32(a)(5) and (a)(6) because it has been prepared in 14-point Palatino Linotype, a proportionally spaced font. I further certify that this brief complies with the type-volume limitation of 9,000 words imposed by this Court's January 29, 2024 order concerning the briefing format in these consolidated cases, Document No. 2025589, *AGA v. DOE*, No. 22-1030 (D.C. Cir.), because, excluding the parts of the brief exempted by Federal Rule of Appellate Procedure 32(f) and D.C. Circuit Rule 32(e)(1), it contains 8,993 words according to the count of Microsoft Word.

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Certificate of Service

I hereby certify that on July 10, 2024, I electronically filed the foregoing using the Court's CM/ECF system, which will send notification of such filing to the Parties.

/s/ Michael B. Schon
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