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No. 15-1363 and Consolidated Cases

In the United States Court of Appeals for the District of Columbia Circuit

STATE OF WEST VIRGINIA, et al.,
Petitioners,

v.

ENVIRONMENTAL PROTECTION AGENCY, et al.,
Respondents.

ON PETITION FOR REVIEW OF A FINAL RULE OF THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

BRIEF OF *AMICI CURIAE* CITIZENS UTILITY BOARD, CONSUMERS UNION, AND PUBLIC CITIZEN, INC. IN SUPPORT OF RESPONDENTS

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COMBINED CERTIFICATES

Certificate as to Parties, Rulings, and Related Cases

As required by Circuit Rule 28(a)(1), counsel for *amici curiae* Citizens Utility Board, Consumers Union, and Public Citizen, Inc., certify as follows:

Except for Citizens Utility Board, Consumers Union, and Public Citizen, Inc., all parties, intervenors, and *amici* that have appeared in this Court are listed in the Brief for Respondent Environmental Protection Agency (EPA). References to the rulings at issue and related cases appear in the Brief for Respondent EPA.

Certificate of Counsel Under Circuit Rule 29(d)

Amici are non-profit organizations that represent the interests of utility ratepayers and consumers. Citizens Utility Board is a Chicago-based, nonpartisan, non-profit organization that represents the interests of residential-utility customers in Illinois. Consumers Union of United States, Inc., d/b/a Consumer Reports, and Public Citizen, Inc. are non-profit membership organizations representing the interests of consumers nationwide. *Amici* file this brief to provide the Court with a consumer-focused perspective on the EPA's Clean Power Plan, and to demonstrate that the plan is in the interest of American consumers—reducing long-term electricity costs and improving consumers' health and well-being. Because no other *amicus* brief contains this material, a separate brief is necessary.

Citizens Utility Board (CUB) is a statutorily created non-profit organization whose mission is to represent the interests of residential and small commercial utility customers in state and federal regulatory and judicial proceedings. CUB is a membership-funded organization with approximately 100,000 members across Illinois. CUB participates in proceedings before state public utility commissions and the Federal Energy Regulatory Commission, and works with the Regional Transmission Organizations that operate wholesale electricity markets. CUB works to ensure safe, reliable, and affordable electric service for consumers.

Consumers Union is the public policy and advocacy division of Consumer Reports, an expert, independent, non-profit organization, founded in 1936, whose mission is to work for a fair, just, and safe marketplace for all consumers and to empower consumers to protect themselves. Consumers Union's work includes advocating on behalf of the interests of residential electric utility customers in federal and state policy to promote sustainable, reliable, and

affordable electric service for consumers, including robust investment in energy efficiency and cost-effective renewable energy investments that appropriately account for health costs and other externalities borne by consumers.

Public Citizen, Inc., is a consumer advocacy organization that appears on behalf of its members and supporters nationwide before Congress, administrative agencies, and the courts on a wide range of issues, and works for enactment and enforcement of laws protecting consumers, workers, and the public. Celebrating its 45th anniversary this year, Public Citizen has long been concerned about issues relating to the nation's energy supply. The organization's Energy Program and its Texas office both engage in research and advocacy with the goal of promoting affordable, clean, and sustainable energy, and some of the analysis in this amicus brief draws on Public Citizen's research about the effects of the Clean Power Plan on consumers' utility bills. In addition, Public Citizen is keenly interested in protecting consumers against excessive electricity rates, as reflected in its participation in many cases in the federal courts and before administrative agencies concerning energy regulatory policy.

Corporate Disclosure Statement

Amicus Citizens Utility Board has no parent corporations. It has no stock, and hence, no publicly held company owns 10% or more of its stock.

Amicus Consumers Union of United States, Inc., d/b/a Consumer Reports has no parent corporations. It has no stock, and hence, no publicly held company owns 10% or more of its stock.

Amicus Public Citizen, Inc. has no parent corporations. It has no stock, and hence, no publicly held company owns 10% or more of its stock.

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TABLE OF AUTHORITIES*

Cases

National Association for Surface Finishing v. EPA, 795 F.3d 1 (D.C. Cir. 2015) 1

National Wildlife Federation v. EPA, 286 F.3d 554 (D.C. Cir. 2002) 1

Statutes

220 Ill. Comp. Stat. 5/8-103(b) 18

Regulations

* 80 Fed. Reg. 64,662 (Oct. 23, 2015) 9, 11, 12, 13, 14, 15, 21, 25

Other authorities

Sherzod Abdukadirov, Mercatus Center at George Mason University, *Expert Commentary: Debate over Furnace Efficiency Standards Heats Up*, The Hill (July 6, 2015) 12

American Council for an Energy-Efficient Economy, *Energy Efficiency and Low-Income Communities in the Clean Power Plan: A Billion Dollar Deal* (Nov. 12, 2015) 10

* David Arkush, Public Citizen, *Clean Power, Clean Savings: The EPA Clean Power Plan Can Cut Household Electricity Bills in Every State* (2015) 7, 30

Galen Barbose, Lawrence Berkeley National Laboratory, presentation at annual meeting of the National Association of Regulatory Utility Commissioners, *Renewables Portfolio Standards: Compliance Costs and Related Issues* (Nov. 17, 2014) 17

Benningfield Group, Inc., *U.S. Multifamily Energy Efficiency Potential by 2020* (Oct. 27, 2009) 10

* Nicholas Bianco, et al., *Seeing Is Believing: Creating a New Climate Economy in the United States* (World Resources Institute Working Paper, 2014) 19, 20, 23

---

* Authorities upon which we chiefly rely are marked with asterisks.

Business Council for Sustainable Energy, *Factbook: Sustainable Energy in America* (2016) 16, 26

Database of State Incentives for Renewables & Efficiency, NC Clean Energy Technology Center 24

* Environmental Protection Agency, EPA-452/R-15-003, Regulatory Impact Analysis for the Clean Power Plan Final Rule (Aug. 2015) 8, 15, 27

Environmental Protection Agency, *Fact Sheet: Clean Energy Incentive Program* 10

Environmental Protection Agency, *Fact Sheet: Clean Power Plan: Benefits of a Cleaner, More Efficient Power Sector* 15, 30

Environmental Protection Agency, *Fact Sheet: EPA's Clean Power Plan: Resources for Communities* 14

* Hannah Choi Granade, et al., McKinsey Global Energy and Materials, *Unlocking Energy Efficiency in the U.S. Economy* (July 2009) 11, 16

Asim Z. Haque, Vice-Chairman, Public Utilities Commission of Ohio, Testimony before Energy Mandates Study Committee (Feb. 5, 2015) 7

* Paul J. Hibbard, et al., Analysis Group, *EPA's Clean Power Plan: States' Tools for Reducing Costs and Increasing Benefits to Consumers* (July 2014) 14, 21, 22

Paul J. Hibbard, et al., Analysis Group, *The Economic Impacts of the Regional Greenhouse Gas Initiative on Nine Northeast and Mid-Atlantic States* (July 14, 2015) 23

Cory Honeyman, Greentech Media, *Executive Summary: U.S. Residential Solar Economic Outlook 2016–2020* (Feb. 2016) 27

Kimberly Klaiman, Energy Information Administration, *Total electricity sales fell in 2015 for 5th time in past 8 years*, Today In Energy, Mar. 14, 2016 23

* M.J. Bradley & Associates, *EPA's Clean Power Plan: Summary of IPM Modeling Results* (2016) 8, 15, 30

M.J. Bradley & Associates, *State Scenarios: EPA's Clean Power Plan: Compliance Pathways* (Dec. 7, 2015) 28

John Muyskens, et al., *Mapping how the United States generates its electricity*, Washington Post, Jul. 31, 2015 ..... 25, 26

Chris Namovicz, U.S. Energy Information Administration, *EIA reviews and enhances data and projections for wind and solar electricity*, Today In Energy, Mar. 24, 2016 5

National Energy Research Associates, *Energy and Consumer Impacts of EPA's Clean Power Plan* (2015) 4

Natural Resources Defense Council, *Issue Brief: Ohio's Pathway to Cutting Carbon Pollution* (Aug. 2015) 7

Scott Nyquist, *Lower oil prices but more renewables: What's going on?* McKinsey & Company Commentary (June 2015) 29

Peak Coal: US coal-fired power is steadily declining, The Economist Intelligence Unit, Aug. 11, 2015 25

Ari Peskoe, Harvard Environmental Policy Initiative, *Designing Emission Budget Trading Programs Under Existing State Law* (Jan. 27, 2016) 25

Press Release, Xcel Energy, Xcel Energy surpasses national carbon emissions reduction goal (May 29, 2014) 20

Public Citizen, *Fact Sheet: Consumer Costs and the EPA Clean Power Plan* (Mar. 2015) 26

* Regional Greenhouse Gas Initiative, *Investment of RGGI Proceeds Through 2013* (Apr. 2015) 13, 14

Jeremy Richardson, et al., Union of Concerned Scientists, *States of Progress Update: Existing Clean Energy Commitments Put Most States in Strong Position to Meet the EPA's Final Clean Power Plan* (Aug. 13, 2015) 8

Denise Robbins, *Why Media Should Stop Citing NERA's Flawed Study on the EPA Climate Plan*, Media Matters for America, Aug. 26, 2015 5

John Rogers, Union of Concerned Scientists, *ACCCE, NERA, and Another Misleading Study about the Clean Power Plan*, The Equation Blog, Nov. 12, 2015 6

John Rogers, Union of Concerned Scientists, *Annual Energy Outlook 2015: EIA Consistently Lowballs Renewables, Undercuts Climate Change Efforts*, The Equation Blog, Apr. 13, 2015 5

Christopher Russell, et al., American Council for an Energy-Efficient Economy Report IE1502, *Recognizing the Value of Energy Efficiency's Multiple Benefits* (Dec. 2015) 12

Elizabeth A. Stanton, et al., Synapse Energy Economics, Inc., *Final Report: Implications of EPA's Proposed 'Clean Power Plan'* (Nov. 14, 2014) 21

Camila Stark, et al., Joint Institute for Strategic Energy Analysis, *Renewable Electricity: Insights for the Coming Decade* (2015) 18

U.S. Energy Information Administration, *Competition among fuels for power generation driven by changes in fuel prices*, Today in Energy, July 13, 2012 26

Jurgen Weiss, et al., The Brattle Group, *EPA's Clean Power plan and Reliability: Assessing NERC's Initial Reliability Review* (Feb. 2015) 26

Ryan Wiser, et al., Lawrence Berkeley National Laboratory and National Renewable Energy Laboratory, NREL/TP-6A20-65005, *A Retrospective Analysis of the Benefits and Impacts of U.S. Renewable Portfolio Standards* (2016) 17, 31

Starla Yeh, *New Study, Same Old . . . Tricks: Coal Industry Uses Bogus Accounting to Exaggerate Clean Power Plan Costs*, NRDC Switchboard, Nov. 11, 2015 ..... 4, 5, 6

GLOSSARY

EPA	Environmental Protection Agency
JA	Joint Addendum
Local Bus. Br.	Brief of 166 State and Local Business Associations as *Amici Curiae* in Support of Petitioners
Nev. Br.	Brief of *Amici Curiae* The State of Nevada and Consumers' Research in Support of Petitioners
60Plus Br.	Brief of *Amici Curiae* 60Plus Association, Federalism in Action, Hispanic Leadership Fund, Independent Women's Forum, National Taxpayers Union, and Taxpayers Protection Alliance in Support of Petitioners Urging Reversal

INTEREST OF *AMICI CURIAE*

Citizens Utility Board, Consumers Union, and Public Citizen, Inc. are non-profit organizations that represent the interests of utility ratepayers and consumers.[1] They file this brief to address the costs and benefits of the EPA's Clean Power Plan—especially for consumers and low-income communities—and to rebut claims made by petitioners and their *amici*.

INTRODUCTION AND SUMMARY OF ARGUMENT

Because of "the complex nature of economic analysis typical in the regulation promulgation process," those who seek to overturn agency rules face a "high" burden, *Nat'l Wildlife Fed'n v. EPA*, 286 F.3d 554, 563 (D.C. Cir. 2002), and must overcome the "special deference" accorded agency decisions based on "complex scientific data within the agency's technical expertise," *Nat'l Ass'n for Surface Finishing v. EPA*, 795 F.3d 1, 7 (D.C. Cir. 2015). Given that uphill climb, one might have expected the challengers here to attempt a careful rebuttal to the EPA's analysis of the costs and benefits of its plan for American consumers.

Instead, they chose a very different strategy: unrestrained alarmism. Rather than grapple with available data on economic, environmental, and social effects,

[1] Detailed descriptions of the three *amici curiae* are provided in the Certificate of Counsel Under Circuit Rule 29(d), and in the motion for leave to file this brief. No party or intervenor objects to the brief's filing, and no counsel for a party or intervenor authored it in whole or in part. Apart from the *amici* and their counsel, no person contributed money to fund its preparation or submission.

their briefs predict doom. On their account, nothing short of "economic disaster" will follow if the plan is implemented; "[t]housands of businesses . . . will suffer," and be forced to "lay off workers or close their doors entirely." Local Bus. Br. 23–24. The plan, they say, "offers no solution" to rising energy costs, which will disproportionately affect low-income communities. 60Plus Br. 12. The result will be "immediate" and "adverse," *id.* at 4—electricity costs will rise, "affordable power sources" will vanish, businesses will shutter, Local Bus. Br. 23, and, indeed, "30,000 premature deaths" will follow directly "from the Rule," Pet. Br. on Procedure 71.

These doomsday claims rest on little more than one industry-funded (and discredited) study, stray commentary from a vice-chairman of a utilities commission in Ohio (a state that has, in fact, found success with analogous clean-power programs embraced by the EPA's plan), and the possibility that "one coal-fired plant" in South Dakota might shut down. Local Bus. Br. 24. That is not enough. Evidence and data—not hyperbole and anecdote—should inform decisions on the reasonableness of an agency's rule.

As this brief explains, the available data reveal a very different picture: The EPA's final Clean Power Plan leverages energy-efficiency opportunities to achieve greenhouse-gas emission reductions in a way that directly benefits consumers, low-income households, and other electricity ratepayers. Employing a framework of

flexible, state-driven reforms, the plan establishes a set of benchmarks on national carbon-dioxide emissions for existing coal- and gas-fired power plants and allows each state to determine, for itself, the best approach to meeting those benchmarks. And, it gives states flexibility to consider cost and other factors before deciding how to structure an emissions-reduction plan by identifying the best system of emission reduction.

A wealth of empirical evidence over the past decade shows that clean-power programs improve access to affordable electricity, reduce greenhouse-gas emissions, and increase energy efficiency for utilities, businesses, and consumers alike. At scale, a robust clean-power program, like the EPA's plan, can aggregate these effects to dramatically reduce greenhouse-gas emissions and drive energy costs down.

ARGUMENT

I. The empirical claims made by petitioners and their *amici* are either greatly overstated or lacking in evidentiary support.

The challengers have embraced an extreme position on the impact of the EPA's plan. They contend that it will "reconfigur[e] the nation's power sector in an extremely short period of time," and, as a result, "raise the cost of operations for countless businesses." Local Bus. Br. 24. What's more, they say, "consumers will see their electricity rates rise as affordable power sources close and utilities are forced to build expensive new plants." *Id.* at 23; *see also* Nev. Br. 28 (predicting that "electricity rates will skyrocket"). Another set of *amici* claims that the plan will have

an "immediate adverse impact on many fixed- and low-income heads of household," largely through real-time increases in electricity rates. 60Plus Br. 4. And they attack the plan for doing "virtually nothing to counteract the harsh economic realities that low- and fixed income families will face if the Plan goes into effect." *Id.* at 11. No serious evidence supports these claims.

A. Petitioners and their *amici* cite no serious empirical evidence that consumer costs will meaningfully increase.

For their claim that consumer electricity costs will dramatically rise, the challengers rely on the thin reed of a discredited, industry-funded study that is both outdated and flawed. *See* Local Bus. Br. 23; 60Plus Br. 6; Nev. Br. 28–29 (citing study of Nat'l Energy Research Assocs., *Energy and Consumer Impacts of EPA's Clean Power Plan* (2015)). For example, the study's cost analysis includes the funds that utilities would spend on allowances—trading emissions credits within the electric system—as part of its total, economy-wide analysis of the impact passed on to ratepayers. But, because some will sell and some will buy these allowances, the net costs of this part of the program passed on to consumers should be zero. In the words of one researcher, "[i]ncluding allowance costs in its total expenditures is just plain bad accounting and ignores basic economic and energy market principles."[2] Indeed, before any other changes are made to the analysis, just backing out

[2] Starla Yeh, *New Study, Same Old . . . Tricks: Coal Industry Uses Bogus Accounting to Exaggerate Clean Power Plan Costs*, NRDC Switchboard, Nov. 11, 2015, http://on.nrdc.org/1ZNJWPn.

allowance costs from the study's calculations results in a precipitous drop in the additional expenditures that the study predicts consumers will see reflected in their bills (relative to a scenario without a Clean Power Plan), from $24 billion to $12 billion annually.[3]

The challengers' industry-funded study, unlike the EPA's final analysis, also uses "outdated cost figures" for both renewable-energy sources and energy-efficiency programs, which artificially "drive the total costs of compliance."[4] To wit: the study uses data from the U.S. Energy Information Administration's Annual Energy Outlook 2015, which other analysts have more recently noted overstates the costs of wind and solar and underestimates the cost-effectiveness of energy-efficiency programs.[5] By relying on high cost estimates for compliance, and lowballing the benefits of investment in energy-efficiency programs—which quickly

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[3] *Id.*

[4] *Id.; see also* Denise Robbins, *Why Media Should Stop Citing NERA's Flawed Study on the EPA Climate Plan*, Media Matters for America, Aug. 26, 2015, http://mm4a.org/1RA1cT0.

[5] *Id.* Even the Energy Information Administration has acknowledged that its 2015 cost analysis is already out of step with future projections about the costs of renewable energy. The agency expects future projections to "incorporate significant adjustments to the wind and solar costs used" in that analysis, a result of the unanticipated "sharp decline in solar [photovoltaic] costs seen over the past several years." Chris Namovicz, U.S. Energy Info. Admin., *EIA reviews and enhances data and projections for wind and solar electricity*, Today In Energy, Mar. 24, 2016, http://1.usa.gov/1T7D0vS; *see also* John Rogers, Union of Concerned Scientists, *Annual Energy Outlook 2015: EIA Consistently Lowballs Renewables, Undercuts Climate Change Efforts*, The Equation Blog, Apr. 13, 2015, http://1.usa.gov/1T7D0vS.

pay for themselves in lower energy use—the challengers' study distorts the cost-benefit analysis of the Clean Power Plan. Using more recent data from the Lawrence Berkeley National Laboratory, researchers have concluded that "energy sector expenditures between 2022 and 2033 would be $41 billion less with the Clean Power Plan than without."[6]

That same flaw also infects the challengers' conclusion that, under the EPA's plan, customers will see higher utility bills. The challengers' analysis considers only potential energy prices but fails to take into account that consumers will also be able to manage these costs through expanded energy-efficiency measures implemented as a result of the Clean Power Plan—measures that will cut the *amount* of energy customers use.[7] Again using updated data from the Berkeley Lab, analysts estimate that customers would spend less—0.8 to 1.2 percent less—if the Clean Power Plan were implemented.[8]

The challengers' claim that wholesale market energy prices in some states will be far higher under the EPA's plan—as much as 39 percent higher in Ohio, they claim—fares no better. Local Bus. Br. 24. The Ohio analysis, although presented as evidence about the direct effect of the plan on ratepayers, was in fact

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[6] *Id.*

[7] John Rogers, Union of Concerned Scientists, *ACCCE, NERA, and Another Misleading Study about the Clean Power Plan*, The Equation Blog, Nov. 12, 2015, http://bit.ly/1M3mXxy.

[8] Yeh, *supra* note 2.

far narrower. It is an incomplete projection of how just one building block of the *proposed* rule—the new emissions requirements for natural-gas units—might affect the market.[9] This outdated, partial prediction is not nearly enough to support the assertion that "the Rule will raise the cost of operations for countless businesses" and "force businesses to close." Local Bus. Br. 24. To the contrary, Public Citizen's recent state-by-state projection of the rule shows marginal short-term cost and significant long-term gain for consumers. In Ohio, under one compliance scenario, although bills are projected to increase 3.2 percent ($33 annually) over the base scenario in 2020, they will ultimately decrease by 6.7 percent in 2025 and by 14.1 percent in 2030, in part because of decreased usage.[10] Even per-unit electricity rates that utilities charge consumers are projected to be 1 percent lower in 2025, assuming the Clean Power Plan is implemented.[11] And Ohio, building on its extensive experience with clean-energy investment, is indeed "already well on the way to achieving the Clean Power Plan pollution limits."[12]

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[9] Asim Z. Haque, Vice-Chairman, Pub. Utils. Comm'n of Ohio, Testimony before Energy Mandates Study Committee 3–4 (Feb. 5, 2015), available at http://1.usa.gov/1Uv6NzG.

[10] David Arkush, Public Citizen, *Clean Power, Clean Savings: The EPA Clean Power Plan Can Cut Household Electricity Bills in Every State* 7–8 (2015), http://bit.ly/20ZHqHP.

[11] *Id.*

[12] Natural Res. Defense Council, *Issue Brief: Ohio's Pathway to Cutting Carbon Pollution* 5 (Aug. 2015), http://on.nrdc.org/1PHRwDL. Looking at the goals under the final rule, researchers at the Union of Concerned Scientists project that initiatives to which the state has *already* committed will bring Ohio well over halfway toward

Ultimately, the challengers rely on outlier projections of the consumer-cost impacts. The EPA's own Regulatory Impact Analysis for the rule—based on "a state-of-the-art, peer-reviewed" integrated planning model [13] —predicts that consumer electricity bills will rise modestly in the very short term, but then fall quickly. By 2030, the EPA projects, the Clean Power Plan will *lower* bills by at least 7 percent.[14] Independent analyses confirm this projection: initiatives taken to meet the rule's requirements could, by 2030, reduce household electric bills by as much as 20 percent across the board.[15]

B. Petitioners and their *amici* fail to show that low-income consumers will be substantially burdened by the plan.

The challengers' concerns that the EPA's plan will harm low-income households—"whose pressing survival needs today," they argue, "eclipse any potential benefit," 60 Plus Br. 2—are contradicted by both the rule itself and the available data on the impact of similar clean-power programs already in effect across the country (as further described in Part II below).

To begin, the EPA's plan specifically focuses attention on the energy-usage

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its initial, 2022 compliance goal. *See* Jeremy Richardson, et al., Union of Concerned Scientists, *States of Progress Update: Existing Clean Energy Commitments Put Most States in Strong Position to Meet the EPA's Final Clean Power Plan* (Aug. 13, 2015), http://bit.ly/1RNxQ2M.

[13] EPA, Regulatory Impact Analysis for the Clean Power Plan Final Rule ES-4, EPA-452/R-15-003 (Aug. 2015).

[14] *Id.* at 3-40.

[15] M.J. Bradley & Assocs., *EPA's Clean Power Plan: Summary of IPM Modeling Results* 21 (2016), http://bit.ly/1RPMVHp.

needs of low-income communities. As the rule explains, "[t]he federal government is taking significant steps to help low-income families and individuals gain access to [renewable energy] and demand-side [energy efficiency]." 80 Fed. Reg. 64,662, 64,676 (Oct. 23, 2015). The final rule "ensures that bill-lowering measures such as demand-side [energy efficiency] continue to be a major compliance option." *Id.* at 64,676–77. The plan also expressly "require[s] states to demonstrate how they are meaningfully engaging all stakeholders, including workers and low-income communities, communities of color, and indigenous populations living near power plants and otherwise potentially affected by the state's plan." *Id.* at 64,668. Given this mandate, the claims of petitioners' *amici* that the EPA has failed to "reflect on the profound implications" for "economically disadvantaged and minority families," 60Plus Br. 11, rings hollow.

A major element of the EPA's plan—an early action-program known as the Clean Energy Investment Program—explicitly focuses on ensuring that the power program's benefits reach low-income Americans. As the EPA put it, "[t]o help support states in taking concrete actions that provide economic development, job and electricity bill-cutting benefits to low-income communities directly, the EPA has designed the [program] specifically to target the incentives it creates on investments that benefit low-income communities." 80 Fed. Reg. at 64,670.

Under the Clean Energy Incentive Program, states can opt in and commit to

working on projects designed to invest in renewable-energy sources (wind and solar) and demand-side energy-efficiency projects in low-income communities.[16] To encourage participation, the program comes with "matching" funds in the form of allowances: For every megawatt-hour of avoided generation that comes from the energy-efficiency investments, states will receive two matching "credits"—which can be sold on the allowance market.[17] The American Council for an Energy-Efficient Economy has calculated that this program could represent $1.2 billion worth of investment in projects in low-income communities.[18] Such incentives would help encourage cost-effective energy-efficiency upgrades for multifamily rental housing—where many low-income Americans live. A 2009 study estimated that economically feasible energy-efficiency upgrades could reduce usage in these buildings by nearly 60 percent.[19] It is, therefore, demonstrably untrue that EPA's Plan "does virtually nothing," 60Plus Br. 7, for low-income families.

Ample evidence undermines the challengers' claim that the EPA's efforts are little more than a "patchwork" solution, only available to a few communities. 60Plus Br. 14. It is, of course, true that states must opt in to the Clean Energy

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[16] EPA, *Fact Sheet: Clean Energy Incentive Program*, http://1.usa.gov/21UIU3I.

[17] *Id.*

[18] Am. Council for an Energy-Efficient Econ., *Energy Efficiency and Low-Income Communities in the Clean Power Plan: A Billion Dollar Deal* 7 (Nov. 12, 2015), http://bit.ly/21UIYR3.

[19] Benningfield Grp., Inc., *U.S. Multifamily Energy Efficiency Potential by 2020* 4 (Oct. 27, 2009), http://bit.ly/1M3v1i3.

Incentive Program, but staying out would leave significant money on the table. And the benefits of the program are not, as the challengers claim, only available to the few states "that buy-in to a federal plan for emission reductions, rather than fashioning their own." 60Plus Br. 14.[20] "[E]ligible projects" under the program, in fact, include both initiatives begun under state-authored plans as well as projects in states that fail to submit a final plan to the EPA altogether. 80 Fed. Reg. at 64,830.

The program also addresses an obvious current problem for low-income households: the startup costs of energy-efficiency and renewable-energy programs. For instance, the rule explicitly includes support for initiatives that target "increasing solar energy systems in federally subsidized homes" and installing "solar systems for others with low incomes." *Id.* at 64,676. Recent research has found that low-income homes face particular barriers to implementing energy-efficiency measures: The average low-income home would require $910 in upgrades (half of the household's annual non-core budget).[21] But retrofitting a house "typically reduce[s] heating and cooling bills by 32 percent."[22] That can mean the difference between working lights and a power shut-off for a low-income

[20] The challengers here misread an EPA press release that explains the several ways an initiative can be deemed eligible for Clean Energy Incentive Program credit. *Cf.* EPA, *Fact Sheet: Clean Energy Incentive Program*, supra note 16 (explaining that the program will be available to projects in both opt-in states that have submitted final plans, and in "states where EPA implements a federal plan").

[21] Hannah Choi Granade, et al., McKinsey Global Energy and Materials, *Unlocking Energy Efficiency in the U.S. Economy* 40 (July 2009).

[22] *Id.* at 40–41.

family—"a customer who is able to reduce an electric bill through energy efficiency is more likely to avoid nonpayment and disconnection."[23]

Petitioners' *amici* claim that energy-efficiency investment programs will not reduce burdens on low-income consumers because "purchases of energy-efficient products do not always translate into the promised energy savings." 60Plus Br. 13 (citing Abdukadirov, Mercatus Ctr. at George Mason Univ., *Expert Commentary: Debate over Furnace Efficiency Standards Heats Up* (2015)). But that claim wrongly assumes that these low-income homeowners would foot the bill for any energy-efficiency investments; in many programs—including those cited by the challengers—participants received direct financial assistance for upgrades. The EPA's plan provides many similar avenues for subsidizing upgrades. *See* 80 Fed. Reg. at 64,916–18. Absent the challengers' incorrect assumption, the balance sheet looks entirely different: the result will be direct reductions across-the-board in electricity usage—and hence in monthly bills—for participating families.

The EPA's focus on investment in low-income communities draws directly from successful state-run programs accomplishing much the same thing, providing states with significant models to copy or expand. For instance, the rule highlights a Maryland program that has successfully helped fund installation of energy-

[23] Christopher Russell, et al., Am. Council for an Energy-Efficient Econ., Report IE1502, *Recognizing the Value of Energy Efficiency's Multiple Benefits* vii (Dec. 2015), http://aceee.org/research-report/ie1502.

efficiency materials, like lighting retrofits, in low-income households. *Id.* at 64,917. So, too, with a New York State program that has successfully provided assistance, including no-cost energy-efficiency upgrades, to 100,000 people statewide. *Id.* And the EPA's plan relies on—and leverages—other federal programs that assist low-income households, including initiatives to help install solar energy in federally subsidized housing and training to help low-income Americans gain access to jobs in the green-energy sector. *Id.* at 64,918–19.

What's more, the challengers are mistaken when they question whether the plan's allowance-trading components—including initiatives like the Clean Energy Incentive Program—"will *ever* translate into actual dollars in the pockets of families in need," even in the near term. 60Plus Br. 15. States that have participated in analogous emissions-reduction programs, like the Regional Greenhouse Gas Initiative, have successfully invested proceeds from cap-and-trade sales into low-income communities—with significant direct benefits. For example, Delaware invested 61 percent of its proceeds through 2013 in home weatherization and heating assistance for low-income residents.[24] And Maryland has supported energy-efficiency upgrades for 11,880 low- to moderate-income households and returned funds directly to ratepayers—nearly $40 million in general relief, and more than $100 million specifically to help 215,800 low-income households pay their energy

[24] Reg'l Greenhouse Gas Initiative, *Investment of RGGI Proceeds Through 2013* 16–17 (Apr. 2015), http://bit.ly/1VVUMCR.

bills.[25] States are encouraged to follow these models under the EPA rule—meaning that more allowance-sale proceeds will be funneled directly and immediately to low-income consumers' electricity bills.[26]

The EPA carefully considered these state programs—and their benefits to low-income communities—in crafting its rule. The plan's flexible final form was specifically designed to "give[] states the opportunity to ensure that communities"—particularly those already vulnerable to the threats of climate change—"share in the benefits of a clean energy economy."[27] An independent study concludes that the final rule will allow for state-level plans that share those benefits: "Based specifically on our detailed analysis of states' experience . . . and the design of a wide array of programs that insulate lower-income consumers," it concludes that "the impacts on electricity rates and bills from well-designed [carbon-dioxide] pollution control programs will be modest in the near term, especially for low-income customers."[28]

Ultimately, what the challengers fail to acknowledge is that low-income

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[25] *Id.* at 20

[26] *See* 80 Fed. Reg. at 64,916 ("The EPA encourages states to consider targeting economic development resources to communities that are likely to be negatively affected by ongoing changes in the utility and related sectors.").

[27] EPA, *Fact Sheet: EPA's Clean Power Plan: Resources for Communities*, http://1.usa.gov/21UPGqc.

[28] Paul J. Hibbard, et al., Analysis Grp., *EPA's Clean Power Plan: States' Tools for Reducing Costs and Increasing Benefits to Consumers* 3 (July 2014), http://bit.ly/1QEs1Ex.

communities *now* are more likely to be negatively affected by the *current* energy-sector status quo. The EPA "analyzed the communities in closest proximity to power plants and found that they include a higher percentage of communities of color and low-income communities than national averages." 80 Fed. Reg. at 64,670. It took this problem seriously, and its plan specifically contemplates "a reduction in the adverse health impacts of air pollution on these low-income communities and communities of color." *Id.* And the projected health benefits of the EPA's plan are clear: Every dollar spent on compliance costs is expected to be offset by four dollars in health benefits.[29]

The challengers, though, are right about one thing: The "problems of energy costs are very real, and very serious" for low-income families. 60Plus Br. 15. That is precisely why the EPA's Clean Power Plan must be implemented. Under both the EPA's analysis[30] and independent projections,[31] average electricity bills in 2030 will be far lower under scenarios in which the EPA's rule goes into effect. Refusing to shift America's energy infrastructure towards cleaner, more affordable energy would only leave low-income Americans with higher costs over time—for electricity and for preventable adverse health effects.

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[29] EPA, *Fact Sheet: Clean Power Plan: Benefits of a Cleaner, More Efficient Power Sector*, http://1.usa.gov/1RNLW48.
[30] EPA, Regulatory Impact Analysis, *supra* note 13, at 3-40.
[31] M.J. Bradley & Assocs., *EPA's Clean Power Plan*, *supra* note 15, at 21.

II. The EPA's Clean Power Plan will improve efficiency and reduce electricity costs.

Contrary to petitioners' and their *amici*'s predictions of exorbitant costs and "economic disaster," Local Bus. Br. 24, the EPA's carefully calibrated plan promises to drive electricity costs down for consumers and ratepayers while accomplishing substantial cuts to greenhouse-gas emissions.

Indeed, researchers studying the effects of energy-efficiency programs have drawn one "central conclusion": that a "comprehensive and innovative" energy-efficiency plan can deliver significant economic savings and achieve major reductions in greenhouse-gas emissions.[32] How substantial? Using only current energy-efficiency technology, recent projections are that a robust domestic clean-power program, "executed at scale," would "yield gross energy savings worth more than $1.2 trillion," and "reduce end-use energy consumption" by "roughly 23 percent of projected demand"—a result that would remove "1.1 gigatons of greenhouse gases" from the atmosphere every year.[33] Americans have already recognized the economic value of these initiatives: investment in energy-efficiency programs has grown 25 percent per year between 2006 and 2011, and overall clean-energy investment reached a record high $329 billion in 2015.[34]

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[32] Granade et al., *supra* note 21, at iii.

[33] *Id.*

[34] Bus. Council for Sustainable Energy, *Factbook: Sustainable Energy in America* 6, 24 (2016), http://bit.ly/235kHtT.

A. State clean-power programs have resulted in lower costs to consumers while dramatically reducing harmful carbon-dioxide emissions.

Today, most states—from Maine to Texas—have adopted statewide standards designed to promote energy-efficiency and renewable-energy solutions. Under these plans, states require utility companies "to meet a growing portion of their load with eligible forms of renewable electricity" while reducing or capping their reliance on coal- and gas-fired power plants.[35]

Most state programs were implemented in the early 2000s and, over the past decade, the results have been remarkable. In 2013 alone, these renewable-energy plans reduced overall greenhouse-gas emissions by 59 million metric tons.[36] And new, utility-added renewable-energy sources netted consumers up to $1.2 billion in savings on electricity bills.[37] Most states with these portfolio standards in place have also preemptively and proactively set limits on how much in compliance costs can be passed on to consumers—capping the amount passed through at under five percent of average retail rates in more than a dozen states.[38] As the cost of

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[35] Ryan Wiser, et al., Lawrence Berkeley Nat'l Lab. and Nat'l Renewable Energy Lab., NREL/TP-6A20-65005, *A Retrospective Analysis of the Benefits and Impacts of U.S. Renewable Portfolio Standards* vii, 2 (2016), http://1.usa.gov/1RNMmr4.

[36] *Id.* at vii–viii.

[37] *Id.* at viii.

[38] Galen Barbose, Lawrence Berkeley Nat'l Lab., presentation at annual meeting of the National Association of Regulatory Utility Commissioners, *Renewables Portfolio*

renewable-energy sources continues to fall, these programs' balance sheets will only look better and better for consumers.[39]

The impact at the state and county level has been no less significant. Consider, for example, Illinois's Energy Efficiency Portfolio Standard, which requires large utilities to reduce electricity consumption by two percent per year, particularly through energy-efficiency programs focused on end users. *See* 220 Ill. Comp. Stat. 5/8-103(b). Six years in, the program has saved 76 billion kilowatt-hours, the equivalent of powering 4.7 million homes.[40] And the state's real-time energy-pricing program—a component of its overarching clean-power plan—"generated over $4,000,000 in net benefits" for customers of Chicago's main utility, the Commonwealth Edison Company. Downstate, the Ameren Illinois Company expects a net savings of nearly $6 million through 2020 for its customers.[41] Aligning the state program with the EPA's plan means that, over the lifetime of the energy-efficiency investments, consumers in Illinois can expect to save "a total of $806 million on electric bills."[42]

Standards: Compliance Costs and Related Issues 18 (Nov. 17, 2014) http://1.usa.gov/1UWZz7G

[39] Camila Stark, et al., Joint Inst. for Strategic Energy Analysis, *Renewable Electricity: Insights for the Coming Decade* v (2015), http://1.usa.gov/1SCaRLj.

[40] Decl. of David Kolata, Exs. in Support of Movant Respondent-Intervenors' Resps. in Opp'n to Mots. for Stay, Dkt. 1587530, at JA B499.

[41] *Id.* at JA B501.

[42] *Id.*

Other states have found—as a result of their own clean-power requirements—that it can be substantially cheaper for utilities to rely on renewable energy sources rather than traditional power plants. After Austin Energy (a utility in Texas) purchased 150 megawatts of solar energy for less than five cents per kilowatt hour, it immediately realized that there were direct cost-benefits to using renewable energy to power the grid: the utility estimated that the same amount of energy obtained through new natural-gas-fired generation would cost seven cents per kilowatt-hour; coal would cost ten cents; and nuclear thirteen cents. No matter how you slice it, the utility understood that solar energy "compares favorably" to all other traditional energy sources—and was able to pass on those cost savings directly to customers.[43]

Michigan's Public Service Commission, too, found that "the most recent new utility-scale wind power contracts cost about half the price of new coal generation," and concluded that "a combination of renewable energy and energy efficiency is cheaper than any other new fossil fuel generator, including combined-cycle natural gas units."[44] In fact, one Michigan utility, DTE Energy, was able to lower consumer electricity rates by 6.5 percent in 2014 after increasing reliance on

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[43] Nicholas Bianco, et al., *Seeing Is Believing: Creating a New Climate Economy in the United States* 14 (World Res. Inst. Working Paper, 2014), http://bit.ly/1yWnSs9.

[44] *Id.*

renewable-energy sources.[45] And MidAmerican Energy (an Iowa utility)—which will soon derive 39 percent of its energy from wind—recently announced a significant benefit of its $1.9 billion investment in new wind power: Iowans who buy their energy from the utility will save $10 million a year on their electricity bills.[46]

Even major energy companies understand the value of renewable investment. In 2014, Xcel Energy announced its plan to add substantial amounts of wind energy to its portfolio "at prices below fossil fuel alternatives."[47] In committing to "reduce carbon dioxide emissions" by "invest[ing] in a cost-effective clean energy strategy," the company made clear that it "know[s] how to make clean energy work" for customers.[48] As part of its strategy, Xcel provided its customers with "$75 million in incentives in 2013 to encourage energy efficiency through more than 90 electricity saving programs and more than 45 natural gas programs," leading customers to save enough electricity "to power more than 121,000 homes" and gas to "fuel more than 17,000 homes."[49]

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[45] *Id.*

[46] *Id.*

[47] Press Release, Xcel Energy, Xcel Energy surpasses national carbon emissions reduction goal (May 29, 2014), http://bit.ly/1RAijEf.

[48] *Id.*

[49] *Id.*

B. States have an array of cost-effective tools to meet the plan's emission standards.

States are also quite unlikely to be forced to "restructure" their existing energy-efficiency and renewable-energy frameworks (as the challengers claim). Local Bus. Br. 19. One of the key features of the EPA's plan is its flexibility. States have considerable freedom—and time—to determine how best to meet the plan's compliance requirements. 80 Fed. Reg. at 64,666. This flexibility makes sense: Research has shown that there is no one-size-fits-all approach for implementing an effective and cost-efficient clean-power program. To the contrary, "states have a long track record of using various regulatory and other policy tools to encourage utility programs and investments that minimize the cost of electric service."[50] The EPA's plan reinforces this understanding.

A model for some of the successful, diverse approaches available to states for cost-effective emission reductions can be found in the Northeast states' Regional Greenhouse Gas Initiative—the nation's first cap-and-trade carbon dioxide emission-control program.[51] Beginning in 2010, ten northeastern and mid-Atlantic states banded together to reduce emissions from large-scale fossil-fuel power plants. Under the program, carbon-dioxide allowances are auctioned, and the proceeds

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[50] Hibbard, et al., *EPA's Clean Power Plan*, *supra* note 28, at 1; *see also* Elizabeth A. Stanton, et al., Synapse Energy Econs., Inc., *Final Report: Implications of EPA's Proposed 'Clean Power Plan'* (Nov. 14, 2014), http://bit.ly/1pNWlX6; Decl. of David Kolata, *supra* note 40, at JA B499.

[51] Hibbard, et al., *EPA's Clean Power Plan*, *supra* note 28, at 17

are used to reduce customers' electric bills and support energy-efficiency efforts.[52]

The results are compelling: By June 2014—just four years into the program—revenues from carbon-dioxide allowances totaled $1.4 billion. States within the Initiative received a proportional amount of this revenue based on their share of the cap on carbon and used it, among other things, to invest in energy-efficiency programs, credit customers' electricity bills, fund state-government operations, invest in renewable-energy installation, and fund education programs.[53] What's more, in the program's first three years, allowance auctions generated about $33 per person in net economic benefits, and the revenue produced by the program more than "offset the modest increase in electricity prices" and "led to myriad positive economic spillover effects."[54] Although the emission allowances marginally increased electricity prices in the short term (by less than one percent), over time—as states began to invest the allowance proceeds in energy-efficiency programs—lower electricity use and cost reduced "consumer payments for electricity."[55] Between 2012 and 2014, the overall savings to consumers' energy

[52] *Id.* at 5

[53] *Id.* at 19

[54] *Id.* at 20

[55] *Id.* at 21

bills totaled $460 million.[56]

States have also developed a number of different, often distinctly local, incentive programs and policies designed to promote energy efficiency and renewable energy. Nearly half of all states have put electricity-efficiency savings targets in place—programs that "regularly save customers" twice as much as the initial investment.[57] As a result of these programs, the EPA has predicted that, in some states, electricity demand could soon begin to fall, even as local economies continue to grow.[58]

States have also created locally sensitive incentive programs to encourage the construction of more energy-efficient buildings—with significant potential long-term benefits for controlling energy demand and saving occupants money, even as populations and economies grow. In North Carolina, for example, a statewide program gives counties and cities the power to provide rebates for permit fees to builders whose plans meet certain energy-efficiency guidelines. By delegating decision-making power over incentives, the program allows jurisdictions to come

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[56] Paul J. Hibbard, et al., Analysis Grp., *The Economic Impacts of the Regional Greenhouse Gas Initiative on Nine Northeast and Mid-Atlantic States* 7 (July 14, 2015), http://bit.ly/1L2jqOb.

[57] Bianco, *supra* note 43, at 53.

[58] Nationwide, electricity sales have fallen for five of the past eight years—declining 1.1 percent from 2014 to 2015—in part as a result of "increasing efficiency of electricity-using equipment." Kimberly Klaiman, U.S. Energy Info. Admin., *Total electricity sales fell in 2015 for 5th time in past 8 years*, Today In Energy, Mar. 14, 2016, http://1.usa.gov/1QXJCIb.

up with locally sensitive programs—such as an exemption from zoning restrictions.[59] Similarly, dozens of states have implemented programs to provide property-tax relief to eligible properties that invest in energy-efficiency upgrades or on-site renewable-energy generation, such as solar panels.[60]

Many more states—27 in all—have imposed standards that regulate and encourage energy efficiency for utility companies.[61] And, around the country, hundreds of programs (nearly 250) offer low-interest loans to implement energy-efficiency upgrades. This figure includes programs run by local governments and utilities that allow customers (both commercial and residential/homeowners) to borrow money at low (or even no) interest for energy-efficiency measures, including weatherization, purchasing solar photovoltaic systems, and more.[62] Under the EPA's plan, states remain free to press forward with these programs.

The EPA's plan also safeguards preexisting state efforts to address other emission-related concerns. The EPA's emission-budget trading program is "a

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[59] Database of State Incentives for Renewables & Efficiency, NC Clean Energy Technology Center, *Local Option – Green Building Incentives*, http://bit.ly/25yVA4X, last updated Dec. 4, 2015.

[60] Database of State Incentives for Renewables & Efficiency, NC Clean Energy Technology Center, *Programs – Property Tax Incentives*, http://bit.ly/1Y2rykh.

[61] Database of State Incentives for Renewables & Efficiency, NC Clean Energy Technology Center, *Programs – Energy Efficiency Resource Standard*, http://bit.ly/1pOfI2e.

[62] Database of State Incentives for Renewables & Efficiency, NC Clean Energy Technology Center, *Programs – Loan Program*, http://bit.ly/1PI83aR.

familiar option for the power sector"—building on states' past decades of experience regulating nitrogen oxides and other pollutants that power plants emit.[63] As the EPA explained in its final rulemaking, this action "continue[s the] approach" that the agency has used to establish other flexible, state-specific pollution reduction programs. 80 Fed. Reg. at 64,678. For example, in the EPA's view, this plan and the Cross-State Air Pollution Rule, which regulates silicon and nitrogen oxides emissions, "are complementary. Compliance with one helps facilities comply with the other." *Id.* at 64,921. The EPA thus expects that the rule will allow states to build off of the hard work they've already begun—using initiatives in place under existing programs to help meet the benchmarks set by the Clean Power Plan.

C. The EPA's plan will reinforce changes to the electric grid and benefit consumers.

1. It is no secret that traditional sources of electricity—mainly coal and oil—are in decline.[64] As older power sources break down or run their course, states and utilities are increasingly opting to replace them with new (and cheaper) renewable energy sources. As we explain, the beneficial impact on emissions reductions and

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[63] Ari Peskoe, Harvard Envtl. Policy Initiative, *Designing Emission Budget Trading Programs Under Existing State Law* 2 (Jan. 27, 2016), http://bit.ly/1PI8923.

[64] *Peak Coal: US coal-fired power is steadily declining*, The Economist Intelligence Unit, Aug. 11, 2015, http://bit.ly/1RNRRX1; *see also* John Muyskens, et al., *Mapping how the United States generates its electricity*, Wash. Post, Jul. 31, 2015, http://wapo.st/1P07Phq.

cost-savings to consumers in those states that have pushed to increase reliance on renewable-energy sources has been substantial. The EPA's plan capitalizes on this trend by encouraging all states to accomplish what many already have.

For starters, both coal's and oil's share of overall electricity have dropped significantly in the last decade. Coal's share has "slipped from 49% in 2007 to only 34% in 2015."[65] And petroleum has dropped from its high point in the late 1970s—when it represented more than 20 percent of U.S. energy generation[66]—to just 1 percent in 2015.[67] That decrease is expected to continue apace.[68] Given current trends and the "relative flexibility" of the Clean Power Plan, the retirement of coal-fired plants—as part of an overall reduction in reliance on coal—is not expected to affect electricity reliability.[69] As the costs associated with renewable energy continue to fall, more and more renewable energy will be used to replace failing coal-fired power sources. As one recent report observed, residential photovoltaic solar panels are a growing and affordable source of energy—the pace of additions in total capacity increased tenfold between 2010 and the third quarter

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[65] Bus. Council for Sustainable Energy, *supra* note 34, at 13.

[66] U.S. Energy Info. Admin., *Competition among fuels for power generation driven by changes in fuel prices*, Today in Energy, July 13, 2012, http://1.usa.gov/1UX2Un9.

[67] Muyskens, et al., *supra* note 64.

[68] Public Citizen, *Fact Sheet: Consumer Costs and the EPA Clean Power Plan* (Mar. 2015), http://bit.ly/22SBx2y ("[M]uch of [the nation's coal infrastructure] will need to be replaced in the near future.").

[69] Jurgen Weiss, et al., The Brattle Grp., *EPA's Clean Power plan and Reliability: Assessing NERC's Initial Reliability Review* 30 (Feb. 2015), http://bit.ly/1bZbLAX.

of 2015.[70] Research both by the EPA and independent sources confirms that "the projected rate of change in coal-fired generation is consistent with recent historical declines in coal-fired generation."[71]

Given the historical and empirical data surrounding ongoing shifts in the electric grid, the EPA's plan is sound. A report by the Analysis Group found that the rule establishes reasonable emissions-reduction targets that are in line with recent historical data.[72] Looking at reductions in carbon-dioxide totals and emission rates from 2005 to 2013, the group concluded that "the reasonable pace of change . . . required by the Clean Power Plan is not only possible in theory, but has been achieved in practice."[73]

Indeed, many states have already found that switching to different generation sources can have a remarkable effect on emissions rates. Florida, for instance, achieved 4.6 percent annual emissions reductions, largely by switching to natural gas from coal- and oil-fired power plants. And Minnesota's growth in renewable generation led to a 3.2 percent annual reduction in emissions. Ohio, too, has reduced emissions 2.6 percent per year over the historical baseline, even in a

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[70] Cory Honeyman, Greentech Media, *Executive Summary: U.S. Residential Solar Economic Outlook 2016–2020* 8 (Feb. 2016), http://bit.ly/1VbGc9C.

[71] EPA, Regulatory Impact Analysis, *supra* note 13, at 3-28.

[72] Decl. of Paul J. Hibbard and Andrea M. Okie, Exs. in Support of Movant Respondent-Intervenors' Resps. in Opp'n to Mots. for Stay, Dkt. 1587530, at JA B407.

[73] *Id.* at JA B414–15.

period when it experienced significant economic growth.[74] All of these states achieved emissions cuts well above what the EPA's plan will require.

These states' experiences are not outliers. Quite the opposite: Because these states possess a diversity of relevant characteristics—from fuel mixes to industrial consumption to growth in renewables—their experiences demonstrate that states have already driven substantial emissions reductions nationwide. As researchers have observed, these reductions took place "without any nationwide policy to reduce . . . emissions" by "integrat[ing]" renewable energy sources "into electricity grid operations as a matter of course without significant impacts to reliability or electricity prices."[75]

Under the EPA's plan, other states should have little difficulty following suit. Of the 27 states that have challenged the EPA's plan here, recent research found that 21 of them could meet the emissions targets set through 2024 using only "existing generation, investments already planned within each state, and implementation of respective existing state policies."[76] At least 18 of these states

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[74] *Id.* at JA B418–19.

[75] *Id.* at JA B407.

[76] Decl. of Diane Munns, Exs. in Support of Movant Respondent-Intervenors' Resps. in Opp'n to Mots. for Stay, Dkt. 1587530, at JA B337–40; *see also* M.J. Bradley & Assocs., *State Scenarios: EPA's Clean Power Plan: Compliance Pathways* (Dec. 7, 2015) (Ex. to Decl. of Diane Munns), at JA B359.

could comply all the way through 2030 with these sources.[77] Even looking only at projects that were already well on their way to realization (plants in operation or construction, or at least that have been permitted), 16 states could meet the first three years of targets with just those projects already in place.[78] For the few states that could not meet reduction targets through existing or already planned investments, the "analysis indicates that very modest efforts taken after the deadline for submitting state plans would be sufficient to close the gap."[79] The reasonable emissions-reductions goals in the EPA's plan take advantage of these ongoing changes to the electric grid.

2. The EPA's plan to encourage all states to follow a similar approach will not only trigger significant emissions reductions, but also benefit end-user consumers. New renewable-energy generation sources have become increasingly cost-effective over the past few years; installation costs have fallen significantly, and the generating efficiency of solar and wind technology has improved considerably.[80] Going forward, then, not only are costs associated with new renewables unlikely to impose major burdens on consumers, but states are well-positioned to efficiently increase their investment in emissions-free, renewable-

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[77] *Id.*

[78] *Id.* at B342.

[79] *Id.*

[80] Scott Nyquist, *Lower oil prices but more renewables: What's going on?* McKinsey & Co. Commentary (June 2015), http://bit.ly/1Y2th9r.

energy sources.

Consider the results of a Public Citizen study focused on projected electricity costs under the EPA's plan. Using EPA data to project a state-by-state timeline for electricity costs under the final rule, Public Citizen observed that, although retail electricity rates may rise slightly, "the key question is what effect the Clean Power Plan will have on what [consumers] actually pay, which means their electricity bills."[81] On that question, it found that household bills are projected to fall by 2025 in nearly every state, and in every state by 2030.[82] "For consumers focused on costs," the report concludes, because the EPA's plan will "spur improvements in energy efficiency so that people use less electricity," the "net result is that electricity bills will fall, not rise."[83] Other research makes the same point: Overall reductions in monthly household electric bills from the EPA's plan are projected to be between 5 percent and 20 percent in 2030.[84] That conclusion is in line with the EPA's own projection that, by 2030, the average American family will see about $7 in savings on its monthly electric bill because of the plan.[85] The Clean Power Plan

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[81] Arkush, *supra* note 10, at 3.

[82] *Id.*

[83] *Id.*

[84] M.J. Bradley & Assocs., *EPA's Clean Power*, *supra* note 15, at 21.

[85] EPA, *Fact Sheet: The Clean Power Plan: Benefits*, *supra* note 29. And, the economic benefits of renewable energy investment go beyond just saving on utility costs. The renewable generation used to meet the 2013 Renewable Portfolio Standards (discussed above) compliance obligations "supported an estimated 200,000 U.S.-

will help, not hurt, consumers.

CONCLUSION

For the foregoing reasons, the Court should deny the petitions.

Respectfully submitted,

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based gross jobs earning average annual salaries of $60,000, and driving over $20 billion in GDP"—including more than 30,000 additional ongoing domestic jobs, and 170,000 construction jobs. *See* Wiser, et al., *supra* note 35, at 33.

CERTIFICATE OF COMPLIANCE WITH RULE 32(a)(7)

I hereby certify that my word processing program, Microsoft Word, counted 7,101 words in the foregoing brief, exclusive of the portions excluded by Rule 32(a)(7)(B)(iii).

/s/ Deepak Gupta
Deepak Gupta

CERTIFICATE OF SERVICE

I hereby certify that on April 1, 2016, I electronically filed the foregoing Brief of *Amici Curiae* Citizens Utility Board, Consumers Union, and Public Citizen, Inc. in Support of Respondents with the Clerk of the Court of the U.S. Court of Appeals for the D.C. Circuit by using the Appellate CM/ECF system, which will send notice to all counsel who are registered CM/ECF users.

/s/ Deepak Gupta
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