

Nos. 14-840 & 14-841

---

---

IN THE  
**Supreme Court of the United States**

---

FEDERAL ENERGY REGULATORY COMMISSION,  
*Petitioner,*

*v.*

ELECTRIC POWER SUPPLY ASSOCIATION, ET AL.,  
*Respondents.*

---

ENERNOC, INC. ET AL.,  
*Petitioners,*

*v.*

ELECTRIC POWER SUPPLY ASSOCIATION, ET AL.,  
*Respondents.*

---

ON PETITIONS FOR A WRIT OF CERTIORARI TO THE  
UNITED STATES COURT OF APPEALS  
FOR THE DISTRICT OF COLUMBIA CIRCUIT

---

**BRIEF FOR ELECTRICITY CONSUMERS AND  
DEMAND RESPONSE PROVIDERS AS AMICI  
CURIAE IN SUPPORT OF PETITIONERS**

---

SETH P. WAXMAN  
*Counsel of Record*  
MARK C. KALPIN  
DAVID M. LEHN  
SAURABH H. SANGHVI  
WILMER CUTLER PICKERING  
HALE AND DORR LLP  
1875 Pennsylvania Ave., NW  
Washington, DC 20006  
(202) 663-6000  
seth.waxman@wilmerhale.com

---

---

## TABLE OF CONTENTS

	Page
TABLE OF AUTHORITIES .....	ii
INTEREST OF AMICI CURIAE.....	1
SUMMARY OF ARGUMENT.....	2
ARGUMENT.....	4
I. DEMAND RESPONSE HAS PROVIDED SUB- STANTIAL BENEFITS FOR YEARS.....	4
A. FERC Has Facilitated Demand Re- sponse To Address Important Prob- lems Affecting Wholesale Rates .....	4
B. Demand Response Provides Demon- strable Benefits To Electricity Markets.....	9
C. Demand Response Provides Important Additional Benefits To End-Use Con- sumers.....	12
II. IF ALLOWED TO STAND, THE DECISION BELOW WILL HAVE BROAD AND SEVERE CONSEQUENCES FOR THE MARKETS, DE- MAND RESPONSE PARTICIPANTS, AND RATEPAYERS GENERALLY .....	13
A. The States Cannot Adequately Repli- cate The Benefits Of Wholesale De- mand Response In Energy Markets .....	15
B. The Decision Below Threatens Capaci- ty Markets And The Availability Of Demand Response In Those Markets .....	17
CONCLUSION .....	22

## TABLE OF AUTHORITIES

### CASES

	Page(s)
<i>Morgan Stanley Capital Group, Inc. v. Public Utility District No. 1 of Snohomish County</i> , 554 U.S. 527 (2008) .....	14
<i>Motor Vehicle Manufacturers Ass’n v. State Farm Mutual Auto Insurance Co.</i> , 463 U.S. 29 (1983) .....	14
<i>New York v. FERC</i> , 535 U.S. 1 (2002) .....	5, 19

### STATUTES, RULES, AND REGULATIONS

16 U.S.C.	
§ 824(b)(1) .....	1
§ 824e .....	1
Energy Policy Act of 2005, Pub. L. No. 109-58, 119 Stat. 594 .....	8
Wholesale Competition in Regions with Organized Electric Markets, 73 Fed. Reg. 64,100 (Oct. 28, 2008) .....	8

### OTHER MATERIALS

Boshart, Glen, <i>Navigant: Absent DR participation, PJM capacity prices could jump up to 3-fold</i> , SNL Financial (Oct. 6, 2014) available at <a href="https://www.snl.com/InteractiveX/Article.aspx?cdid=A-29411194-12081">https://www.snl.com/InteractiveX/Article.aspx?cdid=A-29411194-12081</a> .....	10
Comments of the Electric Power Supply Association, FERC Docket No. EL15-21-000 (Dec. 4, 2014) .....	18

**TABLE OF AUTHORITIES—Continued**

	Page(s)
Delaware Public Service Commission Comments to FERC Regarding D.C. Circuit May 23, 2014 Opinion Vacating FERC Order No. 745, FERC Docket RM10-17-000 (July 2, 2014) .....	19
FERC, <i>2007 National Assessment of Demand            Response and Advanced Metering</i> (Sept. 2007), available at <a href="http://www.ferc.gov/legal/staff-reports/09-07-demand-response.pdf">http://www.ferc.gov/            legal/staff-reports/09-07-demand-response            .pdf</a> .....	9, 10, 11
FERC, <i>2008 National Assessment of Demand            Response and Advanced Metering</i> (Dec. 2008), available at <a href="http://www.ferc.gov/legal/staff-reports/12-08-demand-response.pdf">http://www.ferc.gov/            legal/staff-reports/12-08-demand-response.pdf</a> .....	11
FERC, <i>2010 Assessment of Demand Response            and Advanced Metering</i> (Feb. 2011) available at <a href="http://www.ferc.gov/legal/staff-reports/2010-dr-report.pdf">http://www.ferc.gov/legal/staff            -reports/2010-dr-report.pdf</a> .....	16
FERC, <i>2011 National Assessment of Demand            Response and Advanced Metering</i> (Nov. 2011), available at <a href="http://www.ferc.gov/legal/staff-reports/11-07-11-demand-response.pdf">http://www.ferc.gov/            legal/staff-reports/11-07-11-demand-response            .pdf</a> .....	11
FERC, <i>2012 National Assessment of Demand            Response and Advanced Metering</i> (Dec. 2012), available at <a href="http://www.ferc.gov/legal/staff-reports/12-20-12-demand-response.pdf">http://www.ferc.gov/legal/            staff-reports/12-20-12-demand-response.pdf</a> .....	11

**TABLE OF AUTHORITIES—Continued**

	Page(s)
FERC, <i>2014 Assessment of Demand Response and Advanced Metering</i> (Dec. 2014), available at <a href="http://www.ferc.gov/legal/staff-reports/2014/demand-response.pdf">http://www.ferc.gov/legal/staff-reports/2014/demand-response.pdf</a> .....	8, 9
FERC, <i>A National Assessment of Demand Response Potential</i> (June 2009), available at <a href="http://www.ferc.gov/legal/staff-reports/06-09-demand-response.pdf">http://www.ferc.gov/legal/staff-reports/06-09-demand-response.pdf</a> .....	8
FERC, <i>Assessment of Demand Response and Advanced Metering</i> (Aug. 2006, rev. Dec. 2008), available at <a href="http://www.ferc.gov/legal/staff-reports/demand-response.pdf">http://www.ferc.gov/legal/staff-reports/demand-response.pdf</a> .....	7, 8, 9, 16
FERC, <i>Energy Primer: A Handbook of Energy Market Basics</i> (July 2012), available at <a href="http://www.ferc.gov/market-oversight/guide/energy-primer.pdf">http://www.ferc.gov/market-oversight/guide/energy-primer.pdf</a> .....	17
FERC, <i>National Action Plan on Demand Response</i> (June 2010), available at <a href="http://www.ferc.gov/legal/staff-reports/06-17-10-demand-response.pdf">http://www.ferc.gov/legal/staff-reports/06-17-10-demand-response.pdf</a> .....	8
<i>FirstEnergy Service Co. v. PJM Interconnection, L.L.C.</i> , FERC Docket No. EL14-55-000 (May 23, 2014) .....	18
Letter from W. Kevin Hughes, State of Maryland Public Service Commission, to Cheryl A. LaFleur, FERC Acting Chairman, FERC Docket RM10-17-000 (June 25, 2014) .....	19

**TABLE OF AUTHORITIES—Continued**

	Page(s)
Monitoring Analytics, <i>Analysis of the 2015/2016 RPM Base Residual Auction</i> (Sept. 24, 2013), available at <a href="http://www.monitoringanalytics.com/reports/Reports/2013/Analysis_of_2015_2016_RPM_Base_Residual_Auction_20130924.pdf">http://www.monitoringanalytics.com/reports/Reports/2013/Analysis_of_2015_2016_RPM_Base_Residual_Auction_20130924.pdf</a> .....	10
Monitoring Analytics, <i>Analysis of the 2016/2017 RPM Base Residual Auction</i> (Apr. 18, 2014), available at <a href="http://www.monitoringanalytics.com/reports/Reports/2014/IMM_Analysis_of_the_20162017_RPM_Base_Residual_Auction_20140418.pdf">http://www.monitoringanalytics.com/reports/Reports/2014/IMM_Analysis_of_the_20162017_RPM_Base_Residual_Auction_20140418.pdf</a> .....	10
Navigant, <i>Carbon Dioxide Reductions from Demand Response</i> (Nov. 25, 2014), available at <a href="http://www.ieca-us.com/wp-content/uploads/Carbon-Dioxide-Reductions-from-Demand-Response_Navigant_11.25.14.pdf">http://www.ieca-us.com/wp-content/uploads/Carbon-Dioxide-Reductions-from-Demand-Response_Navigant_11.25.14.pdf</a> .....	11
NERA Economic Consulting, <i>Distributed Resources: Incentives</i> (Mar. 9, 2006), available at <a href="http://sites.energetics.com/madri/pdfs/whitepaper_031006.pdf">http://sites.energetics.com/madri/pdfs/whitepaper_031006.pdf</a> .....	15
<i>New England Power Generators Ass’n v. ISO New England, Inc.</i> , FERC Docket No. EL15-21-000 (Nov. 14, 2014).....	18
Order Accepting Tariff Sheets As Modified, 95 FERC ¶ 61306 (May 30, 2001).....	7
Order Removing Obstacles, 94 FERC ¶ 61272 (Mar. 14, 2001).....	8, 14

**TABLE OF AUTHORITIES—Continued**

	Page(s)
PJM Interconnection, L.L.C., Revisions to the Reliability Pricing Market and Related Rules in the PJM Open Access Transmission Tariff and Reliability Assurance Agreement Among Load Serving Entities, FERC Docket No. ER15-852-000 (Jan. 14, 2015).....	20, 21

## INTEREST OF AMICI CURIAE<sup>1</sup>

Amici curiae Alcoa, Inc., Aqua America, Inc., Colonial Pipeline Co., Comverge, Inc., Cpower Corp., the Calvert County Board of Education, Direct Energy, the Electricity Consumers Resource Council, EnergyHub, Inc., Ferrite International Co., Ictec Energy Services, Industrial Energy Consumers of America, the North Penn School District, and the University of Maryland, College Park, submit this brief in support of petitioners.

Amici are a diverse group unified by a common theme: the tremendous value of demand response. The group includes two public school systems, a state university, an energy pipeline company, a water utility, two industrial metals manufacturers, and two associations representing industrial businesses. The group also includes demand response providers, i.e., companies that enable hundreds of thousands of commercial, industrial, institutional, and residential electric power consumers to participate in demand response programs.

The court of appeals' decision—that the Federal Energy Regulatory Commission (“FERC”) lacks the statutory power to regulate demand response in wholesale electric energy markets—is wrong. The Federal Power Act expressly authorizes FERC to regulate any practice affecting wholesale rates, unless the practice is a “sale of electric energy” other than at wholesale. *See* 16 U.S.C. §§ 824(b)(1), 824e. Remarkably, the court held that FERC had unreasonably construed the Fed-

---

<sup>1</sup> Letters consenting to the filing of this brief have been filed with the Clerk of the Court. No counsel for a party authored this brief in whole or in part, and no person, other than amici or their counsel, made any monetary contribution to the preparation or submission of this brief.

eral Power Act to grant it authority over a practice that the court *conceded* both affected wholesale rates and was not a sale of electric energy at all. EnerNOC Pet. App. 6a-8a & n.1.

But amici do not write to show the court of appeals' legal error. Rather, amici write to further explain the exceptional importance of correcting that error. If the decision stands, electricity consumers will lose the significant benefits of demand response because they cannot adequately be replicated by the States, and because the validity of demand response in important, closely related markets will be, at best, disrupted by a cloud of legal uncertainty for years.

### **SUMMARY OF ARGUMENT**

Various regions of the country have developed federally regulated wholesale electricity markets to capture efficiencies across state lines. Demand response addresses two distinct problems affecting wholesale rates in those markets: 1) the inelasticity of electricity demand arising from fixed retail pricing, and 2) the inefficiency of relying on generation as the sole resource to ensure grid reliability.

Recognizing that the rare moments of peak demand can be met more cheaply by paying some consumers to reduce their demand than by maintaining or building power plants just for that purpose, FERC has worked for over fifteen years to facilitate demand response in fulfillment of its statutory mandate to ensure just and reasonable wholesale electricity rates. Those efforts, coupled with investments by independent system operators, States, and market participants, have yielded substantial benefits for the nation.

Demand response benefits all end-use consumers by eventually reducing their electricity prices by billions of dollars per year. It also provides a reliable and effective mechanism for balancing the grid when demand spikes. But demand response further provides specific benefits to those who participate in such programs, including many amici. With some investment, power consumers can extract the value of an asset they might not otherwise have appreciated: the ability to help bring supply into balance with demand by lowering their consumption on request. Thus, for example, a school district can find itself with funds to invest in additional cost-saving energy-conservation projects and even enhance its curriculum.

The court of appeals' decision uproots FERC's and many other stakeholders' substantial investments in demand response and imperils the benefits of demand response. If it stands, the decision will stop a fast-growing and crucial industry in its tracks.

The decision below will likely have consequences beyond the "energy markets" that were the subject of Order 745. Generators have already asked FERC to rule that, in light of the decision below, demand response cannot participate in the much larger wholesale "capacity markets" either. At a minimum, absent this Court's immediate intervention, electricity markets will be in disarray for years as the scope of the court of appeals' decision is contested. This legal uncertainty is particularly destructive to capacity markets, which are supposed to stimulate investment necessary to ensure future reliability.

State regulation is not the answer, in the wholesale energy or capacity markets. States are legally and practically incapable of administering interstate elec-

tricity markets, and they specifically are unable to replicate demand response that has existed under FERC's auspices. Indeed, the creation of regional markets and of wholesale demand response programs within those markets was a response to the inefficiencies and other barriers associated with piecemeal State-level regulation.

For all these reasons, the decision below warrants this Court's review.

## **ARGUMENT**

### **I. DEMAND RESPONSE HAS PROVIDED SUBSTANTIAL BENEFITS FOR YEARS**

Demand response is built on the simple premise that when supply is short, it is often far more efficient for consumers to reduce their electricity consumption than for power plants to increase their generation. So, regulators and the industry have spent over a decade integrating demand response into electricity markets. These efforts have produced substantial benefits for the markets and end-use consumers that are jeopardized by the decision below.

#### **A. FERC Has Facilitated Demand Response To Address Important Problems Affecting Wholesale Rates**

Consistent with congressional policy to realize substantial efficiencies through integrated interstate wholesale markets, much of the nation's wholesale electricity markets are operated under FERC's close regulation by regional nonprofit entities called independent

system operators (“ISOs”).<sup>2</sup> See FERC Pet. 2, 6-7; EnerNOC Pet. 6-7; *New York v. FERC*, 535 U.S. 1, 8 (2002) (noting that national electric system is designed to permit consumers in one State to purchase electricity efficiently from generators in another). ISOs are charged by FERC with balancing supply and demand within the markets they administer—known as “organized markets”—on both a real-time and prospective basis, and with ensuring efficient reliability of the electric grid. Demand response is a device for addressing two fundamental problems that have impaired ISOs’ ability to achieve these objectives: the relative inelasticity of retail demand for electric power, and the inefficiency of relying solely on generation to ensure system reliability.

1. The first problem arises from the fact that traditionally demand has not been responsive to prices, i.e., prices are relatively inelastic. Pursuant to state policies favoring stable retail prices, end-use consumers generally pay fixed rates, which respond to wholesale price changes only long after the fact. Thus, when there would be an imbalance between supply and demand, consumers would have little incentive to reduce their consumption to restore equilibrium. Rather, the ISO would have to call on increasingly expensive marginal supply, raising wholesale prices and leading later to retail price increases.

The second problem arises from the need to ensure utmost reliability in electricity markets, as required by federal and state policy. Many ISOs manage not only energy markets, but also capacity markets. In capacity

---

<sup>2</sup> For ease of reference, this brief includes within the category of ISOs the closely related regional transmission organizations (“RTOs”).

markets, load serving entities (“LSEs”), i.e., entities that supply power to end-use consumers, traditionally pay generators, through an auction, for the commitment to produce power on the ISO’s request. The auctions generally occur long before the capacity is needed, to encourage the maintenance or building of sufficient generation capacity. Fulfilling these commitments can be expensive, and the resulting generation is often inefficient or unreliable. In some cases, generators are paid substantial sums to maintain or build power plants that might run only a few hours in an entire year.<sup>3</sup>

2. Because both of these problems—the relative inelasticity of demand and the inefficiency of generation as the sole reliability resource—directly affect wholesale electricity prices, they implicate FERC’s core statutory responsibility: ensuring that those prices are just and reasonable.

FERC and ISOs have recognized that both problems can be addressed through the use of “demand response.” In organized markets, demand response providers commit to reduce demand when called upon by an ISO, in return for certain payments. Demand response providers fulfill these commitments by aggregating contracts with all kinds of retail customers on similar terms.

Demand response programs vary depending on which problem they principally seek to address. “Economic” demand response programs, which participate in energy markets, mostly address the first problem.

---

<sup>3</sup> ISOs also manage ancillary services markets. In traditional ancillary services markets, generators are paid for their ability to provide, in real time, various services an ISO might need to maintain grid reliability. Demand response, however, now also participates in such markets.

In these programs, the provider makes a short-term commitment in the wholesale market to reduce demand (typically one day ahead). The bulk of the payment the provider receives for this commitment is passed on to its end-use customers. The program thus increases elasticity of demand by exposing the provider's customers to wholesale price changes and compensating them for reducing electricity consumption.

“Reliability-based” demand response programs principally address the second problem. In these programs, demand response providers make similar commitments to reduce demand, but do so months or years ahead. And they are paid both for the commitment to stand by (in the capacity markets) and for the actual reduction in demand when eventually called upon (in the energy market). These programs generally provide ISOs a far cheaper tool to ensure system reliability and avoid blackouts than bringing additional generation online.<sup>4</sup>

3. To fulfill its mandate of ensuring just and reasonable wholesale prices, FERC began asserting jurisdiction over demand response programs in wholesale markets in 2001, following the California electricity crisis. *See Order Accepting Tariff Sheets As Modified*, 95

---

<sup>4</sup> FERC has recognized that demand response can be more effective than generation in responding to emergencies. First, it can be much quicker: it is often easier to turn off consumption than to start a new generator. Second, it can be more reliable, because it is a “statistical resource.” *See FERC, Assessment of Demand Response and Advanced Metering* 119-120 (Aug. 2006, rev. Dec. 2008), available at <http://www.ferc.gov/legal/staff-reports/demand-response.pdf> (“2006 FERC Report”). That is, whereas the failure of a few consumers to fulfill their commitments to reduce consumption when requested has a small effect on the relationship between supply and demand, the failure of a generator to provide power on request has a substantial effect.

FERC ¶ 61,306 (May 30, 2001); Order Removing Obstacles, 94 FERC ¶ 61,272 (Mar. 14, 2001). In so doing, it appropriately rejected jurisdictional objections essentially identical to those presented here.

In 2005, Congress directed FERC to expand its efforts by establishing a federal policy of removing “unnecessary barriers to demand response participation in energy, capacity, and ancillary service markets”—the key wholesale markets that *only* FERC has authority to regulate. Energy Policy Act of 2005, Pub. L. No. 109-58, § 1252(f), 119 Stat. 594, 966 (“EPAAct”). Pursuant to EPAAct, FERC commissioned studies of demand response and then developed with States, ISOs, and other stakeholders a demand response national action plan.<sup>5</sup> FERC then undertook several demand response rulemakings, including Order 719, which institutionalized the structure of demand response, *see* Wholesale Competition in Regions with Organized Electric Markets, 73 Fed. Reg. 64,100, 64,101-64,102 (Oct. 28, 2008), and Order 745, which standardized the methodology for determining compensation rates for demand response in wholesale markets and which is the subject of this case, *see* EnerNOC Pet. App. 140a-253a.

FERC’s actions triggered a cascade of actions by ISOs, States, and market stakeholders. ISOs initiated extensive processes to implement FERC’s orders, ul-

---

<sup>5</sup> *See, e.g.*, 2006 FERC Report; FERC, *A National Assessment of Demand Response Potential* (June 2009), available at <http://www.ferc.gov/legal/staff-reports/06-09-demand-response.pdf>; FERC, *National Action Plan on Demand Response* (June 2010), available at <http://www.ferc.gov/legal/staff-reports/06-17-10-demand-response.pdf>; FERC, *2014 Assessment of Demand Response and Advanced Metering* (Dec. 2014), available at <http://www.ferc.gov/legal/staff-reports/2014/demand-response.pdf> (“2014 FERC Report”).

timately leading to the submission of revised tariffs for FERC’s approval. State utility commissions and legislatures relied on the revised ISO tariffs to create complementary retail-level demand response programs. And end-use consumers invested in the infrastructure necessary to reliably reduce consumption when requested so that they could participate in demand response programs.

### **B. Demand Response Provides Demonstrable Benefits To Electricity Markets**

This collective effort has paid off. In 2013, demand response resources in organized markets provided an aggregate potential peak reduction of approximately 29,000 megawatts (“MW”)—or 6.1% of peak demand. 2014 FERC Report 11. That was enough electricity to power millions of homes.

Because demand response’s impact is most significant at the margin, an even better indicator of its importance is its effect on wholesale prices. *See* 2006 FERC Report 7 (“Not all consumers need to respond simultaneously for markets to benefit by lowered overall prices.”). For example, one of the largest ISOs in the United States—PJM<sup>6</sup>—calculated that, on a single hot day in 2006, its use of demand response saved the system \$230 million in energy costs by avoiding the need to “dispatch” (or activate) inefficient generation plants. *See* FERC, *2007 National Assessment of Demand Response and Advanced Metering* 6 (Sept. 2007), available at <http://www.ferc.gov/legal/staff-reports/09-07-demand-response.pdf> (“2007 FERC Report”).

---

<sup>6</sup> PJM serves 13 States, principally in the Mid-Atlantic region, and the District of Columbia.

Longer-term price benefits are most visible in the related capacity markets. One independent analysis calculated that, without demand response, capacity prices for the 2017/2018 delivery year could have *tripled* in certain PJM zones. See Boshart, *Navigant: Absent DR participation, PJM capacity prices could jump up to 3-fold*, SNL Financial (Oct. 6, 2014) available at <https://www.snl.com/InteractiveX/Article.aspx?cdid=A-29411194-12081>. Moreover, removing demand response in PJM would increase system-wide capacity costs by up to \$9 billion for that same year. See FERC Pet. 32; EnerNOC Pet. 29-30. Having to redo capacity auctions in PJM for 2016/17 and 2015/16 would potentially increase costs by \$10 billion and \$14 billion, respectively. See Monitoring Analytics, *Analysis of the 2016/2017 RPM Base Residual Auction* 37 (Apr. 18, 2014), available at [http://www.monitoringanalytics.com/reports/Reports/2014/IMM\\_Analysis\\_of\\_the\\_20162017\\_RPM\\_Base\\_Residual\\_Auction\\_20140418.pdf](http://www.monitoringanalytics.com/reports/Reports/2014/IMM_Analysis_of_the_20162017_RPM_Base_Residual_Auction_20140418.pdf); Monitoring Analytics, *Analysis of the 2015/2016 RPM Base Residual Auction* 5 (Sept. 24, 2013), available at [http://www.monitoringanalytics.com/reports/Reports/2013/Analysis\\_of\\_2015\\_2016\\_RPM\\_Base\\_Residual\\_Auction\\_20130924.pdf](http://www.monitoringanalytics.com/reports/Reports/2013/Analysis_of_2015_2016_RPM_Base_Residual_Auction_20130924.pdf). And these figures are just for a single organized market.

The impact on system reliability in emergencies is equally stark. As FERC has observed, “even small load reductions at system peak can have a large impact on reducing stress on electric delivery systems when operating reserves are in near-shortage conditions.” 2007 FERC Report 4. Both petitions highlight the important role demand response played in meeting peak demand in the PJM market during the summer of 2013 and the 2014 “polar vortex.” See FERC Pet. 33; EnerNOC Pet. 30. But these benefits have not been

limited to the PJM market or to those particular events. For example, in February 2011 demand response saved the day in Texas when a “significant number of electric generating facilities in the U.S. Southwest tripped off line, failed to start, or had their available capacity de-rated during the extreme cold weather.” See FERC, *2011 National Assessment of Demand Response and Advanced Metering* 10 (Nov. 2011), available at <http://www.ferc.gov/legal/staff-reports/11-07-11-demand-response.pdf> (“2011 FERC Report”). And FERC repeatedly has catalogued the “critical” or “necessary” role demand response has played in the hottest summers of the past decade, in markets including New York, New England, California, the Midwest, Texas, and PJM. See FERC, *2012 National Assessment of Demand Response and Advanced Metering* 44 (Dec. 2012), available at <http://www.ferc.gov/legal/staff-reports/12-20-12-demand-response.pdf> (summer 2012); 2011 FERC Report 9-10 (summer 2011); FERC, *2008 National Assessment of Demand Response and Advanced Metering* 50-51 (Dec. 2008), available at <http://www.ferc.gov/legal/staff-reports/12-08-demand-response.pdf> (summer 2007); 2007 FERC Report 4-6 (summer 2006).

Finally, as others have observed, demand response provides various other benefits, including promoting a cleaner environment.<sup>7</sup>

---

<sup>7</sup> For example, a recent Navigant study concluded that demand response could reduce carbon dioxide emissions by 2%, which is 10% of the Environmental Protection Agency’s target of 20% reductions by 2030. See Navigant, *Carbon Dioxide Reductions from Demand Response* 1 (Nov. 25, 2014), available at [http://www.ieca-us.com/wp-content/uploads/Carbon-Dioxide-Reductions-from-Demand-Response\\_Navigant\\_11.25.14.pdf](http://www.ieca-us.com/wp-content/uploads/Carbon-Dioxide-Reductions-from-Demand-Response_Navigant_11.25.14.pdf). As Navigant notes, demand response not only directly reduces fossil fuel con-

### **C. Demand Response Provides Important Additional Benefits To End-Use Consumers**

Additional benefits accrue to the wide range of consumers that participate in demand response programs. End-use consumers that can reliably reduce power consumption on request—a factory delaying manufacturing processes until night hours, a hospital turning on a back-up generator, a resident lowering the air-conditioning—hold assets of substantial value: the ability to bring demand into balance with supply, especially when demand peaks. Demand response programs offer such end-use consumers an opportunity to both extract this value and benefit society as a whole.

For example, amici Calvert County Board of Education and North Penn School District run school systems in Maryland and Pennsylvania, respectively, each with at least twenty buildings and 13,000 students. Working with demand response providers, both school systems committed to reducing electric load in various ways, including adjusting lighting, pump motors, and other units. Their respective demand response providers successfully bid these commitments, aggregated with those of other customers, into wholesale markets. Each school system was then paid significant sums for its demand response efforts. The North Penn School District, for example, earned up to \$110,000 per year for the past three years, which permitted it to both pay for these investments and maintain educational programs that other schools have had to eliminate. The Calvert County Board of Education invested its pay-

---

sumption, but also indirectly supports renewable technologies. The generation output of solar and wind power can vary unpredictably due to weather conditions. Demand response can plug such variability gaps efficiently and thereby permit renewables to form a greater portion of the nation's generating capacity.

ments into several energy conservation projects that reduced utility costs even further. In both school systems, the energy management programs have become a visible part of the curriculum.

Amici could provide countless other examples. The commercial and industrial amici have found that demand response significantly offsets costs and helps maintain competitiveness. And collectively the demand response provider amici have brought similar value to hundreds of thousands of residential consumers in federally regulated markets. For example, just one Converge program in the Philadelphia area that is offered into PJM's capacity market pays nearly 100,000 residential consumers \$80 a year for making their air conditioners available to be cycled during system emergencies.

## **II. IF ALLOWED TO STAND, THE DECISION BELOW WILL HAVE BROAD AND SEVERE CONSEQUENCES FOR THE MARKETS, DEMAND RESPONSE PARTICIPANTS, AND RATEPAYERS GENERALLY**

The court of appeals' decision threatens to uproot over a decade of investment in demand response and deny the markets, end-use consumers that participate in demand response programs, and ratepayers generally the significant benefits described above, potentially costing them billions of dollars per year. Although Order 745 concerns only demand response in energy markets, the decision below is having, and if allowed to stand will continue to have, serious adverse effects on demand response in capacity markets as well.

The States on their own cannot step into the void created by the decision below and facilitate demand response programs capable of achieving comparable efficiencies to those yielded by FERC-regulated demand

response programs. Indeed, it was the States' differing approaches and limitations in providing adequate incentives for demand response that spurred FERC to promote demand response in wholesale markets in the first place. *See* EnerNOC Pet. App. 181a-183a (FERC recognizing in Order 745 "lack of market incentives to invest in [demand response] enabling technologies"); *id.* 84a-86a (FERC expanding on these findings on rehearing).

Thus, over the course of 15 years, FERC, along with States, ISOs, end-use consumers, and other market stakeholders, have invested in and developed a demand response system predicated on cooperative federalism: States in organized markets structure retail programs while FERC promotes "complementary wholesale programs" in ISO markets. 94 FERC ¶ 61,272, 61,972. Order 745 in particular creates necessary incentives by setting a uniform reasonable rate at which demand response providers are paid for their aggregated demand reductions in the wholesale energy market.<sup>8</sup> The decision below would discard this suc-

---

<sup>8</sup> FERC appropriately determined, after careful consideration, that this rate should be the full value of the energy demand response providers return to the market, i.e., the wholesale price of energy, also called the locational marginal price ("LMP"). *See* EnerNOC Pet. App. 174a-189a (FERC's extensive explanation of this decision in original order); *see also id.* 78a-90a (FERC's further explanation of this decision on rehearing). After all, a megawatt saved is a megawatt earned. FERC's determination was owed "great deference" because the "statutory requirement that rates be 'just and reasonable' is obviously incapable of precise judicial definition." *Morgan Stanley Capital Grp., Inc. v. Public Utility Dist. No. 1 of Snohomish Cnty.*, 554 U.S. 527, 532 (2008); *see also Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto Ins. Co.*, 463 U.S. 29, 43 (1983) (requiring agency only to "examine the relevant data and articulate a satisfactory explanation for its action including a rational connection between the facts found and

cessful model and leave the market without an adequate replacement.

**A. The States Cannot Adequately Replicate The Benefits Of Wholesale Demand Response In Energy Markets**

There are significant barriers to replicating the benefits of wholesale demand response programs in energy markets on the state level. The basic challenge of promoting demand response is to provide an adequate incentive to the consumer to reduce demand when called upon to do so, even on short notice. For various reasons, state-level actors have not been able to provide such an incentive.

States could offer to pay consumers to reduce demand. This might make sense in a State served by a vertically integrated utility, as the State's ratepayers would also fully internalize the benefits of lower prices and reduced congestion resulting from the demand reduction. But if the State is within an organized interstate market, those benefits will be diffused across neighboring States within the same market. States are generally reluctant to impose the full costs of demand response programs on their own ratepayers when those ratepayers will not capture all the benefits of the investments. See NERA Economic Consulting, *Distributed Resources: Incentives* 15 (Mar. 9, 2006), available at [http://sites.energetics.com/madri/pdfs/whitepaper\\_03](http://sites.energetics.com/madri/pdfs/whitepaper_03)

---

the choice made"). The court of appeals' alternative holding that Order 745 was arbitrary and capricious failed to accord the requisite deference, as explained by the dissent below. See *EnerNOC Pet. App.* 39a-44a. Amici respectfully submit that should the Court grant *certiorari* to address FERC's jurisdiction, it would be in the interest of justice for the Court also to address (and reverse) this alternative holding.

1006.pdf (discussing inefficiencies due to the misalignment of costs and benefits of demand response).

Nor would an adequate incentive likely come from entities in the supply chain responsible for delivering power from wholesale markets to retail customers: the LSEs that supply power to retail customers; the state-regulated utilities that distribute that power to customers on the LSE's behalf; or utilities that play both roles. FERC has recognized the "long-standing" and "difficult to address" problem that these entities are not typically exposed to wholesale prices changes and thus are unlikely to encourage their customers to reduce demand. 2006 FERC Report 72; *see also* FERC, *2010 Assessment of Demand Response and Advanced Metering* 47 (Feb. 2011) available at <http://www.ferc.gov/legal/staff-reports/2010-dr-report.pdf> (reiterating concern). LSEs (including utilities functioning as LSEs) are generally indifferent to short-term wholesale price increases because they enter into fixed-price contracts with generators or have otherwise hedged their power purchases. And utilities that are not LSEs are generally paid as a function of the total power they distribute; accordingly, reducing power sales will either reduce their revenue, which they obviously do not want, or cause them to petition for rate increases.

State-level dynamic pricing programs, whereby retail prices vary somewhat based on the time of day or market conditions, would not solve the problem.<sup>9</sup> First,

---

<sup>9</sup> Programs along these lines include: "critical-peak pricing," in which customers pay lower prices in most hours in exchange for paying very high prices during peak events; "peak time rebates" where customers are given rebates for reducing demand in certain peak hours; "time-of-use pricing," which charges customers different fixed rates depending on the time of day of the power consumption; and "real-time pricing," which exposes the consumer to

state-level dynamic pricing programs face the same challenges just discussed. Second, such programs insufficiently incentivize load reductions when they would be needed. Although States have made progress encouraging some forms of dynamic pricing for large consumers, dynamic pricing remains a distant goal for residential and smaller consumers because such consumers generally prefer stable retail prices, and States support that preference. *See* EnerNOC Pet. App. 182a (Order 745 noting “lack of dynamic retail prices” as impetus for FERC action). Moreover, even where dynamic pricing is available to large consumers in States in ISO markets, those consumers often purchase their power at a fixed price from LSEs to limit the risk of price spikes. This reduces the potential effectiveness of these programs.

### **B. The Decision Below Threatens Capacity Markets And The Availability Of Demand Response In Those Markets**

Although Order 745 only concerns the energy markets, generators have argued that the decision below should be extended to capacity markets. The resulting legal uncertainty has already severely disrupted capacity markets, and if it is determined that the decision in fact bars demand response from participating in such markets, that disruption will increase and become permanent. The decision below thus poses a serious threat to the benefits demand response provides in these markets, because States in organized interstate markets have no ability to encourage sufficient demand re-

---

changes in wholesale prices directly. *See generally* FERC, *Energy Primer: A Handbook of Energy Market Basics* 47-48 (July 2012), available at <http://www.ferc.gov/market-oversight/guide/energy-primer.pdf>.

sponse to meet the market’s capacity and reliability needs.

1. As petitioners point out, several power generators, with respondent EPSA’s support, have filed complaints with FERC arguing that the decision bars demand response providers from participating in future capacity auctions—and even that some previously held and settled capacity auctions in which demand response providers participated must be invalidated. *See* FERC Pet. 31 (citing *FirstEnergy Serv. Co. v. PJM Interconnection, L.L.C.*, FERC Docket No. EL14-55-000 (May 23, 2014); *New England Power Generators Ass’n v. ISO New England, Inc.*, FERC Docket No. EL15-21-000 (Nov. 14, 2014)); EnerNOC Pet. 30-31 (same).<sup>10</sup>

2. If the generators’ reading of the decision below prevails, there is not likely to be an adequate alternative way to encourage comparable demand response participation in organized capacity markets.

States are not positioned to play the role of ISOs in interstate markets to ensure reliability and adequate

---

<sup>10</sup>The generators contend that “the D.C. Circuit’s jurisdictional holding speaks directly to the Commission’s jurisdiction to regulate demand response generally, not just demand response in any particular wholesale market.” Comments of the Electric Power Supply Association 4, FERC Docket No. EL15-21-000 (Dec. 4, 2014). Pointing to the D.C. Circuit’s remark that “demand response—simply put—is part of the retail market,” *id.* at 2 (quoting EnerNOC Pet. App. 10a), the generators argue that “[t]here is simply no plausible distinction that can be drawn between ‘compensating a consumer for reducing demand’ in the energy market and doing the exact same thing in the capacity market,” *id.* at 5 (quoting EnerNOC Pet. App. 10a (alterations omitted)). Dozens of entities, including various market participants, state utility commissions, state consumer advocates, ISOs, and others, have sought to intervene in opposition to the generators’ complaints. *See* FERC Docket No. EL14-55-000; FERC Docket No. EL15-21-000.

capacity. Currently, ISOs in such markets decide whether to ensure system reliability by dispatching marginal generation or demand response, and they do so on an interstate basis. For example, PJM can compensate for a temporarily downed generator in Pennsylvania by calling on a Maryland university's commitment to lower its consumption. This enables the ISO to achieve substantial efficiencies. An individual State or state-regulated utility, however, has no comparable ability because its authority stops at its borders. *See New York*, 535 U.S. at 4 (explaining the "Attleboro gap").

Indeed, most state-level reliability-based demand response likely would not even exist if demand response could not participate in FERC-regulated capacity markets. Generally, utilities can adopt a demand response program only if they prove to their state regulator that the benefits would exceed costs, and one of the biggest benefits of such a program is that it allows the utility to offset its capacity obligations in ISO auctions. If these state-level demand response programs cannot participate in capacity markets, they likely will be deemed not cost-effective and have to be discontinued. Recognizing that the decision has endangered States' ability to fund their own programs, States in organized markets have voiced strong opposition to it. *See, e.g.*, Delaware Public Service Commission Comments to FERC Regarding D.C. Circuit May 23, 2014 Opinion Vacating FERC Order No. 745, FERC Docket RM10-17-000 (July 2, 2014) (noting that Delaware's \$26 million Delmarva program and statutory efficiency goals are now in jeopardy because of potential inability to access demand response in wholesale markets); Letter from Hughes, State of Maryland Public Service Commission, to LaFleur, FERC Acting Chairman, FERC Docket

RM10-17-000 (June 25, 2014) (same regarding state EmPOWER Maryland programs).

3. In view of these difficulties, one ISO has proposed a sweeping and potentially destructive preemptive action should this Court deny review. PJM has decided that it “cannot reasonably plan its operations based on the expectation that the Commission and subsequent reviewing courts will confine [the decision below] to energy markets.” PJM Interconnection, L.L.C., Revisions to the Reliability Pricing Market and Related Rules in the PJM Open Access Transmission Tariff and Reliability Assurance Agreement Among Load Serving Entities, FERC Docket No. ER15-852-000, at 4 n.7 (Jan. 14, 2015). Accordingly, last month PJM asked FERC to approve revisions to its capacity market rules that would apply only if this Court denies the certiorari petitions. *Id.* PJM’s proposal would bar non-LSE demand response providers from bidding into the capacity markets, but would attempt to permit some form of demand response through LSEs.

But if the decision below forecloses demand response providers from participating in organized capacity markets, it may equally foreclose PJM’s proposal.<sup>11</sup> Moreover, for much the same reasons that States cannot adequately facilitate demand response, there are serious practical doubts about whether PJM’s proposal could facilitate meaningful demand response. Indeed, PJM itself describes its proposal as a “stop-gap” program that is inferior to the status quo, and recognizes that demand response participation “could be substan-

---

<sup>11</sup> After all, PJM is seeking approval from FERC simply to narrow the range of companies that can provide demand response in the wholesale market; it does not propose to leave demand response only to the retail markets and the States.

tially lower under this proposal than it has been historically.” *Id.* at 2-3.

4. This controversy has immense stakes. If the generators prevail and the decision below is determined to also foreclose demand response in capacity markets, then ratepayers are expected to incur billions of dollars per year in additional costs, ISOs will lose a valuable tool for ensuring system reliability, and (as just discussed) even state demand response programs may cease.

In the meantime, even the legal uncertainty raised by the decision below is pernicious because the purpose of capacity markets is to encourage long-term investment because of the time it takes to build new capacity. The possibility that ISOs may not be able to call upon demand response commitments already made raises the specter of extremely expensive, and possibly fruitless, last-minute scrambles for capacity.

Simply put, other than this Court’s intervention to correct the court of appeals’ error, there is no apparent remedy for the quandary the decision below has imposed on capacity markets. Nor is there a prospect of any positive outcome for these markets, at least in the short term. Given the substantial stakeholder interest and the difficult questions presented, FERC will likely take months if not years to ultimately resolve the generators’ complaints and PJM’s proposal. If FERC decides it must alter the status quo, ISOs will then undertake their own extensive stakeholder processes to unwind existing practices and develop new rules that implement FERC’s order, and then those new rules will again have to be reviewed and approved by FERC. State utility commissions and legislatures will have to modify their own programs to be consistent with what-

ever new approach FERC and the ISOs adopt, as will industry participants. All of these actions would have to take place under the cloud of legal challenges that will inevitably follow. This is no way to develop a wholesale electricity market that produces reliable service at just and reasonable rates.<sup>12</sup>

### CONCLUSION

For the foregoing reasons, the petitions for certiorari should be granted.

Respectfully submitted.

SETH P. WAXMAN  
*Counsel of Record*  
MARK C. KALPIN  
DAVID M. LEHN  
SAURABH H. SANGHVI  
WILMER CUTLER PICKERING  
HALE AND DORR LLP  
1875 Pennsylvania Ave., NW  
Washington, DC 20006  
(202) 663-6000  
seth.waxman@wilmerhale.com

FEBRUARY 2015

---

<sup>12</sup> While undoubtedly some demand response investment has already been chilled by the decision below, markets have continued to operate because of the prospect of this Court's review. PJM for its part has said it will withdraw its proposal if this Court grants the petitions.