

155 FERC ¶ 61,062  
UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Norman C. Bay, Chairman;  
Cheryl A. LaFleur, Tony Clark,  
and Colette D. Honorable.

PJM Interconnection, L.L.C.

Docket No. ER14-504-001

ORDER ON REHEARING

(Issued April 21, 2016)

1. The PJM Industrial Customer Coalition (PJM-ICC) seeks rehearing of an order issued January 30, 2014, in which the Commission accepted PJM Interconnection, L.L.C.'s (PJM) proposed tariff changes to cap PJM's procurement of certain limited-availability demand response products, as described more fully below.<sup>1</sup> For the reasons discussed below, we deny rehearing.

**I. Background**

2. On November 29, 2013, PJM submitted a proposal to place certain caps on the right of its limited-availability demand response products, namely, Limited Demand Response,<sup>2</sup> and Extended Summer Demand Response,<sup>3</sup> to participate in PJM's capacity

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<sup>1</sup> See *PJM Interconnection, L.L.C.*, 146 FERC ¶ 61,052 (2014) (January 2014 Order). The limited-availability demand response products at issue here have been replaced, in relevant part, by PJM's Capacity Performance Proposal, in Docket No. ER15-623-000, *et al.*, establishing, on a phased-in basis, an annual demand response requirement. See *PJM Interconnection, L.L.C.*, 151 FERC ¶ 61,208 (2015) (*Capacity Performance Order*).

<sup>2</sup> See Reliability Assurance Agreement at 1.43A (defining Limited Demand Response as a capacity product that may be called on by PJM from June through September, up to ten times, and for six hours at a time).

<sup>3</sup> *Id.* at 120C (defining Extended Summer Demand Response as a capacity product that may be called on by PJM for an unlimited number of times, from May through October and for up to ten hours at a time).

market. PJM stated that, under its then-existing capacity procurement floors, PJM was required to rely on Annual Resources (PJM's highest-availability capacity product), to procure 90 percent of its reliability requirement.<sup>4</sup> PJM stated that it was further required to procure 96 percent of its reliability requirement from either Annual Resources or Extended Summer Demand Response. Beyond these minimum procurement requirements, PJM was permitted to procure Limited Demand Response.

3. PJM asserted, however, that these minimum procurement requirements had resulted in price suppression. PJM explained that under these targets, it would first procure the minimum requirements of the higher valued resources, but then would procure the lower cost, limited-availability demand response products until the price of the lower cost product intersected the demand curve or the demand curves of the higher and lower cost products converged. PJM argued that its minimum procurement requirements had effectively created a vertical demand curve for Annual Resources, such that fewer MWs of Annual Resources were acquired at a generally lower price than would be expected under a sloped demand curve.<sup>5</sup>

4. PJM therefore proposed to cap the amount of Limited Demand Response at 4 percent of PJM's reliability requirement and cap the aggregate amount of Limited Demand Response and Extended Summer Demand Response at 10 percent of PJM's reliability requirement. PJM proposed that both constraints rely on PJM's then-existing reliability targets for Limited Demand Response and Extended Summer Demand Response, i.e., on the maximum amounts that can count towards PJM's reliability requirement with an acceptable level of risk. By capping the amount of its limited-availability demand response products, PJM proposed to procure all available products,

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<sup>4</sup> *Id.* at section 1.1A (defining Annual Resources to include existing and planned generation capacity, energy efficiency resources, or demand response resources available to PJM on a year-round basis).

<sup>5</sup> In past auctions, as PJM noted in its filing, the clearing price for Annual Resources, with a procurement floor in place, had risen above the clearing price for limited availability demand response, as cleared under the sloped demand curve. Had a ceiling on limited availability demand response been in effect, in place of the floor for Annual Resources, more Annual Resources would have been acquired and at a higher price. PJM therefore argued that maintaining a floor on Annual Resources had resulted in lower prices paid to Annual Resources than would have otherwise been paid.

until it reached the caps on the more limited products, and then procure only the higher valued product.

5. In the January 2014 Order, the Commission accepted PJM's filing, finding that it was appropriate for PJM to distinguish between PJM's three capacity market product classes in meeting its reliability requirement.<sup>6</sup> The Commission also found that, on balance, PJM's proposal retained an adequate opportunity for limited-availability demand response to participate in PJM's capacity market. Specifically, the Commission found that limited-availability demand response would be permitted to compete in PJM's capacity market up to PJM's procurement caps, while entities seeking to participate in excess of these levels would be permitted to submit coupled offers for both Annual Resources and limited-availability demand response.<sup>7</sup>

6. In the January 2014 Order, the Commission also agreed with PJM that when Annual Resources are required to be paid a price premium to satisfy PJM's minimum procurement requirement, this virtually guaranteed the clearance of PJM's limited-availability demand response products in excess of the minimum requirement, and thus prevented PJM from procuring additional quantities of a superior, higher-availability product, i.e., Annual Resources.

7. The January 2014 Order also found that PJM's proposal was appropriately designed to remedy this problem by applying PJM's existing procurement limits on Limited Demand Response and Extended Summer Demand Response.<sup>8</sup> The January 2014 Order further found that this preference for a higher availability product was appropriate, given that not all events requiring the commitment of demand response resources will occur during the limited availability periods in which Limited Demand Response and Extended Summer Demand Response may be called.<sup>9</sup> Finally, on the issue

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<sup>6</sup> January 2014 Order, 146 FERC ¶ 61,052 at P 60.

<sup>7</sup> *Id.* The Commission further noted that, given the large portion of PJM's reliability need that must be met by an Annual Resource, it was appropriate that PJM ensure that this higher-availability product clear above the level that satisfies PJM's reliability requirement, to incent the development and continued availability of this essential resource. *Id.* P 64.

<sup>8</sup> *Id.* P 61.

<sup>9</sup> *Id.* n.48 (citing *Communication of Operational Information Between Natural Gas Pipelines and Electric Transmission Operators*, Order No. 787, FERC Stats. & Regs. ¶ 31,350 and PJM Supplemental Answer at 7).

of cost impact, the January 2014 Order found that the increased capacity costs attributable to PJM's proposal were reasonable, given the enhanced reliability it would provide, and given that the additional clearance of generation resources would contribute more supply to PJM's energy market and thus place a downward pressure on energy prices.<sup>10</sup>

## **II. Request for Rehearing**

8. PJM-ICC asserts that the Commission in the January 2014 Order failed to demonstrate that consumers will receive adequate energy market savings under PJM's proposal to justify increased capacity charges of nearly \$1 billion per year, as projected by PJM in its study issued as part of its stakeholder proceedings.<sup>11</sup> PJM-ICC argues that, under PJM's 2013 Simulation Study, the full offset claimed by PJM (\$3.4 billion) could not be achieved, absent an increase in the total amount of cleared Annual Resources of 7,185 MW, while PJM's proposal would result in an increase of only 612 MW of Annual Resources. PJM-ICC asserts that, with these adjustments, PJM load would incur a net increase of costs of \$740 million for the simulated period of 2016-17.

9. PJM-ICC also argues that PJM failed to demonstrate how the energy savings assumed to be produced under PJM's proposal would flow back through PJM's capacity market demand curve via the inclusion of the Energy and Ancillary Services offset in the calculation of the Net Cost of New Entry (Net CONE), the input used to set the demand curve parameters. PJM-ICC argues that a low energy market clearing price would reduce the Energy and Ancillary Services offset and increase Net CONE, all else being equal, thus leading to higher clearing prices in PJM's capacity market auctions.

10. PJM-ICC also asserts as error the January 2014 Order's findings that PJM's proposed tariff changes are not unduly discriminatory as between Annual Resources, Limited Demand Response, and Extended Summer Demand Response. Specifically, PJM-ICC challenges the Commission's finding that limited-availability demand response is not similarly situated with Annual Resources, given the differences in their performance requirements.<sup>12</sup> PJM-ICC argues that, while there may be differences

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<sup>10</sup> *Id.* P 68.

<sup>11</sup> See PJM January 6, 2014 answer at 37 (citing PJM Markets and Reliability Committee, "*Comparison of Proposals for Clearing DR Products in RPM Auctions*," at 21, (2013) (2013 Simulation Study).

<sup>12</sup> January 2014 Order, 146 FERC ¶ 61,052 at P 65.

between these products, any such difference is irrelevant in assessing whether these products may be similarly-situated, given that PJM's limited-availability demand response products provide the same service as Annual Resources and contribute extensively to PJM in meeting its reliability requirement.

11. PJM-ICC also argues that, while it is appropriate to limit the extent to which PJM's limited-availability demand response products should be used to meet PJM's reliability requirement, the January 2014 Order went well beyond establishing an appropriate resource mix to ensure reliability by precluding the right of limited-availability demand response to provide any excess capacity beyond PJM's reliability requirement. PJM-ICC argues that limited-availability demand response has performed when Annual Resources failed to perform or were unable to perform. Specifically, petitioner notes that during the three-day heat wave in September 2013, when PJM experienced generation outages from between 24,000 to 28,000 MW (including 11,000 MW of Annual Resources subject to planned outages), PJM had 7,700 MW of Limited Demand Response available, of which it called approximately 6,000 MW.

12. PJM-ICC further argues that, for purposes of assessing whether PJM's capacity products are similarly-situated in the context of procuring excess capacity (beyond the reliability requirement), the marginal value of each additional MW of capacity procured above this level decreases. PJM-ICC argues that, as such, any difference in the reliability value of PJM's capacity products are minimized, thus invalidating any preference that might be sought as to an Annual Resource. PJM-ICC adds that this is particularly so given that PJM's limited-availability demand response products are also low cost resources that meet one of the core principles underlying PJM's capacity market design, namely, the identification of the least cost alternative to meeting PJM's reliability needs.

13. Finally, PJM-ICC asserts that the January 2014 Order failed to address its request that the Commission "find and conclude that any settlement or hearing procedures in this proceeding, or any re-filing of the PJM proposal to address PJM's vertical demand curve concerns, must consider how [PJM's proposed sell offer plan filing, in Docket No. ER13-2108-000], if approved, impact the issues in this proceeding."<sup>13</sup>

#### **IV. Discussion**

14. For the reasons discussed below, we deny rehearing of the January 2014 Order. We note, as a threshold matter, that the limited-availability demand response products

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<sup>13</sup> See PJM-ICC rehearing request at 11 (citing Coalition of Diverse Stakeholders protest at 25).

that are the subject of PJM's filing, namely, Limited Demand Response and Extended Summer Demand Response, will be replaced by PJM's phased implementation of a new capacity product.<sup>14</sup> As such, PJM-ICC's request for rehearing is considered here in the context of a limited locked-in period.

15. PJM-ICC argues that the January 2014 Order erred by failing to consider a quantifiable cost benefit analysis, including PJM-ICC's proposed revisions and adjustments to PJM's 2013 Simulation Study. We agree that costs are an important consideration in evaluating the merits of PJM's proposed procurement caps.<sup>15</sup> However, while the Commission is required to consider all relevant factors and make a "common-sense assessment" that costs that may be incurred are consistent with the ratepayers' overall needs and interests, the Commission's findings in making such an assessment need not be accompanied by a quantitative cost-benefit analysis.<sup>16</sup> In addition, in determining whether tariff revisions are just and reasonable, the Commission has "broad authority to consider non-cost factors[.]"<sup>17</sup>

16. Applying this standard here, we reaffirm the January 2014 Order's finding that PJM's proposed tariff changes struck an appropriate balance, by enhancing PJM's ability to meet its reliability requirement, with resources that are capable of responding when

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<sup>14</sup> See *Capacity Performance Order*, 122 FERC ¶ 61,172 at P 2. Under PJM's Capacity Performance construct, as fully implemented, all capacity resources seeking to participate in PJM's capacity market, including all demand response resources, will be required to perform as a Capacity Performance Resource and meet enhanced capacity resource performance requirements. *Id.*

<sup>15</sup> *Farmers Union Cent. Exch., Inc. v. FERC*, 734 F.2d 1486, 1502 (D.C. Cir. 1984).

<sup>16</sup> *Process Gas Consumers Grp. v. FERC*, 866 F.2d 470, 476-77 (D.C. Cir. 1989); see also *Am. Elec. Power Serv. Corp.*, 118 FERC ¶ 61,041, at P 18 (2007); *Sw. Power Pool, Inc.*, 116 FERC ¶ 61,289, at P 47 (2006).

<sup>17</sup> *Midwest Indep. Transmission Sys. Operator, Inc.*, 122 FERC ¶ 61,172, at P 26 (2008); see also, *Permian Basin Area Rate Cases*, 390 U.S. 747, 814-15 (1968); *Morgan Stanley Capital Grp. Inc. v. Pub. Util. Dist. No. 1 of Snohomish County*, 554 U.S. 527, 558 (2008); *Pub. Utilities Comm'n of Cal. v. FERC*, 367 F.3d 925, 929 (D.C. Cir. 2004); *PJM Interconnection, L.L.C.*, 147 FERC ¶ 61,103, at P 37 (2014).

needed, while retaining an adequate opportunity for limited-availability demand response to participate in PJM's capacity market.<sup>18</sup>

17. Moreover, while PJM-ICC challenges the analysis set forth in the 2013 Simulation Study (a stakeholder discussion document), the January 2014 Order did not rely on this study in finding that the capacity cost increases attributable to PJM's proposal would be offset, in part, by a downward pressure on energy prices.<sup>19</sup> On rehearing, PJM-ICC disputes whether there would be a net savings, given that any savings in energy costs resulting from PJM's proposal would reduce the energy and ancillary services revenue offset, and thus increase Net CONE -- the input used by PJM to establish the height of its capacity market demand curve. We disagree, however, that this asserted reduction in the energy and ancillary services revenues offset would be the determinative cost impact to Net CONE attributable to PJM's revised procurement caps. In fact, as PJM points out in its filing, a sloped demand curve, which results in lower price volatility and is produced for Annual Resources by removing the floor on Annual Resources, can be expected to reduce the risks faced by an Annual Resource.<sup>20</sup> This decrease in risk, in turn, can be expected to reduce the cost of capital, and thus reduce the Net CONE.

18. We next consider whether PJM's proposed tariff changes are unduly discriminatory, as between Annual Resources and limited-availability demand response. As the Commission has held, a finding of undue discrimination may be supported by a showing that there is a difference in rates or services among similarly situated entities that is not justified by some legitimate factor.<sup>21</sup> Here, however, as the January 2014 Order found, limited availability demand response is substantially different from an Annual Resource when the availability of these products is considered.<sup>22</sup>

19. PJM-ICC argues that these products are similarly-situated, when the procurement of excess capacity above PJM's reliability requirement is considered. We disagree. While PJM's reliability requirement is established as a projection of PJM's needs, PJM

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<sup>18</sup> January 2014 Order, 146 FERC ¶ 61,052 at P 60.

<sup>19</sup> *Id.* P 68.

<sup>20</sup> See PJM's November 29, 2013 filing at Attachment A, p. 12 (Affidavit of Benjamin F. Hobbs).

<sup>21</sup> *Cal. Indep. Sys. Operator Corp.*, 132 FERC ¶ 61,148, at P 34 (2010).

<sup>22</sup> January 2014 Order, 146 FERC ¶ 61,052 at P 60 and P 65.

procures capacity based on a downward sloping demand curve. In PJM's program during the locked-in period at issue here, the excess above the reliability requirement will be filled primarily by the lower cost, and lower valued resources. PJM's proposal here reasonably permits higher valued resources to provide added capacity above the reliability requirement. Given the differences among the three groups of demand response products in their performance requirements, the January 2014 Order found, and we reaffirm here, that these resources are not similarly situated; as such, PJM reasonably proposed to impose a cap on the amount of the more limited resources.<sup>23</sup>

20. For this same reason, we deny PJM-ICC's argument that limited availability demand response should be treated the same as Annual Resources based on PJM-ICC's assertion that limited-availability demand response has performed when Annual Resources have failed to perform or were unable to perform. As a class, Annual Resources provide a reliability benefit that cannot be provided by a limited-availability demand response product. The fact that some limited-availability demand response resources may choose to respond voluntarily during a period when they are not required to do so does not enhance the reliability of PJM's system to the same extent as do Annual Resources, given that limited-availability demand response is not accountable for such performance. Annual Resources have incentives to perform; they are subject to the imposition of penalty charges and related provisions for non-performance. By contrast, limited-availability demand response resources are subject to no such requirements during periods when they are not required to perform.

21. Finally, we reject as moot PJM-ICC's argument that the January 2014 Order failed to address PJM-ICC's conditional request that, in the event the Commission established hearing procedures, or required PJM to submit a compliance filing to address PJM's vertical demand curve, such a hearing and/or compliance filing be required to consider how PJM's filing, in Docket No. ER13-2108-000, would affect the issues presented here.<sup>24</sup> The January 2014 Order did not establish hearing procedures or require a compliance filing to address PJM's vertical demand curve. As such, the January 2014 Order was not required to address PJM-ICC's alternative challenge.

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<sup>23</sup> *Id.* P 65.

<sup>24</sup> See *PJM Interconnection, L.L.C.*, 146 FERC ¶ 61,150 (2014) (accepting PJM's proposed tariff revisions requiring that a Demand Resource Provider seeking to participate in PJM's capacity market auctions submit certain information, in advance of the relevant base residual auction, demonstrating its ability to perform when called upon).



The Commission orders:

Rehearing of the January 2014 Order is hereby denied, as discussed in the body to this order.

By the Commission.

( S E A L )

Kimberly D. Bose,  
Secretary.