

175 FERC ¶ 61,171  
UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Richard Glick, Chairman;  
Neil Chatterjee, James P. Danly,  
Allison Clements, and Mark C. Christie.

PJM Interconnection, L.L.C.

Docket No. ER21-1591-000

ORDER REJECTING PROPOSED TARIFF REVISIONS

(Issued May 28, 2021)

1. On April 1, 2021, pursuant to section 205 of the Federal Power Act,<sup>1</sup> PJM Interconnection, L.L.C. (PJM) filed proposed revisions to its Open Access Transmission Tariff (Tariff) and the Amended and Restated Operating Agreement (Operating Agreement) to incorporate rules that would allow sellers to change their unit-specific parameter limits in real time (Real Time Values). PJM states that the filing will help ensure PJM operators have accurate information related to real time operational constraints of individual resources to ensure the reliable and efficient operation of the electric system. As discussed below, we reject PJM's filing.

**I. Background**

2. Generally, resources participate in the PJM energy market by submitting offer schedules composed of both financial parameters (price-megawatt pairs, Start-up Costs, and No-load Cost) and operating parameters like Minimum Run Time. Generation capacity resources<sup>2</sup> can submit three types of offers in PJM's energy market: cost-based

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<sup>1</sup> 16 U.S.C § 824d.

<sup>2</sup> The parameter limited schedule rules apply to Generation Capacity Resources, which PJM defines as “ a Generating Facility, or the contractual right to capacity from a specified Generating Facility, that meets the requirements of RAA, Schedule 9 and RAA, Schedule 10, and, for Generating Facilities that are committed to an FRR Capacity Plan, that meets the requirements of RAA, Schedule 8.1. A Generation Capacity Resource may be an Existing Generation Capacity Resource or a Planned Generation Capacity Resource.” PJM, Intra-PJM Tariffs, Reliability Assurance Agreement, Article 1, Definitions (33.0.0).

offers, which are always parameter limited;<sup>3</sup> market-based parameter limited offers that must adhere to the same operating parameters as cost-based offers; and non-parameter limited market-based offers.<sup>4</sup> Operating Agreement, Schedule 1, section 6.6, requires that cost-based offers shall be considered in the commitment of a resource when the market seller does not pass the three pivotal supplier test.<sup>5</sup> Sellers submit multiple offers for each resource in advance of the market run: (1) price-based offers, which have no limitations on price or parameter flexibility other than the \$1,000/MWh offer cap on unverified offers; (2) cost-based offers, which are limited to the resource's cost plus 10% and require that operating parameters are at least as flexible as the default unit-specific operating parameters; and (3) price-based parameter limited offers that allow price flexibility (up to \$1,000/MWh), but require operating parameters to be at least as flexible as the default unit-specific operating parameters. PJM takes into consideration parameter limited offers when sellers have market power, meaning when a resource fails the three pivotal supplier test or during emergency conditions, to ensure that resources are not able to physically withhold by offering with inflexible operating parameters (e.g., excessively long Notification Times). Different types of offers are considered during different circumstances, but in each case, PJM mitigates the seller's offer to the cheapest option, which may not necessarily be the parameter limited offer. Also, as noted above, when an offer is subject to parameter limits, the offer must contain parameters which are at least as flexible as the applicable unit-specific parameter values so that resources are not being withheld from the market due to potentially inflexible parameter offers.<sup>6</sup> Unit-specific

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<sup>3</sup> The following parameters are included in a parameter limited offer: Turn Down Ratio, Minimum Down Time, Minimum Run Time, Maximum Daily Starts, Maximum Weekly Starts, Maximum Run Time, Start-up Time, and Notification Time. See PJM, Intra-PJM Tariffs, Operating Agreement, Schedule 1, § 6.6(b) (9.0.0) (hereinafter cited as Operating Agreement); PJM, *PJM Manual 11: Energy and Ancillary Services Market Operations*, § 2.3.4.1 (effective Mar. 29, 2021) (Manual 11), <https://www.pjm.com/-/media/documents/manuals/m11.ashx>.

<sup>4</sup> See Operating Agreement, Schedule 1, §§ 6.6(a-b) (9.0.0).

<sup>5</sup> See Operating Agreement, Schedule 1, § 6.6(a) (9.0.0). The three pivotal supplier test is a structural test that measures the degree to which the supply from three suppliers (the two largest suppliers and the seller under consideration, all selected relative to a given constraint) is required in order to relieve a specific constraint in a given hour. See PJM Operating Agreement, Schedule 1, § 6.4.1 (11.1.2).

<sup>6</sup> See Operating Agreement, Schedule 1, §§ 6.6(a) and 6.6(b) (9.0.0) and the parallel provisions in PJM, Intra-PJM Tariffs, OATT attach. K-App., §§ 6.6(a) and 6.6(b) (9.0.0) (hereinafter cited as Tariff).

parameters are associated with the underlying resource's physical capability and are determined by PJM.<sup>7</sup>

3. However, the Tariff also allows sellers to deviate from their resources' unit-specific parameters in certain circumstances by submitting exceptions to PJM for review and approval. Specifically, the Tariff currently provides for: (1) temporary exceptions of less than 30 days; (2) period exceptions lasting between 31 days and one year; and (3) persistent exceptions lasting beyond one year. Exception requests are reviewed by PJM and the Market Monitor to ensure the exception is due to an actual operational and physical constraint on the resource.<sup>8</sup> However, the process does not provide for sellers to notify PJM of unanticipated real time operational limitations applicable after the close of the day ahead market.

4. PJM filed stricter parameter limits as part of its implementation of its Capacity Performance revisions to its capacity market.<sup>9</sup> PJM's Tariff requires generation resources with capacity obligations to submit parameter limited schedules.<sup>10</sup> Requiring the submission of parameter limited schedules subject to operating parameters at least as flexible as the default parameter values limits the ability of resources that do not pass the three-pivotal-supplier test to exert market power through the submission of inflexible operating parameters and also guards against the exertion of market power under emergency conditions.<sup>11</sup> Operating Agreement, Schedule 1, sections 6.6(a) and 6.6(b) provide that parameter limited offers are considered in market clearing when a seller fails

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<sup>7</sup> See Operating Agreement, Schedule 1, §§ 6.6(a) and 6.6(b) (9.0.0) and the parallel provisions of Tariff, attach. K-App., §§ 6.6(a) and 6.6(b) (9.0.0).

<sup>8</sup> See Operating Agreement, Schedule 1, § 6.6(i) (9.0.0) and the parallel provisions of Tariff, attach. K-App., § 6.6(i) (9.0.0).

<sup>9</sup> See *PJM Interconnection, L.L.C.*, 155 FERC ¶ 61,157, at PP 7-8 (2016) (“[i]n its energy market filing, PJM explained that, in developing its capacity market design changes, PJM had identified four areas in its current energy market rules that enable, or could enable, unreasonable excuses for non-performance, namely (i) rules permitting market sellers in certain circumstances to limit their day-ahead energy offers based on operating parameters that extend beyond the operating design characteristics of their specific resources and that include economic or budgetary concerns.”).

<sup>10</sup> Operating Agreement, Schedule 1, § 6.6 (9.0.0). See also *PJM Interconnection, L.L.C.*, 171 FERC ¶ 61,010, at P 3 (2020) (2020 Order); *PJM Interconnection, L.L.C.*, 125 FERC ¶ 61,244, at P 5 (2008) (2008 Order).

<sup>11</sup> 2020 Order, 171 FERC ¶ 61,010 at P 7.

the three pivotal supplier test (cost-based parameter limited offers) or certain emergency conditions are triggered (market-based parameter limited offer).<sup>12</sup>

## II. Filing

5. PJM states that its operating Manual currently permits generation owners to submit Real Time Values<sup>13</sup> to notify PJM of a resource's current operational limitations if they differ from its unit-specific parameter limits or any applicable approved parameter limited exception. PJM argues that such a process is necessary because none of the existing exception options in the Tariff provide sellers the ability to notify PJM if their resource's operational ability changes in real time.<sup>14</sup>

6. PJM states that, absent a Real Time Value in accordance with the Manual, PJM operators expect resources to generate in accordance with their respective unit-specific parameter or parameter exception values. PJM claims that, if operators do not learn that a resource's actual operational condition differs from its approved parameter limits until after the resource is dispatched, it could potentially cause delays in resource dispatch and require PJM operators to locate and dispatch a more expensive alternative resource to maintain necessary power balance in real time. PJM explains that this could result in higher Locational Marginal Prices or even prevent PJM from maintaining the necessary power balance.<sup>15</sup>

7. PJM proposes to add a provision to the Tariff that makes explicit the obligation for sellers to notify PJM whenever a resource is unable to conform to its unit-specific parameters in real time, prior to the resource being dispatched.<sup>16</sup> The parameters that are eligible for Real Time Value overrides consist of Turn Down Ratio, Minimum Down Time, Minimum Run Time, Maximum Run Time, Start-up Time, and Notification Time.

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<sup>12</sup> Such emergency conditions include Hot Weather Alert, Cold Weather Alert, or Maximum Generation Emergency Alert. *See* Operating Agreement, Schedule 1, §§ 6.6(a) and 6.6(b) (9.0.0) and the parallel provisions in Tariff, attach. K-App., §§ 6.6(a) and 6.6(b) (9.0.0).

<sup>13</sup> PJM proposes that "Real Time Value" means a notification to the Office of Interconnection when a resource cannot operate according to its unit-specific parameters or approved exception to the resource's parameters. *See* Proposed Tariff, Definitions R-S.

<sup>14</sup> PJM Transmittal at 4.

<sup>15</sup> *Id.* at 5.

<sup>16</sup> *Id.* at 7.

Each use of a Real Time Value is valid for one operating day, which shall expire at the end of such operating day.<sup>17</sup> As part of this filing, PJM imposes strict notification and review requirements for capacity resources that submit parameter changes when it has notified parties of Hot Weather Alerts, Cold Weather Alerts, or Maximum Generation Emergencies.<sup>18</sup> If a resource is or will become unable to achieve the unit-specific values, PJM requires that the capacity resource must provide notification.<sup>19</sup> PJM clarifies that submitting a Real Time Value will not alter a resource's obligations with respect to Capacity Performance, and such resources will still be subject to applicable Capacity Performance penalties, even if they are not dispatched as a result of the Real Time Value.<sup>20</sup> PJM also proposes to specify in the Tariff that, consistent with existing authority, nothing in the new provision precludes PJM from making a referral to the Commission's Office of Enforcement and/or the Market Monitor in the event that PJM dispatches a resource that is unable to meet its submitted parameters.<sup>21</sup>

8. PJM also proposes provisions that it states will "limit unintended overuse of Real Time Values." PJM states that it will not allow Real Time Values for Maximum Daily Starts and Maximum Weekly Starts, as any restrictions on these parameters should be anticipated and are therefore more appropriately addressed through the unit-specific adjustment or parameter limited exception. In addition, PJM states that Real Time Values will only be valid for one operating day but can be resubmitted for the following day. PJM states this is appropriate because the purpose of Real Time Values is to allow sellers to notify PJM of unanticipated limitations that arise in real time.<sup>22</sup>

9. PJM further states that, if a seller submits a Real Time Value for which no actual limitation exists, the seller will not be eligible to receive Operating Reserve Credits or be made whole for operating when not dispatched by PJM. Conversely, a seller that fails to submit a Real Time Value when it cannot meet its unit-specific parameters related to Notification Time, Start-Up Time, or Minimum Down Time will be required to enter a forced outage ticket in PJM's generator availability data system for that period. PJM

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<sup>17</sup> Proposed Tariff, Definitions R-S.

<sup>18</sup> Proposed Operating Agreement, Schedule 1, § 6.6(k)(ii) (9.0.0).

<sup>19</sup> *Id.* § 6.6(k)(i).

<sup>20</sup> PJM Transmittal at 6.

<sup>21</sup> *Id.* at 8. PJM clarifies that it has a process in place to review operational parameter discrepancies and would only refer a seller after going through that process. *Id.* n.15.

<sup>22</sup> *Id.* at 9.

explains that it is reasonable to focus on these three parameters because they are likely to prevent PJM from dispatching the resource in the first place, meaning the resource would not receive any make whole payments.<sup>23</sup>

10. Finally, PJM states that, if a Real Time Value is submitted during a Hot Weather Alert, Cold Weather Alert, or Maximum Generation Emergency event, the seller must provide documentation supporting the need for the Real Time Value to PJM and the Market Monitor for review.<sup>24</sup> PJM requests an effective date of June 1, 2021.<sup>25</sup>

### **III. Notice and Responsive Pleadings**

11. Notice of PJM's filing was published in the *Federal Register*, 86 Fed. Reg. 18972 (2021), with interventions and protests due on or before April 22, 2021. Timely motions to intervene were filed by Monitoring Analytics, LLC, acting in its capacity as the Independent Market Monitor for PJM (Market Monitor); Exelon and its affiliates;<sup>26</sup> Delaware Division of the Public Advocate; Calpine Corporation; Rockland Electric Company; Old Dominion Electric Cooperative; Vistra Corp. and Dynegy Marketing and Trade, LLC; Dominion Energy Services, Inc., on behalf of Virginia Electric and Power Company d/b/a Dominion Energy Virginia; NRG Power Marketing LLC and Midwest Generation, LLC; and American Electric Power Service Corporation. The Market Monitor filed a protest on April 22, 2021. PJM filed an answer on April 27, 2021. The Market Monitor filed an answer to PJM's answer on May 12, 2021.

12. Buckeye Power, Inc. filed an untimely motion to intervene on April 26, 2021.

#### **A. Market Monitor Protest**

13. The Market Monitor states that, currently, market sellers use the Manual-based Real Time Values to avoid offering resources with flexible parameters when parameter limited schedules are used, even though the Tariff does not allow this practice.<sup>27</sup> The Market Monitor argues that PJM's proposed Real Time Values would create a significant

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<sup>23</sup> *Id.* at 10.

<sup>24</sup> *Id.*

<sup>25</sup> *Id.* at 1.

<sup>26</sup> Exelon owns Atlantic City Electric Company, Baltimore Gas and Electric Company, Commonwealth Edison Company, Delmarva Power & Light Company, PECO Energy Company, and Potomac Electric Power Company.

<sup>27</sup> Market Monitor Protest at 6.

and inappropriate loophole in the current rules governing offer parameters and the exercise of market power. The Market Monitor argues that the Commission should reject PJM's filing because it is unjust and unreasonable and undermines market power protections in the PJM energy market.<sup>28</sup>

14. The Market Monitor explains that sellers frequently use the current Manual-based Real Time Values to extend the notification time of combustion turbines that are not staffed and have no remote start capability. For example, the Market Monitor states that, in 2020, combustion turbines used Real Time Values to extend their notification times for unstaffed resources for 29% of on-peak hours and 57% of the off-peak hours. The Market Monitor asserts that making the economic choice to not staff a resource, such that it is not ready to start, and then extending the time to start through Real Time Values to avoid potential commitment is physical withholding.<sup>29</sup> The Market Monitor states that extended notification times could force PJM to remove these quick start resources from available supply and to commit other resources.<sup>30</sup> The Market Monitor argues that including this process in the Tariff would not prevent the existing misuse of Real Time Values from continuing to occur because resource owners engage in this behavior explicitly and consciously. The Market Monitor adds that PJM's proposed Real Time Values would create a significant and inappropriate loophole in the existing rules governing offer parameters and the exercise of market power because the current manual process improperly allows market sellers to avoid offering flexible parameters for their resources when parameter limited schedules are used, even though the Operating Agreement does not allow this practice.<sup>31</sup>

15. Further, the Market Monitor argues that beginning May 1, 2022, PJM will use the downward sloping Operating Reserve Demand Curves (ORDC) to procure synchronized reserves, primary reserves, and secondary reserves.<sup>32</sup> The Market Monitor states that under the new ORDCs, offline resources that have the capability of starting in 30 minutes or less but use the Real Time Values proposal to increase their notification or start times will have a direct impact on prices in every interval that they are offered. For example, if

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<sup>28</sup> *Id.* at 9.

<sup>29</sup> *Id.* at 9-10.

<sup>30</sup> *Id.* at 7. The Market Monitor explains that the look-ahead window in the real-time market is only two hours. *Id.* at 7, n.17.

<sup>31</sup> *Id.* at 6-7.

<sup>32</sup> The new secondary reserve product is defined as the available energy output achievable within 30 minutes. *See* Operating Agreement, Schedule 1, § 1.10.1A(m) (36.0.0).

10 combustion turbines of 50 MW each (total 500 MW) use Real Time Values to artificially increase their startup time to a value longer than 30 minutes, secondary reserve prices will increase because the supply of secondary reserves is reduced by 500 MW, and the market will clear at a higher price on the secondary reserve demand curve, even when the minimum reserve requirement is met.<sup>33</sup> The Market Monitor states that the use of Real Time Values to increase resources' startup time to a value greater than 30 minutes will increase energy and reserve prices for the system. The Market Monitor states that PJM's filing offers no protections against resources that choose to do so. Therefore, the Market Monitor argues that the Commission should reject the filing and require PJM to make explicit that Real Time Values are to be used only for resource testing and the associated changes in Turn Down Ratios.<sup>34</sup>

16. The Market Monitor states that the filing does not define what PJM would consider a misuse of the Real Time Values proposal and does not propose any safeguards to prevent its abuse. The Market Monitor rejects PJM's claim that limiting the use of Real Time Values to certain parameters, such that sellers cannot submit Real Time Values for Maximum Daily or Weekly Starts, will help avoid overuse. The Market Monitor argues that allowing a resource to submit Real Time Values to extend the Start-up Time, Notification Time, Minimum Run Time, and Minimum Down Time explicitly reduces the number of daily and weekly starts it can complete, because daily and weekly starts are calculated based on the other parameters. The Market Monitor explains that the longer the start time, the fewer starts a resource can complete within a week. For example, if a resource increases its start time to 24 hours, it can only start six times a week. The same logic applies to Minimum Down Time, Minimum Run Time and Notification Time.<sup>35</sup> The Market Monitor also argues that making each Real Time Value submission valid for only one day is not a safeguard because most market sellers use the PJM interface (Markets Gateway) multiple times a day to submit offer data for each resource.<sup>36</sup> The Market Monitor adds that the proposal offers no protections from market sellers that choose to withhold resources on days without weather alerts or maximum emergency generation alerts.<sup>37</sup>

17. The Market Monitor argues that contrary to PJM's assertion, the Real Time Values proposal is not simply an extension of existing temporary parameter exceptions to

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<sup>33</sup> Market Monitor Protest at 14-16.

<sup>34</sup> *Id.* at 16.

<sup>35</sup> *Id.* at 10-11.

<sup>36</sup> *Id.* at 11.

<sup>37</sup> *Id.* at 8.

real-time submissions. The Market Monitor explains that the Tariff requires that every temporary exception be justified after the fact, but within a defined time frame, based on the physical conditions at a resource that led to the exception. For example, a resource owner's economic choices to not cycle a resource to avoid wear and tear, or to not staff a resource to cut costs, are not valid physical reasons. The Market Monitor asserts that the temporary exception process balances the need to require flexible parameters with the ability to reflect changes to the capability of a resource because of unforeseen issues.<sup>38</sup> The Market Monitor therefore proposes that, as an alternative to the Real Time Values proposal, PJM instead simply modify the existing temporary exception process to allow real-time submissions.<sup>39</sup>

18. The Market Monitor argues that PJM's proposed rule limiting eligibility for uplift payments is not new. The Market Monitor states that the filing is simply restating in a different section of the Operating Agreement that market sellers that submit Real Time Values are not eligible for uplift payments unless they can show after the fact that the reason for the changed values was because of an actual constraint.<sup>40</sup> According to the Market Monitor, the rule will only deter the use of Real Time Values if the resources are committed using the inflexible parameters and ask to be made whole to the resulting costs. The Market Monitor states that the rule will have no impact on the use of the proposed Real Time Values for physical withholding.<sup>41</sup>

19. The Market Monitor states that the Real Time Values proposal would permit the use of Real Time Values that are not based on actual operational or physical limitations on every day except for the handful of days with emergency alerts (e.g., PJM declared such alerts on only 22 days in 2020, and 27 days in 2019).<sup>42</sup> The Market Monitor argues that referrals to the Commission's Office of Enforcement do not substitute for clear rules

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<sup>38</sup> *Id.* at 7.

<sup>39</sup> *Id.* at 9.

<sup>40</sup> *Id.* at 11 (citing Operating Agreement, Schedule 1, § 3.2.3 (e) (52.0.0) "A Generation Capacity Resource that operates outside of its unit-specific parameters will not receive Operating Reserve Credits nor be made whole for such operation when not dispatched by the Office of the Interconnection, unless the Market Seller of the Generation Capacity Resource can justify to the Office of the Interconnection that operation outside of such unit-specific parameters was the result of an actual constraint.").

<sup>41</sup> *Id.* at 11-12.

<sup>42</sup> *Id.* at 12 (citing Monitoring Analytics, LLC, "2020 Annual State of the Market Report for PJM," at Tbl. 3 – 68).

defining acceptable and unacceptable behavior. The Market Monitor adds that PJM's proposal creates ambiguity rather than clarity, and facilitates rather than prevents the use of Real-Time Values to physically withhold capacity.<sup>43</sup> The Market Monitor argues that the Commission should reject the filing and require PJM to enforce the requirement to offer flexibility based on a resource's physical capability.<sup>44</sup>

## **B. PJM Answer**

20. PJM argues that prohibiting submission of Real Time Values because they may be used to withhold would not be just and reasonable given the reliability concerns associated with resources failing to provide PJM with this information. PJM states that the proposed rules impose several restrictions on the use of Real Time Values, such as: (1) limiting Real Time Values to be valid for only one Operating Day; (2) making resources ineligible to receive Operating Reserve Credits or be made whole for operating when dispatched by PJM for a restriction which is not an actual or physical limitation; (3) requiring a resource that did not notify PJM of an operational constraint prior to being dispatched to enter a forced outage ticket into PJM's generator availability data system, which will result in a higher equivalent demand forced outage rate; and (4) certifying that the resource could not operate to its unit-specific parameter limits or approved parameter limited exception during stressed system conditions.<sup>45</sup> PJM states these restrictions are carefully crafted to balance the need for accurate real time reporting of operational constraints while limiting the potential over-use of Real Time Values. In addition, PJM argues these rules are set in the backdrop of the existing Capacity Performance requirements, which would not excuse any Non-Performance Charges for any resource that was not dispatched solely because of an operational limitation based on a Real Time Value. In this respect PJM states "the Market Monitor's incorrect assertion that the proposed rules undermine incentives for Capacity Performance goals is a red herring. As noted in the April 1 Filing, the proposed Real Time Value rules make no changes to the existing Capacity Performance rules."<sup>46</sup> PJM explains that its proposal "effectively limits Market Sellers from submitting a Real Time Value for increased Notification Times (through after the fact review) during times of system stress, which is when Generation Owners are expected to provide the most flexible parameter limits for their resource."<sup>47</sup> During non-emergency times, PJM explains that resources may have a legitimate basis

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<sup>43</sup> *Id.* at 12-13.

<sup>44</sup> *Id.* at 14.

<sup>45</sup> PJM Answer at 2.

<sup>46</sup> *Id.* at 3.

<sup>47</sup> *Id.*

for submitting changes to their offer parameters; for example, a generator without remote start capabilities or without on-site staff at all hours may still have staff available at a nearby resource. In this situation, it argues simply extending the Notification Time by a reasonable amount of time to allow operators to get on site does not mean the resource is engaged in economic withholding.<sup>48</sup>

21. PJM argues that the Market Monitor is required by the Tariff to monitor and investigate the potential exercise of market power or manipulation in the PJM markets, including whether any Real Time Values may constitute withholding or market manipulation. However, PJM contends that the proposed Tariff language does not provide a safe harbor for Real Time Values that may be deemed an exercise of market power.<sup>49</sup>

22. PJM argues that its proposed rules sufficiently discourage market participants from submitting Real Time Values for unstaffed resources. First, PJM explains, during emergency conditions, sellers may only submit Real Time Values for actual physical operating constraints.<sup>50</sup> PJM explains that the proposed rules would therefore prohibit using Real Time Values to change the startup parameters for an unstaffed resource during emergency conditions.<sup>51</sup> Second, PJM states, under the proposal, that sellers submitting Real Time Values outside of emergency conditions would still be subject to inquiry from PJM or the Market Monitor regarding whether they are engaged in economic withholding or failing to use good utility practice as a result of not being staffed.<sup>52</sup>

23. PJM is clear, however, that the Tariff does not require sellers to staff their resources at all times and that extending the Notification Time by a reasonable amount to allow operators time to get to a resource does not mean that resource is engaged in economic withholding. PJM also states that it could still dispatch resources based on increased notification time under the proposed Tariff changes, but those resources would not be eligible to receive uplift payments.<sup>53</sup> PJM states that its proposal appropriately balances the need for PJM to ensure sufficient resources when generation is most needed with sellers' financial considerations in deciding whether to staff a resource every hour of

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<sup>48</sup> *Id.* at 5.

<sup>49</sup> *Id.* at 3-4.

<sup>50</sup> *Id.* at 4.

<sup>51</sup> *Id.* at 4-5.

<sup>52</sup> *Id.* at 5.

<sup>53</sup> *Id.*

every day, even when the resource is not committed in the day-ahead market. PJM reiterates that because Real Time Values are only valid one day, sellers bear the risk of Capacity Performance penalties, and PJM and the Market Monitor can refer a seller suspected of withholding to the Office of Enforcement.<sup>54</sup> PJM argues that referrals to the Commission are the appropriate avenue for guarding against misuse of Real Time Values.<sup>55</sup> PJM objects to the Market Monitor's argument that the filing would undermine the goals of Capacity Performance because Real Time Values would not excuse a resource that was not dispatched solely on a Real Time Value from non-performance charges.<sup>56</sup>

24. PJM states that stakeholders considered imposing penalties on sellers misusing Real Time Values but decided against the proposal. PJM explains that sellers may be discouraged from submitting Real Time Values if they are penalized for doing so or are required to provide supporting documentation each time. PJM argues this would undermine the ultimate goal of the revisions, which is to ensure reliability by making real time operational constraint information available to PJM operators.<sup>57</sup> PJM also argues that it would be arbitrary to develop a penalty value for submitting or failing to submit a Real Time Value because there is no clear or consistent market impact when Real Time Values are or are not submitted.<sup>58</sup>

### C. Market Monitor Answer

25. The Market Monitor responds that PJM's Real Time Value proposal would permit market sellers to increase their Notification Times when their resources are unstaffed and PJM's proposal would also create a discriminatory economic advantage for resources that have failed to invest in remote start capability compared to the resources that have made those investments.<sup>59</sup> Regarding whether PJM can dispatch those resources based on the increased Notification Time, the Market Monitor argues that the question is how PJM's market software evaluates the submitted offer parameters. The Market Monitor explains that PJM's dispatch software only presents resources for potential commitment that can

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<sup>54</sup> *Id.* at 5-6. PJM notes that there is no Tariff requirement that all resources be staffed at all times or equipped with remote start capabilities. *Id.* at 6, n.20.

<sup>55</sup> *Id.* at 6-7.

<sup>56</sup> *Id.* at 3.

<sup>57</sup> *Id.* at 8.

<sup>58</sup> *Id.* at 9.

<sup>59</sup> Market Monitor Answer at 5.

start within two hours.<sup>60</sup> Therefore, the resources that extend their Start-up Time plus Notification Time beyond two hours will not be committed by the market software because the PJM dispatchers will dispatch the resources that fulfill their obligations as capacity resources and not the resources with longer start times. According to the Market Monitor, this is physical withholding. The resources violating the rules will receive an arbitrary advantage in dispatch, allowing them, for example, to receive capacity payments without operating.<sup>61</sup>

26. In response to PJM's assertion that it supports the Real Time Values proposal because it wants dispatchers to have the most accurate information at their disposal, the Market Monitor argues that PJM's proposal would not improve the information available to dispatchers because the Commission's market behavior rules already explicitly require market sellers to provide accurate information to the RTOs.<sup>62</sup> The Market Monitor believes that PJM dispatchers should have accurate parameter data that reflect unit-specific limits or a Tariff defined exception to their parameter limited schedules to ensure that capacity resources meet their obligations and do not exercise market power.<sup>63</sup>

27. The Market Monitor responds that PJM incorrectly interprets the Capacity Performance rules to only include the performance assessment during certain emergency actions, which is inconsistent with PJM's filing in the Capacity Performance proceeding that recognized the interactions between capacity market rules and energy market rules.<sup>64</sup> The Market Monitor states PJM submitted Tariff updates that created the obligation of Capacity Performance resources to comply with unit-specific parameter limits in the energy market. The Market Monitor states that the Commission issued orders jointly for both the capacity market updates and the energy market updates and that by modifying

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<sup>60</sup> *Id.* at 6 (citing PJM Filing, Docket No. EL19-58-000, (March 29, 2019), attach. E (Affidavit of Christopher Pulong on Behalf of PJM Interconnection, L.L.C.) at 8).

<sup>61</sup> Market Monitor Answer at 5-6.

<sup>62</sup> *Id.* at 7 (citing 18 C.F.R. § 35.41(b) (2020) (“A Seller must provide accurate and factual information and not submit false or misleading information, or omit material information, in any communication with the Commission, Commission-approved market monitors, Commission-approved regional transmission organizations, Commission-approved independent system operators, or jurisdictional transmission providers, unless Seller exercises due diligence to prevent such occurrences.”)).

<sup>63</sup> Market Monitor Answer at 7.

<sup>64</sup> *Id.* at 8 (citing Docket Nos ER15-623-000 and EL15-29-000).

the rules now in this proceeding, PJM would weaken the requirements for reliability and flexibility that were and continue to be the goal of the Capacity Performance reforms.<sup>65</sup>

#### **IV. Discussion**

##### **A. Procedural Matters**

28. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2020), the timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding.

29. Pursuant to Rule 214(d) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214(d) (2020), we grant Buckeye Power, Inc.'s late-filed motion to intervene given its interest in the proceeding, the early stage of the proceeding, and the absence of undue prejudice or delay.

30. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2020), prohibits an answer to a protest or answer. We accept the answers filed by PJM and the Market Monitor because they provided information that assisted us in our decision-making process.

##### **B. Substantive Matters**

31. We reject PJM's proposed Tariff revisions. We find that PJM's proposal is unjust and unreasonable because it does not contain sufficient protections against sellers using Real Time Values to avoid market power mitigation by inappropriately increasing their Notification Time on parameter limited schedules.

32. Under PJM's existing rules, capacity resources must provide energy market offers with parameter limitations based on their physical capability.<sup>66</sup> PJM will consider these parameter limited offers in its market clearing when two conditions are met: (1) the resource does not pass the three pivotal supplier test; and (2) when PJM calls certain emergency situations such as a Hot Weather Alert, Cold Weather Alert, or Maximum Generation Emergency Alert.<sup>67</sup> In addition, the PJM Tariff allows capacity market sellers to deviate from their resources' unit-specific parameters in the day-ahead market by

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

<sup>66</sup> See Operating Agreement, Schedule 1, §§ 6.6(a-b) (9.0.0) and parallel provisions of Tariff, attach. K-App., § 6.6(c) (9.0.0).

<sup>67</sup> See Operating Agreement, Schedule 1, §§ 6.6(a) and 6.6(l) (9.0.0) and parallel provisions of Tariff, attach. K-App., §§ 6.6(a) and 6.6(l) (9.0.0).

submitting parameter limited exceptions.<sup>68</sup> However, as PJM notes, these exceptions were not designed to allow market sellers to communicate unanticipated real time operational limitations to PJM.<sup>69</sup> To circumvent this gap, PJM's Manual 11 currently allows market sellers to submit real time operational limitations if their resources cannot operate according to their unit-specific parameter limits.<sup>70</sup>

33. In its filing, PJM proposes to move the Manual provisions, with some modifications, into the Tariff and Operating Agreement.<sup>71</sup> The existing Tariff states that, under certain conditions, sellers shall be subject to “pre-determined limits” on offers that “must specify parameter values equal to or less limiting, i.e., more flexible, than the defined parameter limits.”<sup>72</sup> While the Tariff does not explicitly prohibit exceptions to unit-specific values in real time, the Tariff also does not provide for them. Instead, the existing parameter limited exception process includes three explicit longer-term

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<sup>68</sup> See Operating Agreement, Schedule 1, §6.6(i) (9.0.0) and parallel provisions of Tariff, attach. K-App., § 6.6(i) (9.0.0).

<sup>69</sup> PJM Transmittal at 4. See Manual 11, § 2.3.3.4.

<sup>70</sup> See *id.*

<sup>71</sup> The term “Real Time Value” does not appear in the Tariff and, in its problem statement to stakeholders, PJM wrote “Currently, language around RTVs [Real Time Values] does not reside in the PJM Operating Agreement.” PJM, *Problem/Opportunity Statement Review of Real Time Market Rules* (2019), 20191205-item-06-real-time-values-problem-statement.ashx (pjm.com). PJM stated in the same document that behavior allowed under the existing Real Time Value system “does not seem to be consistent with the existing Tariff and Operating Agreement language regarding parameter limited schedules.” *Id.*

<sup>72</sup> Operating Agreement, Schedule 1, §§ 6.6(a) and 6.6(b) (9.0.0). The Market Monitor also argues this is a violation of the Tariff. Market Monitor Protest at 6.

exceptions currently provided under the Tariff.<sup>73</sup> The current Tariff also specifies that these requests can only be made “due to actual operating constraints affecting the unit.”<sup>74</sup>

34. We find that PJM’s proposed Real Time Value Tariff revisions fail to prevent capacity market sellers from using Real Time Values to inappropriately increase their Notification Time on parameter limited schedules. Parameter limited offers, in part, are a market mitigation mechanism designed to limit the ability of sellers to exert market power through the submission of inflexible operating parameters.<sup>75</sup> In its proposal, PJM proposes to allow sellers that may have market power to evade their unit-specific parameter limits through the Real Time Value process, thus avoiding mitigation.

35. PJM proposes that, during emergency conditions, sellers submitting Real Time Values must provide documentation “supporting an actual operational constraint on the unit.”<sup>76</sup> However, parameter limited offers are not considered only during emergency conditions, but also when a capacity market seller fails the three pivotal supplier test. PJM does not include similar requirements for Real Time Values submitted when an emergency condition is not in effect. We note that during normal conditions, capacity market sellers, including those who have failed the three pivotal supplier test, are not required to provide any documentation.<sup>77</sup> As the Market Monitor notes, emergency conditions are relatively infrequent; PJM declared alerts on only 22 days in 2020 and 27 days in 2019.<sup>78</sup> PJM states it is necessary for market sellers to demonstrate the need to deviate from the approved parameters within three days of submitting the Real Time Value to ensure sellers are offering flexibly when the system is stressed under emergency

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<sup>73</sup> Specifically, the Tariff currently provides for: (1) temporary exceptions of less than 30 days; (2) period exceptions lasting between 31 days and one year; and (3) persistent exceptions lasting beyond one year. Exception requests are reviewed by PJM and the Market Monitor to ensure the exception is due to an actual operational and physical constraint on the resource. *See* Operating Agreement, Schedule 1, § 6.6(i) (9.0.0) and the parallel provisions of Tariff, attach. K-App., § 6.6(i) (9.0.0).

<sup>74</sup> Operating Agreement, Schedule 1, § 6.6(i) (9.0.0).

<sup>75</sup> 2020 Order, 171 FERC ¶ 61,010 at P 3; 2008 Order, 125 FERC ¶ 61,244 at P 5.

<sup>76</sup> PJM Proposed Operating Agreement, Schedule 1, § 6.6 (k)(ii).

<sup>77</sup> PJM Transmittal at 10; PJM Proposed Operating Agreement, Schedule 1, § 6.6 (k)(i).

<sup>78</sup> Market Monitor Protest at 12.

conditions,<sup>79</sup> but PJM does not adequately explain why providing documentation is not needed when a seller fails the three pivotal supplier test under normal conditions.

36. When an emergency condition is not in effect, PJM's proposed Tariff revisions would allow sellers that fail the three pivotal supplier test to avoid their unit-specific parameter values anytime they are "unable to achieve" those values, including for economic reasons. Here, PJM explicitly proposes to allow resources who have failed the three pivotal supplier test, and therefore have local market power, to avoid providing justification for changing their parameter limits. We find that this proposal fails to provide adequate transparency regarding supporting documentation that demonstrates the reasons for the change in parameter values to permit PJM and the Market Monitor to determine whether to examine that revision. Further, it is not clear what standard should apply for any such inquiries, given that the proposed Tariff revisions are unclear regarding when it may be appropriate to increase Notification Time using a Real Time Value. We agree with the Market Monitor that this aspect of PJM's proposal would undermine the rules regarding parameter limited schedules, which are designed to prevent sellers from exercising market power through inflexible parameters.<sup>80</sup>

37. Further, the limited documentation requirements for Real Time Values stand in stark contrast to the existing exception process, which requires sellers to provide documentation for all requests demonstrating that an actual physical or operational condition exists.<sup>81</sup> PJM does not explain why similar requirements are not appropriate for Real Time Value exceptions, except to argue that requiring documentation could discourage sellers from providing the necessary information.<sup>82</sup> We do not find this argument convincing, particularly when the existing exception process in the Tariff already requires documentation.<sup>83</sup> Additionally, the proposed Tariff revisions also do not impose a limit on the number of Real Time Values that could be submitted within a given month. As a result, a seller could use the Real Time Values to replicate a longer term exception but without the documentation requirements of such longer term exception.

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<sup>79</sup> PJM Transmittal at 10.

<sup>80</sup> 2020 Order, 171 FERC ¶ 61,010 at P 3; 2008 Order, 125 FERC ¶ 61,244 at P 5.

<sup>81</sup> Operating Agreement, Schedule 1, § 6.6(i) (9.0.0).

<sup>82</sup> PJM Answer at 8.

<sup>83</sup> See Operating Agreement, Schedule 1, § 6.6(i) (9.0.0) and the parallel provisions of Tariff, attach. K-App., § 6.6(i) (9.0.0).

The Commission orders:

PJM's filing is hereby rejected, as discussed in the body of this order.

By the Commission.

( S E A L )

Debbie-Anne A. Reese,  
Deputy Secretary.