

147 FERC ¶ 61,060  
UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Cheryl A. LaFleur, Acting Chairman;  
Philip D. Moeller, John R. Norris,  
and Tony Clark.

PJM Interconnection, L.L.C.

Docket Nos. ER14-503-000  
ER14-503-001

ORDER ACCEPTING TARIFF REVISIONS

(Issued April 22, 2014)

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1. On November 29, 2013, PJM Interconnection, L.L.C. (PJM), pursuant to section 205 of the Federal Power Act (FPA),<sup>1</sup> submitted revisions to the Reliability Assurance Agreement among Load Serving Entities in the PJM Region (RAA) and the PJM Open Access Transmission Tariff (OATT or Tariff) to recognize limits on the amount of capacity from external generation resources that can be reliably committed in the PJM forward capacity auctions.<sup>2</sup> As discussed below, we accept the proposed Tariff revisions, effective January 31, 2014, as requested.

## **I. Background and Details of the Filing**

2. Under its capacity market rules, PJM conducts forward auctions to secure capacity for a future delivery year. Since the capacity market's inception in 2007, the forward auctions have recognized locational constraints that limit the delivery of capacity within PJM, known as Capacity Emergency Transfer Limits.<sup>3</sup> PJM's capacity market currently does not include capacity import limits on the delivery of capacity to PJM from areas outside of PJM.<sup>4</sup>

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<sup>1</sup> 16 U.S.C. § 824d (2012).

<sup>2</sup> PJM Interconnection, L.L.C., Intra-PJM Tariffs, [OATT ATT DD.2, OATT ATTACHMENT DD.2. DEFINITIONS, 14.0.0](#); [OATT ATT DD.2, OATT ATTACHMENT DD.2. DEFINITIONS, 14.1.0](#); [OATT ATT DD.5.11, OATT ATTACHMENT DD.5.11 Posting of Information Relevant to t, 8.0.0](#); [OATT ATT DD.5.12, OATT ATTACHMENT DD.5.12 Conduct of RPM Auctions, 6.0.0](#); [RAA ARTICLE 1, RAA ARTICLE 1 -- DEFINITIONS, 10.0.1](#); and [RAA SCHEDULE 10, RAA SCHEDULE 10, 1.0.0](#).

<sup>3</sup> Capacity Emergency Transfer Limit is defined in section 1.7 of the RAA as the capability of the transmission system to support deliveries of electric energy to a given area experiencing a localized capacity emergency as determined in accordance with the PJM Manuals.

<sup>4</sup> PJM states that, instead, it addresses this issue only by reviewing requests for firm transmission service into PJM. But transmission requests may not be resolved until long after the external resource offers and clears in a capacity market auction. Consequently, an external resource that clears a capacity market auction, but fails to secure firm transmission on satisfactory terms, will not qualify to be available to PJM in the Delivery Year as a capacity resource. Transmittal Letter at 2.

3. In its filing, PJM argues that the failure to recognize the limits on capacity imports may have adverse reliability consequences, which have been highlighted by two recent events: (1) there has been a substantial increase in the quantity of capacity offered from external generation in the most recent Base Residual Auction—up by 80 percent (from the May 2012 auction to the May 2013 auction)<sup>5</sup> in one year alone and more than tripling since 2008; and (2) PJM has experienced curtailment of firm transmission by surrounding systems numerous times in the past few years (several times each month, on average). PJM states that, while PJM’s firm transmission study assumes that there will be perfect willingness by external systems to schedule and dispatch generation to preserve deliveries to PJM, there is a risk that external resources may not be able to deliver capacity in the relevant delivery year. PJM argues that its Tariff-authorized auction parameters do not account for the risk that an external resource may be prevented from providing energy to PJM at critical times by curtailments of firm transmission by third-party systems over which PJM has no control.<sup>6</sup> PJM explains that, while it has entered into various agreements with its neighbors that make important strides regarding inter-regional scheduling and dispatch to manage congestion,<sup>7</sup> PJM’s firm transmission studies do not address the risk that external systems managing their own congestion will affect deliverability of energy to PJM load.<sup>8</sup>

4. In addition, PJM explains that, while its Tariff rules require external capacity resources to reserve firm transmission service on the entire path from the resource to PJM, that service can be curtailed if an external system calls for level 5 Transmission Loading Relief (TLR-5).<sup>9</sup> PJM states that, from January 2009 through July 2013, firm

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<sup>5</sup> Specifically,  $(8412 - 4649)/4649 = 80.94$  percent increase in offers from the May 2012 Base Residual Auction for the 2015-16 Delivery Year to the May 2013 Base Residual Auction for the 2016-17 Delivery Year. *Id.* at 4, n.4.

<sup>6</sup> Also, PJM states that it has not addressed such risk in its studies of firm transmission service requests from external generators. *Id.* at 5.

<sup>7</sup> See, for example, PJM-Midwest Independent System Operator, Inc. (MISO) Joint Operating Agreement, Attachments 2 and 3 (detailing the inter-Regional Transmission Organization (RTO) congestion management and redispatch procedures), available at: <http://www.pjm.com/~media/documents/agreements/joa-complete.ashx>.

<sup>8</sup> Transmittal Letter at 5.

<sup>9</sup> According to North American Electric Reliability Corporation (NERC), a TLR-5 event calls for the transmission provider to reallocate transmission service “by curtailing Interchange Transactions using Firm Point-to-Point Transmission Service on a pro rata basis to allow additional Interchange Transactions using Firm Point-to-Point” or to

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transmission into PJM was curtailed under 151 separate TLR-5 events, for an average of just under 3 events per month.<sup>10</sup>

5. Furthermore, PJM states that the external resources that do not reflect the cost of delivering capacity into PJM can suppress capacity prices and induce physical resources to retire. PJM argues that over-commitment of external resources that cannot be delivered into PJM affects both short-term and long-term reliability by inflating the supply of resources in the Base Residual Auction. In the short-term, commitment of resources above deliverable levels can directly displace marginal resources for which Reliability Pricing Model capacity payments might make the difference between remaining in service or retiring. In the long-term, market participants seeking to develop truly committed resources similarly will receive inaccurate price signals and may cancel or defer development plans. In addition, PJM states that price suppression and retirement of physical external resources can result in net loss of installed physical capacity due to resources retiring, while external resources that cleared the auction but later do not obtain firm service never become PJM resources. PJM states that its procedures for reviewing and approving firm transmission requests do not address the risk that firm transmission may be curtailed by third-party systems, and that the existing Tariff does not require external generation resources to demonstrate that they have firm transmission before submitting capacity offers.<sup>11</sup>

6. Accordingly, PJM proposes Tariff revisions to recognize limits on the amount of capacity from external resources that PJM can reliably import into the PJM Region. To accomplish this, PJM proposes revisions to the OATT and RAA that define “Capacity Import Limit,” describe a methodology to determine Capacity Import Limit values, establish that PJM will determine Capacity Import Limit values each year, require PJM

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“curtail Interchange Transactions using Firm Point-to-Point Transmission Service to mitigate a[[System Operating Limit] or [Interconnection Reliability Operating Limit] Violation.” North American Electric Reliability Corporation, *TLR Levels*, <http://www.nerc.com/pa/rm/TLR/Pages/TLR-Levels.aspx>.

<sup>10</sup> PJM represents that the maximum instantaneous firm deliveries curtailed from those 151 events was 1,111 MW, and the maximum firm imports PJM continued to receive during those events was 4,434 MWs. PJM states that, considering only the summer months of June through September (i.e., the period when PJM is most likely to need to call on its Capacity Resources), there were 85 separate TLR-5 events resulting in curtailment of firm transmission into PJM, for a summer-period average of close to 5 events per month. Transmittal Letter at 6.

<sup>11</sup> *Id.* at 2-3.

to post the Capacity Import Limit values each year, and direct that the capacity market auctions will incorporate Capacity Import Limit values in the auction-clearing process. PJM proposes to begin employing the new Capacity Import Limits in PJM's next three-year forward Base Residual Auction, for which PJM is required to post all governing parameters by February 1, 2014.

7. PJM states that the proposed Capacity Import Limit constraint is analogous to the Capacity Emergency Transfer Limit constraint, which applies to internal generation. Capacity Emergency Transfer Limit recognizes the physical limits on the movement of capacity from one Locational Deliverability Area to another.

## **II. Notice of Filing and Responsive Pleadings**

8. Notice of the filing was published in the *Federal Register*, 78 Fed. Reg. 73,856 (2013), with interventions and protests due by December 20, 2013. Notices of intervention were filed by Public Utilities Commission of Ohio (Ohio Commission), Pennsylvania Public Utility Commission (Pennsylvania Commission), New Jersey Board of Public Utilities, Public Service Commission of Wisconsin, Illinois Commerce Commission (Illinois Commission), Indiana Utility Regulatory Commission, Michigan Public Service Commission (Michigan Commission), North Carolina Utilities Commission (North Carolina Commission), Maryland Public Service Commission. Timely motions to intervene were filed by Achieving Equilibrium, LLC; Dominion Resources Services, Inc.; NextEra Energy Generators; Duquesne Light Company; Lake Erie CleanPower Connector; NRG Companies; West Virginia Consumer Advocate Division; Delaware Public Advocate; American Electric Power Service Corporation (AEP); H.Q. Energy Services (U.S.) Inc.; Edison Mission Energy; Dayton Power and Light Company (Dayton); Dynegy Marketing and Trade, LLC; PPANJ; FirstEnergy Service Company (FirstEnergy); Old Dominion Electric Cooperative; Wabash Valley Power Association, Inc.; Duke Energy Corporation (Duke); Buckeye Power, Inc.; East Kentucky Power Cooperative, Inc. (East Kentucky Power Cooperative); Ameren Services Company; PPL EnergyPlus, LLC (PPL EnergyPlus); PJM Power Providers Group (P3); Monitoring Analytics, LLC (PJM Market Monitor); Illinois Municipal Electric Agency (Illinois MEA); Exelon Corporation (Exelon); Electric Power Supply Association (EPSA); American Municipal Power, Inc. (AMP); Calpine Corporation (Calpine); America's Natural Gas Alliance (Natural Gas Alliance); MISO's Independent Market Monitor (MISO Market Monitor); Owensboro Municipal Utilities (Owensboro); LS Power Associates, L.P. (LS Power); Office of Ohio Consumers' Counsel (Ohio Consumers' Counsel); PSEG Companies;<sup>12</sup> North Carolina Electric Membership

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<sup>12</sup> The PSEG Companies are the Public Service Electric and Gas Company, PSEG Power LLC, and PSEG Energy Resources & Trade LLC.

Corporation (North Carolina EMC); Citizens Utility Board of Illinois, Maryland Office of People's Counsel; Office of the People's Counsel for the District of Columbia; Pennsylvania Office of Consumer Advocate; Indiana Office of Utility Consumer Counselor; Organization of MISO States, Inc.; Organization of PJM States, Inc.; Midcontinent Independent System Operator, Inc. (MISO); American Municipal Power, Inc. (AMP); and Public Staff of the North Carolina Utilities Commission (North Carolina Public Staff). Untimely motions to intervene were filed by New Jersey Division of Rate Counsel (New Jersey Rate Counsel), Boardman & Clark LLP (Boardman & Clark), Mississippi Public Service Commission (Mississippi Commission), and Indiana Municipal Power Agency (Indiana MPA).

9. Comments were filed by Indicated PJM Utilities Coalition,<sup>13</sup> Illinois Commission, Ohio and Pennsylvania Commissions, North Carolina Commission, P3, PJM Market Monitor, Michigan Commission, Exelon, EPSA, Calpine, Natural Gas Alliance, MISO Market Monitor, MISO, PSEG Companies, and North Carolina EMC. Protests were filed by the Illinois MEA, Wabash Valley, AMP, Ohio Consumers' Counsel, LS Power, and Joint Consumer Advocates.<sup>14</sup> Answers were filed by PJM, P3, the PJM Utilities Coalition, and Maryland Commission, PJM Market Monitor, Illinois MEA, and AMP.

10. On January 28, 2014, Commission staff issued a deficiency letter identifying specific issues that required additional information. PJM filed a response to the deficiency letter on February 20, 2014. Notice of PJM's response was published in the *Federal Register*, 79 Fed. Reg. 11,777 (2014), with comments due on or before March 7, 2014. AMP, LS Power, Indiana MPA, Illinois Commission, Exelon, EPSA, the PJM Market Monitor, and the MISO Market Monitor filed comments/protests to PJM's response to the deficiency letter. PJM filed an answer.

### **III. Deficiency Letter**

11. A deficiency letter was issued on January 28, 2014 directing PJM to submit additional information. The deficiency letter requested that PJM explain the methodology and assumptions used in the development of the Capacity Import Limit and

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<sup>13</sup> AEP, Dayton, FirstEnergy, PPL EnergyPlus Duke and East Kentucky Power Cooperative (collectively, PJM Utilities Coalition).

<sup>14</sup> Citizens Utility Board of Illinois, Maryland Office of People's Counsel, Office of the People's Counsel for the District of Columbia, Pennsylvania Office of Consumer Advocate, Indiana Office of Utility Consumer Counselor, New Jersey Division of Rate Counsel, and Delaware Division of the Public Advocate (collectively, Joint Consumer Advocates).

the criteria for determining the external capacity source zones. The deficiency letter also asked how external resources would satisfy the capacity must-offer requirement and asked PJM to comment on the effect on the reliability of the system of not mandating that all capacity imports meet the three exception conditions. In addition, the deficiency letter asked PJM to explain whether and how the Capacity Import Limit addresses the risk that offers of external capacity resources in the capacity market auctions may not have acquired firm transmission for the Delivery Year. Finally, the deficiency letter asked PJM to explain whether and how PJM believes the Capacity Import Limit Tariff provisions will change as a result of the Joint and Common Market process effort on capacity deliverability.

#### **IV. Discussion**

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

12. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2013), the notices of intervention and timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding.

13. Pursuant to Rule 214(d) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214(d) (2013), the Commission will grant the New Jersey Rate Counsel, Mississippi Commission, Indiana MPA, and Boardman & Clark late-filed motions to intervene given their interest in the proceeding, the early stage of the proceeding, and the absence of undue prejudice or delay.

14. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2013), prohibits an answer to a protest and or answer unless otherwise ordered by the decisional authority. We will accept the answers filed by the PJM Utilities Coalition, Maryland Commission, P3, the PJM Market Monitor, Illinois MEA, AMP, and PJM because they have provided information that assisted us in our decision-making process.

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

15. As discussed below, we find PJM's proposed Tariff revisions to be just and reasonable, and accordingly, we accept PJM's Tariff revisions to recognize limits on the amount of capacity from external resources that PJM can reliably import into the PJM Region, effective January 31, 2014.

## **1. Application of the Capacity Import Limit**

### **a. PJM's Proposal**

16. PJM states that the proposed filing addresses a gap in the reliability rules concerning its forward capacity market. Since the capacity market's inception in 2007, the forward auctions have recognized locational constraints that limit the delivery of capacity within PJM. However, PJM's capacity market currently does not include capacity import limits on the delivery of capacity to PJM from areas outside of PJM. PJM states that, instead, it addresses this issue only by reviewing requests for firm transmission service into PJM. But transmission requests may not be resolved until long after the external resource offers and clears in a capacity market auction. Consequently, an external resource that clears a capacity market auction, but fails to secure firm transmission on satisfactory terms, will not be available to PJM in the Delivery Year as a capacity resource.

17. As PJM explains, failure to recognize the limits on capacity imports may have adverse reliability consequences. PJM argues that its Tariff-authorized auction parameters do not account for the risk that an external resource may be prevented from providing energy to PJM at critical times by curtailments of firm transmission by third-party systems over which PJM has no control.

18. PJM explains that, while its Tariff rules require external capacity resources to reserve firm transmission service on the entire path from the resource to PJM, that service can be curtailed if an external system calls for level 5 Transmission Loading Relief (TLR-5). In addition, PJM states that the external resources that do not reflect the cost of delivering capacity into PJM can suppress capacity prices and induce physical resources to retire. PJM argues that price suppression and retirement of physical external resources can result in net loss of installed physical capacity due to resources retiring while external resources that cleared the auction but later do not obtain firm service never become PJM resources. Furthermore, PJM argues that over-commitment of external resources that cannot be delivered into PJM affects both short-term and long-term reliability by inflating the supply of resources in the Base Residual Auction.

19. To recognize limits on the amount of capacity from external resources that PJM can reliably import into its Region, PJM proposes revisions to the OATT and RAA that define "Capacity Import Limit," describe a methodology to determine Capacity Import Limit values, establish that PJM will determine Capacity Import Limit values each year, require PJM to post the Capacity Import Limit values each year, and incorporate Capacity Import Limit values in the auction-clearing process. PJM proposes to begin employing the new Capacity Import Limits in PJM's next three-year forward Base Residual Auction, for which PJM is required to post all governing parameters by February 1, 2014.

**b. Positions of the Parties**

20. Several parties filed comments in support of the proposal. P3 argues that the proposal received overwhelming support from stakeholders and is necessary to ensure the reliability needs within PJM. The Ohio and Pennsylvania Commissions and EPSA state that the proposed filing represents an appropriate balance between the need to allow capacity from external resources to bid into the market and the importance that those external resources are available for delivery when needed and expected.<sup>15</sup> Calpine and ANGA explain that the proposal will allow PJM to manage the risk that external resources may fail to meet capacity market commitments similar to the way it currently manages delivery risk with respect to internal resources.<sup>16</sup> The North Carolina Commission shares PJM's concern that the over-commitment of external resources in the Base Residual Auction has the potential to adversely affect reliability, although it reserves judgment on the actual modeling and methodology proposed for calculating the Capacity Import Limits.

21. Exelon, the PJM Market Monitor, and the PJM Utilities Coalition agree with PJM that revisions to PJM's market rules are needed to ensure that the level of imported capacity offered into and cleared in the PJM Base Residual Auction does not exceed the maximum level transferrable across the PJM interfaces.

22. Illinois MEA, AMP and the MISO Market Monitor argue that the filing gives PJM near-complete discretion in how it determines and applies the Capacity Import Limits. AMP states that PJM's assumption that no redispatch will be provided to support firm deliveries is contrary to how MISO operates and has the effect of significantly reducing the level of imports deemed to be consistent with reliable operations.<sup>17</sup> Illinois MEA contends that PJM does not provide an analysis of its initial calculation of the Capacity Import Limit of 6,000 MW, and the proposal lacks a provision for protesting PJM's annual Capacity Import Limit determinations.<sup>18</sup>

23. Parties also argue that PJM fails to provide sufficient justification for the solution it proposes. Illinois MEA and the Illinois Commission argue that PJM does not provide any factual support for its claim of excessive risk of TLR-5 events being caused by

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<sup>15</sup> EPSA Comments at 3.

<sup>16</sup> Calpine Comments at 2.

<sup>17</sup> AMP Comments at 12-13.

<sup>18</sup> Illinois MEA at 11.

transmission systems outside PJM. The MISO Market Monitor and Wabash Valley state that PJM's analysis of TLR-5 events shows specific curtailments but did not assess the impact on total import capability at the time of the TLR declarations, and does not acknowledge that TLR-5 events could also impact the ability to dispatch internal generation that has been deemed deliverable.<sup>19</sup>

**c. PJM's Answer**

24. In its answer, PJM asserts that none of the protestors argue against the need for external capacity constraints. P3 and the PJM Utilities Coalition argue that the Capacity Import Limit methodology is technical and requiring PJM to include such a technical methodology in the Tariff would be inconsistent with Commission precedent. In addition, P3 states that AMP's comments regarding the proposal's effect on its investments are outside the scope of this proceeding.

**d. Commission Determination**

25. We find PJM's proposed Tariff revisions to be just and reasonable. The proposed revisions establish a reasonable methodology to allow PJM to ensure the amount of capacity from external resources that can be reliably committed in the PJM forward capacity auctions. The proposed revisions will help to address the risk that external resources may not be able to deliver capacity in the relevant delivery year because firm transmission may be curtailed by third-party systems and external systems managing their own congestion may affect deliverability of energy to PJM load. The revisions will enhance PJM's ability to determine the amount of capacity from external generation resources that PJM can include in the forward capacity auctions without violating reliability criteria, and are an improvement over the current system, which only allows PJM to assess import capability by evaluating individual requests for long-term transmission service. As discussed below, several parties request changes to PJM's proposal. However, the issue in a section 205 proposal is to determine whether PJM's proposal is just and reasonable, and not unduly discriminatory or preferential, not to determine whether alternative proposals are more or less reasonable.<sup>20</sup>

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<sup>19</sup> *Id.* at 6, 15.

<sup>20</sup> *California Indep. Sys. Operator Corp.*, 128 FERC ¶ 61,265, at P 21 (2009). See *OXY USA Inc. et al. v. FERC*, 64 F.3d 679, 692 (1995) (finding that under the FPA, as long as the Commission finds a methodology to be just and reasonable, that methodology "need not be the only reasonable methodology, or even the most accurate one"); *Cities of Bethany et al. v. FERC*, 727 F.2d 1131, 1136 (1984) (when determining whether a rate

(continued...)

26. Some intervenors argue that the filing gives PJM too much discretion on how it determines and applies the Capacity Import Limit proposal. For example, AMP states that PJM's assumption that no redispatch will be provided to support firm deliveries is contrary to how MISO operates and has the effect of significantly reducing the level of imports deemed to be consistent with reliable operations. Illinois MEA also contends that PJM does not provide an analysis of its initial calculation of the Capacity Import Limit of 6,000 MW, and the proposal lacks a provision for protesting PJM's annual Capacity Import Limit determinations. MISO also argues that PJM should coordinate with MISO with respect to modeling and analysis used to derive the Capacity Import Limits. We do not find the tariff unjust and unreasonable because it affords discretion to PJM in determining the Capacity Import Limit. As PJM notes, we have previously found appropriate PJM's use of some reasonable discretion in modeling,<sup>21</sup> for example in the calculation of the Capacity Emergency Transfer Limits that apply to internal resources. We find PJM's discretion in the use of planning parameters to determine the Capacity Import Limit just and reasonable. We also note that PJM states that it has and will continue to coordinate with MISO in modeling the systems when calculating Capacity Import Limits.<sup>22</sup>

27. Some parties also claim that PJM fails to provide sufficient justification for the solution it proposes and the filing does not provide any factual support for its claim of excessive risks of TLR-5 events being caused by transmission systems outside PJM. In response, PJM contends that recent growth in capacity imports and recent experience with TLR-5 firm curtailment events underscores the need to recognize the constraints on transfers of capacity into PJM, just as the RPM recognizes internal constraints. PJM states that the TLR-5 events noted in its filing were broadly distributed.<sup>23</sup> We find PJM's proposal to integrate consideration of external capacity constraints in the forward capacity auctions to address the risk that firm transmission may be curtailed by third-party systems over which PJM has no control to be just and reasonable.

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was just and reasonable, the Commission properly did not consider "whether a proposed rate schedule is more or less reasonable than alternative rate designs").

<sup>21</sup> Transmittal Letter at 16 (citing *PPL Energy Plus v. PJM Interconnection, L.L.C.*, 134 FERC ¶ 61,263, P 43, *reh'g denied*, 136 FERC ¶ 61,060 (2011), *aff'd*, 503 F. App'x 1 (D.C. Cir. 2013)).

<sup>22</sup> PJM January 6 Answer at 11-12.

<sup>23</sup> *See* PJM Answer at 14-15.

## 2. External Source Zones

### a. PJM's Proposal

28. PJM proposes to identify five external source zones as groupings of one or more balancing authority areas in order to reflect planning analysis the fact that when one system enters an emergency condition, it can usually rely on support from surrounding systems.<sup>24</sup> The proposed Tariff language provides that: “[a]s more fully set forth in the PJM Manuals, PJM shall make such determination based on the latest peak load forecast for the studied period, [and] the same computer simulation model of loads, generation and transmission topography employed in the determination of Capacity Emergency Transmission Limit for such Delivery Year . . . .”<sup>25</sup>

29. PJM states that the region-wide and source zone limits capture much of the deliverability assurance that would be provided by individual firm transmission assessments for all of the individual external generation resources, without requiring all of those individual assessments to be completed more than three years prior to the Delivery Year. Moreover, PJM states that reducing the total amount of external resources that commit but fail to secure firm transmission is important because it reduces the likelihood, and potential impact, of resources setting clearing prices at levels that do not reflect the cost to deliver capacity and that inefficiently crowd out deliverable resources that would otherwise be economic. According to PJM, the proposed Capacity Import Limit rules will allow the auctions to put a price on those transmission constraints if and when they bind, just as the capacity market auctions today put a price on the transmission constraints within PJM.<sup>26</sup>

### b. Positions of the Parties

30. The PJM Utilities Coalition explains that the proposed Capacity Import Limit methodology appropriately uses both an aggregate limit and zonal limits, reasonably

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<sup>24</sup> PJM states that the zones may need to be periodically modified based on changing system patterns or historical operational data, but are currently: (a) Northern Zone: NYISO and ISO-NE, (b) Western Tier 1 Zone: MISO East, MISO West and Ohio Valley Electric Corp. (OVEC), (c) Western Tier 2 Zone: MISO Central and MISO South, (d) Southern Tier 1 Zone: TVA and Louisville Gas and Electric (LGEE), (e) Southern Tier 2 Zone: Non-PJM area of Virginia-Carolinas (VACAR).

<sup>25</sup> Proposed PJM RAA, section 1.7A.

<sup>26</sup> *Id.* at 2.

selects the five external zones based on engineering judgment, and appropriately excludes the capacity benefit margin from the calculation of the Capacity Import Limit.<sup>27</sup> MISO states that it does not oppose the filing, but requests that the Commission direct PJM to use the nine MISO Local Resource Zones. Alternatively, MISO argues that the use of two MISO zones should be altered to group MISO east with MISO central and Ohio Valley Electric Corporation should be moved to Southern Tier 1.

31. Illinois MEA and the Illinois Commission contend that PJM should be required to demonstrate how it decided to include five zones in its analysis and its basis for defining the zones, including why MISO is divided into two zones.<sup>28</sup> The MISO Market Monitor argues that PJM's source zone definitions are arbitrary, not consistent with how MISO would actually deliver capacity in real time, and were not developed with input from MISO. In addition, the Illinois Commission and MISO Market Monitor contend that the details of the Capacity Import Limit methodology, particularly the definitions of source zones, should be in the Tariff, not the manuals, because they significantly affect rates, terms, and conditions of service.<sup>29</sup>

**c. PJM's Answer**

32. In its answer, PJM explains that factors used in defining the five source zones include electrical connectivity, the regional reliability organization to which a system belongs, and the relative size of the source zones. PJM explains that having five source zones optimizes the Capacity Import Limit benefit while reasonably approximating the level of flow-adjustment support PJM can expect to receive from external systems during an emergency.

33. Also, in its response to the deficiency letter, PJM states that its planning staff found that the greater number of source zones, the higher the Capacity Import Limit because each source zone effectively defines an area that will provide generator output adjustments to resolve transmission constraints in support of delivery of firm imports into PJM.<sup>30</sup> PJM also describes the analysis it conducted that found that the Capacity Import Limit benefit was maximized with five source zones. In response to the deficiency letter's inquiry as to whether PJM plans to modify source zones on the same schedule

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<sup>27</sup> PJM Utilities Coalition Comments at 35-39.

<sup>28</sup> Illinois MEA Comments at 10; Illinois Commission Comments at 9.

<sup>29</sup> Illinois Commission at 11; MISO Market Monitor Comments at 8.

<sup>30</sup> PJM Deficiency Letter Response at 9.

that it examines the Capacity Emergency Transfer Limit for determining the Locational Deliverability Areas, PJM states that it calculates Capacity Emergency Transfer Limit values each year to determine which previously defined Locational Deliverability Areas should be separately modeled in the capacity market auctions, but PJM does not have a prescribed schedule for redefining Locational Deliverability Areas, or for creating new Locational Deliverability Areas. Each year, PJM reviews the results of analyses prepared for other purposes, such as for Regional Transmission Expansion Plan or for operational purposes, to determine whether there may be a need to develop one or more new Locational Deliverability Areas. If the Capacity Import Limit rules are adopted, PJM states that it would consider possible changes to the source zones in the same manner.<sup>31</sup>

**d. Commission Determination**

34. We find PJM's proposed Tariff revisions to be just and reasonable. In defining the five source zones for determining how much redispatch will be provided to support PJM's firm imports, PJM's planners conducted an analysis and, as discussed above, found that these five source zones optimize the Capacity Import Limit benefit, which reasonably approximates the level of flow-adjustment support PJM can expect to receive from external systems when the PJM system is in capacity emergency conditions. We also find that PJM provides an adequate explanation for the calculation of the Capacity Import Limits and that the use of five source zones to determine the Capacity Import Limit benefit provides a reasonable approximation of the level of flow-adjustment support PJM can expect to receive from external systems.

35. Some parties argue that PJM does not sufficiently justify its delineation of zones and that the details of the Capacity Import Limit methodology, particularly the definitions of source zones, should be in the Tariff. In support of its proposal, PJM proposes to include the Capacity Import Limit calculation procedures, assumptions, and methodology in Attachment G of Manual 14B.<sup>32</sup> PJM identifies the initial source zones, but PJM contends that it is appropriate to include certain details on the determination of these zones in the manuals instead of the specified in the Tariff because conditions on external systems, system configurations, and network topology can change, which may change the zonal determinations. Similarly, P3 and the PJM Utilities Coalition note that the

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<sup>31</sup> PJM clarifies that, while not subject to a formal review process, its planning or operational analyses conducted in the normal course of business may point to a possible need for changes in the source zones. In such a case, PJM states that it would conduct more focused analysis on the need for a change and to identify which changes to the source zones would reasonably respond to that need. *Id.* at 19.

<sup>32</sup> PJM Manual 14B is available at <http://www.pjm.com/documents/manuals.aspx>.

Capacity Import Limit methodology is technical and requiring PJM to include such technical methodology in the Tariff would be inconsistent with Commission precedent.<sup>33</sup> As discussed above, we find that PJM provides an adequate explanation of the analysis it conducted that found that the Capacity Import Limit benefit was maximized with five source zones. Further, we note that the details of the Capacity Emergency Transfer Limit that applies to internal resources are contained in Attachment C of Manual 14B. Therefore, we do not see a need to require PJM to include the technical details of its proposal in the Tariff.

### **3. Exceptions to the Capacity Import Limit**

#### **a. PJM's Proposal**

36. PJM proposes to permit certain external resources that do not present the risks contemplated by this filing to seek an exception to the Capacity Import Limit by demonstrating to PJM by no later than five business days prior to the start of the offer period for the relevant capacity market auction that: (1) they are pseudo-tied generation resources; that is, they are treated like internal generation, subject to redispatch and locational pricing, and are not subject to TLR-5 curtailments; (2) they have long-term firm transmission service confirmed on the complete transmission path from such resource into PJM; and (3) they agree to be subject to the same capacity must-offer requirement as PJM's internal resources. PJM states that an external resource that meets all three of these conditions should not be subject to the Capacity Import Limits because that resource has taken steps to be much like a PJM's internal resource.<sup>34</sup>

37. Because the demonstration by such resources as meeting this exception will "use up" some of the Capacity Import Limit, PJM also proposes to make a downward adjustment to the Capacity Import Limit available in the capacity market auction to other external resources. PJM proposes to use the level of confirmed Network External

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<sup>33</sup> See *Sw. Power Pool, Inc.*, 136 FERC ¶ 61,050, at P 33 (July 21, 2011) ("In Order No. 890, the Commission disagreed with parties who argued that all of a transmission provider's rules, standards, and practices should be incorporated into its OATT, finding that such a requirement would be impractical and potentially administratively burdensome. Instead the Commission requires transmission providers to post on their public websites all rules, standards, and practices that relate to transmission service and provide a link to those rules, standards, and practices on Open Access Same-Time Information System.").

<sup>34</sup> Transmittal Letter at 24.

Designated Transmission Service<sup>35</sup> as a proxy for the measure of the total firm capability available. Should the total of the Capacity Import Limit and the approved exceptions exceed that confirmed service level, PJM will reduce, to that extent, the Capacity Import Limit available in the auction to other resources.<sup>36</sup>

**b. Positions of the Parties**

38. North Carolina EMC requests that, if the Commission accepts the filing, it approve the proposed exceptions because the exceptions are needed to ensure that North Carolina EMC can continue to rely on its external capacity resources to serve its PJM loads.<sup>37</sup>

39. However, some of the parties argue that all capacity imports should have to meet the three conditions that PJM proposes as an exception to the rule before the Base Residual Auction: (1) firm transmission to the PJM border; (2) established pseudo-tie with PJM; and (3) agreement to the capacity must-offer requirement. According to Exelon and the PJM Utilities Coalition, failure to require up-front satisfaction of the exception criteria will provide external resources with the option to cancel the capacity import after clearing in the Base Residual Auction, leading to artificially low Base Residual Auction prices and system reliability issues through premature retirements.<sup>38</sup> The PJM Market Monitor argues that, so long as the market rules allow for acceptance and clearing of offers from external resources that may not be willing or able to deliver

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<sup>35</sup> PJM notes that, for most years, the Network External Designated transmission service will be higher than the estimated level of the PJM Region-wide Capacity Import Limit, as it is for 2018.

<sup>36</sup> Specifically, the proposed RAA states: “(a) the total megawatt quantity of all exceptions granted hereunder for a Delivery Year, plus the Capacity Import Limit for the applicable interface determined for such Delivery Year, may not exceed the total megawatt quantity of Network External Designated Transmission Service on such interface that PJM has confirmed for such Delivery Year; and (b) if granting a qualified exception would result in a violation of the rule in clause (a), PJM shall grant the requested exception but reduce the Capacity Import Limit by the quantity necessary to ensure that the total quantity of Network External Designated Transmission Service is not exceeded.” Proposed PJM RAA, section 1.7A.

<sup>37</sup> NCEMC Comments at 5.

<sup>38</sup> Exelon Comments at 6; PJM Utilities Coalition Comments at 29.

and do not have an obligation to deliver, the rules fail to prevent speculative nonphysical offers.<sup>39</sup>

40. A number of parties argue against the pseudo-tie requirement. The MISO Market Monitor and Wabash Valley argue that the Commission should reject PJM's pseudo-tie requirement because it may create significant inefficiencies in generation dispatch in the energy market, for example, because a unit could be split between RTOs and receive conflicting orders from MISO and PJM.<sup>40</sup> Illinois MEA contends that PJM's approach to require all generation seeking an exception to be pseudo-tied cuts too broadly and fails to recognize that not all generation can be pseudo-tied into PJM.<sup>41</sup> Wabash Valley contends that this requirement places disproportionate and irrational costs on certain external capacity and creates an unreasonable market barrier to external resources.<sup>42</sup> Owensboro states that the pseudo-tie requirement is overly narrow and instead resources should meet that prong of the exception if, a year ahead of the subject auction, they had already made an economic commitment to long-term firm transmission service with a duration of five years or longer.<sup>43</sup> Alternatively, Owensboro states that its concern could be addressed by revising PJM's Effective Equivalent Demand Forced Outage Rate methodology as applicable to external capacity resources.

41. Exelon also requests that the Commission direct PJM to define in the Tariff or business practice manuals the criteria to become a pseudo-tied resource. If the Commission does not find that all resources should meet the exception requirements, Exelon argues that PJM should at least be required to revise its Tariff to require, among other things, a completed System Impact Study for all external resources that do not have

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<sup>39</sup> *Id.* at 5.

<sup>40</sup> MISO Market Monitor Comments at 15; Wabash Valley Comments at 8.

<sup>41</sup> Illinois MEA Comments at 5-6. Illinois MEA states that there were no TLR-5 events at PJM between 2009 and 2010. From 2011 to 2013, Illinois MEA claims that, there were 20 summer curtailment events, with a total integrated net loss of 224 MW, and PJM called all these transactions either as the transmission provider or as the security coordinator.

<sup>42</sup> Wabash Valley Comments at 6.

<sup>43</sup> Owensboro Comments at 3. Wabash Valley requests a similar modification if the Commission does not reject the filing, or alternatively requests that the filing be accepted and suspended for five months and set for hearing. Wabash Valley Comments at 9-10.

existing firm transmission and posting of credit equivalent to the higher of the penalty rate or the estimated transmission network upgrade costs.<sup>44</sup>

42. P3 contends that the pseudo-tie requirement is an important component of the exception because it removes the risk that transmission will be cut by a TLR-5 event, and P3 notes that opposing parties do not challenge that a TLR-5 event would impact resource deliverability.

43. LS Power asserts that the Commission should reject PJM's proposal and direct PJM to replace it with a simple requirement that external resources demonstrate that they have obtained firm transmission in order to participate in the capacity auctions.<sup>45</sup> LS Power also argues that the Commission should reject PJM's suggestion that external resources be required to comply with the must-offer requirement because PJM's stakeholder process did not fully consider this proposal. LS Power asserts that the must-offer provision is only intended for internal resources, and attempting to apply it to external resources could have the perverse consequence of requiring external generators to pay for firm transmission even if they do not clear the Base Residual Auction. In addition, LS Power argues that, in the event a must-offer requirement is imposed on external resources, PJM should be required to re-assess how an external resource could obtain an exception from that requirement; for example, PJM does not address whether existing exceptions are appropriate for an external resource.<sup>46</sup>

44. The PJM Market Monitor argues that the Capacity Import Limit does not address the risk that offers of capacity in capacity auctions may not have actually acquired firm transmission, that even energy imports associated with external capacity with firm transmission may be interrupted under certain conditions and therefore are not comparable to internal resources, and that a generating unit distant from PJM does not provide the same product as one close to PJM.<sup>47</sup>

45. The MISO Market Monitor argues that PJM has not shown that it is reasonable to determine Capacity Import Limits that are less than the firm transfer capability between areas. The MISO Market Monitor also argues that PJM's proposal should replace its

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<sup>44</sup> Exelon Comments at 12.

<sup>45</sup> LS Power Comments at 5-6.

<sup>46</sup> *Id.* at 9-12.

<sup>47</sup> PJM Market Monitor Comments at 3-4.

unit-specific deliverability evaluations because, as long as a resource is fully deliverable to its own RTO area, there is no reason to test its deliverability to the adjacent RTO area.

**c. PJM's Answer**

46. PJM states that, assuming acceptance of PJM's proposal, there are no adverse reliability impacts from *not* mandating that all external capacity resources seeking to offer into a capacity market auction must first obtain firm transmission, commit to a pseudo-tie, and agree to a must offer obligation. However, requiring these three conditions of *all* external resources could limit competition from external resources without providing any offsetting benefits, since the conditions are not needed to assure reliability, and they are not comparable to the treatment of internal resources.<sup>48</sup> Furthermore, PJM addresses objections to the pseudo-tie exception criteria by stating the issue is about responsibility and control, not a metering and dispatch arrangement.

47. In its response to the deficiency letter, PJM states that all firm transmission service is included in the base case powerflow model that is used to determine the Capacity Import Limits, regardless of whether the transmission service is used to deliver a capacity resource. This is necessary because energy deliveries on firm transmission service can be maintained during capacity emergency conditions regardless of whether the energy being scheduled on such service is being delivered from a capacity resource. With respect to external resources that have previously been granted an exception, PJM states that it would not require those resources to maintain firm transmission service. However, if an external resource decides to give up its firm service, then it would no longer qualify as a PJM capacity resource or for the Capacity Import Limit exception.

48. PJM also clarifies in its answer that, to satisfy the must-offer requirement of the proposed exception, an external capacity market seller must show that its resource is subject to the same obligations that section 6.6 of Attachment DD to the Tariff imposes on internal resources that offer capacity into the capacity market auctions. PJM also clarifies that, even if an external resource agrees to the must-offer requirement and becomes a PJM capacity resource, its Sell Offer in subsequent auctions may include "Opportunity Cost," which is defined to include "the documented price available to an

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<sup>48</sup> For example, internal resources are not required to execute an Interconnection Service Agreement before offering into a base residual auction. For an internal generation resource, execution of the Interconnection Service Agreement is the equivalent of the confirmation of firm transmission service. Therefore, requiring an external resource to already have confirmed firm service would place a higher requirement on an external resource than on internal resources. *Id.* at 4-5.

existing generation resource in a market external to PJM.”<sup>49</sup> Accordingly, the PJM must-offer requirement would not preclude a resource from selling capacity in its own area, just as it does not preclude generation capacity resources located inside the PJM Region from selling capacity outside PJM.<sup>50</sup>

**d. Commission Determination**

49. We reject the PJM Utilities Coalition and the PJM Market Monitor’s argument that the required three conditions to receive an exception (i.e., firm service, pseudo-tie, and must-offer) must be made mandatory for all resources. These parties do not recommend rejection of the filing as unjust and unreasonable, and we find PJM’s proposed conditions just and reasonable even though they are not mandatory for all resources. In addition, we find reasonable PJM’s position that making these three conditions mandatory for *all* external resources would limit competition from external resources (by making it more difficult for them to qualify as capacity resources) without providing any offsetting benefits.

50. We accept PJM’s proposal to permit certain external resources that do not present the risks contemplated by this filing to seek an exception to the Capacity Import Limit. We also reject intervenors’ arguments that the proposed pseudo-tie requirement is unjust and unreasonable because PJM fails to recognize that not all generation can be pseudo-tied in PJM, and the MISO Market Monitor’s argument that pseudo-tying inefficiently raises congestion and prices, and degrades reliability because it causes overload on transmission constraint. There is no requirement for all generation units to be pseudo-tied to offer into the auction, so they have options as to how to participate. We find, however, that the pseudo-tie requirement is a reasonable method by which external capacity resources can seek to offer into the forward capacity auctions without being subject to the Capacity Import Limit. As PJM explained, even though a pseudo-tied generation resource is physically located in one balancing authority, it is treated electrically as being in another balancing authority. Therefore, that pseudo-tied resource is subject to the dispatch of that second balancing authority and it is not tagged as an interchange transaction between the two areas and, under NERC rules, it is not subject to curtailment in a TLR-5 event.

51. PJM explains that it can use interregional congestion management arrangements to address any inefficiencies resulting from the pseudo-tie. Specifically, “because a pseudo-tied resource is considered part of PJM’s market, PJM can employ any interregional

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<sup>49</sup> PJM OATT, Attachment DD, subsections 6.7(b)(ii), (d)(ii).

<sup>50</sup> PJM Deficiency Letter Response at 6.

congestion management arrangements it has with neighboring systems to address congestion on such systems that may be associated with the pseudo-tie.”<sup>51</sup> As noted above, pseudo-tied external resources are not subject to the risk associated with TLR-5 curtailments. External resources that are incapable or unwilling to pseudo-tie in PJM may still participate in its forward capacity auctions. However, PJM appropriately considers the curtailment risk of such resources through application of the Capacity Import Limit.

52. We find Exelon’s suggestions that these requirements should be made more stringent by requiring a completed System Impact Study for all external resources that do not have existing firm transmission and changing the credit requirements, as beyond the scope of this filing. We do not find the filing unjust and unreasonable on this ground. PJM states that it is working with its stakeholders in developing business rules to govern dynamic transfers, including pseudo-ties,<sup>52</sup> and we do not find it necessary to implement the additional requirements suggested by Exelon (which would have required PJM to define in the Tariff or business practice manuals the criteria to become a pseudo-tied resource).

53. LS Power argues that the Commission should (1) direct PJM to replace its proposal with a requirement that external resources demonstrate that they have obtained firm transmission in order to participate in the capacity auctions, and (2) reject the imposition of a must-offer requirement on external resources. For similar reasons, we do not find the filing unjust and unreasonable without such changes. Imposing a firm transmission requirement on all external resources would restrict competition without providing any offsetting benefits. We also do not find persuasive LS Power’s argument that the filing is unjust and unreasonable because the must-offer requirement is included. First, we note that only those resources that voluntarily seek and are granted the exception to the Capacity Import Limit must, as part of such exception process, agree to a capacity must offer requirement. Second, a resource that seeks to be treated as comparable to PJM internal generation should be subject to a condition, which indicates a long-term commitment as PJM capacity.

54. We also disagree with the arguments that PJM has not shown that it is reasonable to determine Capacity Import Limits that are less than the firm transfer capability between areas. As previously noted, PJM proposes to use the level of confirmed Network External Designated Transmission Service as a proxy for measuring total firm

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<sup>51</sup> See MISO-PJM JOA, Attachment 2, section 4.1. PJM Transmittal Letter at 24-25.

<sup>52</sup> PJM Deficiency Letter Response at 15.

capability available, and that if the total of the Capacity Import Limit and the approved exceptions exceed that confirmed service level, PJM will reduce, to that extent, the Capacity Import Limit available in the auction to other resources. We find that PJM's proposed adjustment to the Capacity Import Limit available in the capacity market auctions to other external resources would ensure that the Network External Designated transmission service is available for external resources that wish to sell capacity into PJM. Further, as discussed below, PJM must include the transmission transfer capability to support a capacity benefit margin. We find that the proposed filing strikes a reasonable balance between the availability of capacity from external resources to bid into the capacity market and the importance that those external resources are available for delivery when needed and expected.<sup>53</sup>

**4. Capacity Import Limit's Relationship to Capacity Benefit Margin**

**a. PJM's Proposal**

55. PJM proposes to define "Capacity Import Limit" as the maximum megawatt quantity of capacity deliveries into PJM that the system can reliably support minus the capacity benefit margin. PJM states that the capacity benefit margin is currently 3,500 MW, as reflected in the RAA, which represents the amount of emergency assistance that can be received from neighbors, above and beyond the capacity resources, including external capacity resources, otherwise committed to PJM through the capacity market auctions. Capacity benefit margin is used to reduce PJM's required reserve margin and to reduce the amount of capacity procured in the RPM. PJM reasons that because the capacity benefit margin quantity reserved for emergency external assistance competes with external generators that might otherwise export capacity to PJM, PJM assures deliverability of capacity benefit margin by reducing the Capacity Import Limits accordingly.

**b. Positions of the Parties**

56. MISO requests that PJM make a number of technical clarifications, such as how PJM calculates the capacity benefit margin value, and that PJM be required to coordinate with MISO with respect to modeling and analyses used to derive the Capacity Import Limits going forward.

57. The PJM Utilities Coalition argues that MISO's arguments regarding the merits of the capacity benefit margin are outside the scope of the proceeding, and failure to

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<sup>53</sup> See EPSA Comments at 3.

subtract the capacity benefit margin from the Capacity Import Limit would double-count the same transmission transfer capability, which overstates the imports that PJM can use to maintain reliability.

58. The MISO Market Monitor argues that in its development of the Capacity Import Limits, PJM reserves more than a third (3,500 MW) of the firm import capability for its capacity benefit margin. The MISO Market Monitor argues that this is inefficient and reduces the reliability of the system by allowing PJM to count on unspecified, uncommitted, and uncompensated resources to meet its capacity obligation.

59. The Joint Consumer Advocates argue that the Commission should accept PJM's filing but require PJM to either remove or justify calculating the individual zones' Capacity Import Limits by deducting the capacity benefit margin because this proposed approach is arbitrary and results in overly restricting imports from the individual zones.<sup>54</sup>

**c. PJM's Answer**

60. PJM explains that it used a model of the entire Eastern Interconnection, not just MISO, for the calculation of the Capacity Import Limit and capacity benefit margin value of 3,500 MW and that the amounts allocated to each zone are based on the optimal import scenario for each zone. PJM explains that the individual zonal Capacity Import Limits therefore will always sum to a greater quantity than the simultaneous, interface-wide Capacity Import Limit and that PJM will allocate the capacity benefit margin value of 3,500 MW according to the maximum import limit for each zone divided by the maximum import quantity. Finally, PJM asserts that it is appropriate to include certain details in the manuals instead of the Tariff because this is consistent with the treatment of Capacity Emergency Transfer Limit and because conditions on external systems, system configurations, and network topography can change.

**d. Commission Determination**

61. We reject Joint Consumer Advocates' request that PJM be required to either remove or justify its proposed calculation that reduces the Capacity Import Limits based on the capacity benefit margin. We also reject the MISO Market Monitor's argument that the filing's use of capacity benefit margin calculations is unjust and unreasonable. We find that PJM provides an adequate explanation for deducting the established

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<sup>54</sup> The Ohio Consumers' Counsel shares this concern and argues that PJM should explain why the total amount PJM deducts from the individual Capacity Import Limits values is not the capacity benefit margin value of 3,500 MW, as PJM suggests, but 4,762.9 MW.

3,500 MW of capacity benefit margin, as allocated to the source zones, from the overall Capacity Import Limit. We agree with PJM that preserving transmission transfer capability to provide the capacity benefit margin is important so that, in an emergency, PJM can have the transmission capability needed to import the needed emergency capacity from its neighbors.<sup>55</sup> According to the RAA, the capacity benefit margin is used only for “*emergency capacity assistance*” above and beyond committed capacity resources.<sup>56</sup> Because the Capacity Import Limit sets the maximum level of imported capacity, that limit must be set at a level that allows for “access by the load-serving entities to generation from interconnected systems to meet generation reliability requirements.”<sup>57</sup> If the Capacity Import Limit is not reduced by the capacity benefit margin, the emergency-only reliability purpose of the capacity benefit margin could be compromised because the total quantity of megawatts of external capacity available for emergency assistance may be overstated. Finally, issues relating to whether resources will actually be available, and the amount of capacity benefit margin, are not at issue in this proceeding.<sup>58</sup>

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<sup>55</sup> As PJM states, its reliance on the capacity benefit margin for emergency external assistance reduces PJM’s calculated installed reserve margin (i.e., the reserve margin that establishes PJM’s capacity obligations) and therefore reduces the amount of unit-specific capacity commitments that PJM obtains through the Reliability Pricing Model. Transmittal Letter at 10.

<sup>56</sup> RAA, Schedule 4 (emphasis added). *See also* OATT, Attachment C (“The transmission transfer capability preserved as [capacity benefit margin] is intended to be used by an LSE only in times of emergency generation deficiencies. . . . This capability, known as the [capacity benefit margin], is a reflection of the mutual benefit of interconnected operations and reservation of this margin allows a system to reduce its installed generating capacity below that which may have otherwise been required if transmission interconnections did not exist. . . . [capacity benefit margin] shall only be used if the PJM Region is experiencing a generation deficiency to increase generation in the PJM Region.”).

<sup>57</sup> *Mandatory Reliability Standards for the Calculation of Available Transfer Capability, Capacity Benefit Margins, Transmission Reliability Margins, Total Transfer Capability, & Existing Transmission Commitments & Mandatory Reliability Standards for the Bulk-Power Sys.*, 129 FERC ¶ 61,155, at P 26 (2009).

<sup>58</sup> RAA, Schedule 4. *See* MISO Market Monitor Comments at 10 (“PJM provides no legitimate basis for [its reliance on external support], nor does it provide any support

(continued...)

## 5. Other Issues

### a. Parties' Concerns

62. The MISO Market Monitor and the Illinois Commission argue that PJM's proposal moves away from cooperative efforts between PJM and MISO and therefore request that the Commission either establish a technical conference to provide an opportunity for market participants to receive a greater understanding of how the Capacity Import Limits would be determined or direct PJM to address this proposal in the context of the Joint and Common Market process.<sup>59</sup> The Michigan Commission requests that the Commission take steps to coordinate its consideration of issues in the instant docket with the progress being made in the stakeholder process.<sup>60</sup> AMP asserts that the filing is at odds with the Joint and Common Market proceedings and the Commission should reject the proposal and direct PJM to adhere to the procedures set forth in the Joint and Common Market Initiative Work Plan.<sup>61</sup> Alternatively, AMP argues that the Commission should suspend the filing for five months, initiate hearing procedures, and direct PJM to use the five-month period to work within the Joint and Common Market process to develop consensual solutions.<sup>62</sup>

63. The PJM Market Monitor asserts that this proceeding does not concern matters properly within the scope of the Joint and Common Market process because that process concerns coordination of congestion management in the energy market and examination of unnecessary barriers to capacity deliverability from qualifying capacity units, not the design of capacity markets or the definition of capacity in PJM or MISO.

64. The PJM Utilities Coalition contends that PJM's proposal is amply supported. The PJM Utilities Coalition disagrees with the MISO Market Monitor's argument that the Capacity Import Limits should replace other deliverability provisions because the Capacity Import Limit calculation is not as granular as studies of specific transmission

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or technical details regarding the 3,500-MW [capacity benefit margin] value it proposes to use.”).

<sup>59</sup> *Id.* at 14-16.

<sup>60</sup> Michigan Commission Comments at 2.

<sup>61</sup> AMP Comments at 11.

<sup>62</sup> *Id.* at 18-19.

requests and does not reach beyond PJM's border to evaluate deliverability on other systems.

65. Parties opposing the filing generally argue that PJM's proposal will work to bar the import of low-cost capacity resources even when there is sufficient firm transmission capacity available to bring those resources into PJM. AMP argues that its MISO-area generation will be trapped on the wrong side of the MISO-PJM seam and that resources built to serve its native load that is now served by PJM members should be exempt from the application of the Capacity Import Limits.<sup>63</sup>

66. In its answer, AMP asserts that the Capacity Import Limits will restrain trade between PJM and other RTOs/ISOs and interfere with flow of interstate commerce, and PJM has not shown that this is the least restrictive means of satisfying the public need, as required by antitrust law.<sup>64</sup> AMP also argues that P3 mischaracterizes AMP's position when it argues that the proposal's effect on AMP's investments is outside the scope of the proceeding.

67. Illinois MEA requests that, as a condition of approval of the proposal, the Commission require that otherwise eligible participants be permitted an open season to change their status to participate in the Fixed Resource Requirement Alternative (FRR) or terminate their participation in FRR.<sup>65</sup>

68. Lastly, in its answer, the Maryland Commission supports a technical conference, which would provide greater transparency to the disputes and issues posed and valuable insight as to whether further stakeholder processes would be useful.

**b. PJM's Answer**

69. In its answer, PJM asserts that none of the protestors argue against the need for external capacity constraints. PJM represents that PJM and MISO each agreed to make their own determinations on reliability limits as separate but complementary efforts to the Joint and Common Market initiative and that protesting parties have misread the Joint

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<sup>63</sup> AMP Comments at 6-7.

<sup>64</sup> AMP Answer at 4.

<sup>65</sup> The FRR Alternative is an alternative method for a Party to satisfy its obligation to provide Unforced Capacity hereunder, as set forth in Schedule 8.1 to the RAA. RAA, section 1.25.

and Common Market initiative by assuming that the capacity transfer limits and capacity deliverability are the same issue.

70. As discussed above, PJM explains that it is difficult to say what components of the Capacity Import Limit Tariff provisions could change as a result of the Joint and Common Market process effort on capacity deliverability. However, PJM states that it is amenable as part of any filings of any agreed changes coming out of the Joint and Common Market process to also specifically address with the Commission the need for any changes to the Capacity Import Limits calculation and would work with stakeholders to review this issue within the Joint and Common Market process.<sup>66</sup>

71. With respect to the MISO Market Monitor's argument that that PJM should remove the requirement for unit specific deliverability testing from the Capacity Import Limit proposal, PJM argues that this change to pre-existing PJM market rules is outside the scope of this case. PJM argues that its filing proposes no change to the unit-specific deliverability rule, and that this is an attempt by the MISO Market Monitor to pre-empt the Joint and Common Market stakeholder process. PJM also argues that the MISO Market Monitor is incorrect in its view that unit-specific deliverability need not be assessed because all generation capacity resources, internal and external, are committed to PJM on a unit-specific basis; therefore PJM's current deliverability rule, remains just and reasonable.

**c. Commission Determination**

72. We disagree with arguments that the proposal should be rejected or held in abeyance pending coordination through the Joint and Common Market process. We find that the matters addressed in this proposal are sufficiently distinct from the capacity deliverability and other matters raised in the Joint and Common Market process to warrant an independent determination by PJM. We also find that, should any modification to the PJM Capacity Import Limit construct be necessary as a result of the Joint and Common Market process, PJM may make a filing at a later date. We agree with PJM that each RTO can separately determine the level of capacity imports that can be reliably supported by physical transmission system capability, in consultation with stakeholders and neighboring RTOs.

73. We also disagree with the parties that argue that the proposal will harm competition and restrain trade between PJM and other RTOs/ISOs. AMP contends that the proposal must be rejected because it will bar imports of low cost capacity. Contrary to AMP's arguments, the Capacity Import Limit proposal represents the recognition of physical constraints that limit the delivery of capacity to PJM from areas outside of PJM,

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<sup>66</sup> *Id.* at 20-21.

and is made in light of PJM's substantial responsibility for the reliable delivery of energy to load.<sup>67</sup> As the Ohio and Pennsylvania Commissions and EPSA have stated, the proposed filing represents an appropriate balance between the need to allow capacity from external resources to bid into the market and the importance that those external resources are available for delivery when needed and expected.

74. With respect to the MISO Market Monitor's argument that PJM's proposal should replace its unit-specific deliverability evaluations, we find that PJM's filing proposes no changes to the existing PJM unit-specific deliverability rule. As PJM explained, all generation capacity resources, whether external or internal, are committed to PJM on a unit-specific basis. As defined in the PJM OATT Attachment DD, section 6.6(g), a capacity seller that has a financially and physically firm commitment to an external sale of its capacity, must demonstrate that it has entered into a unit-specific bilateral transaction for service to load located outside the PJM region. Since PJM has not proposed any changes to the existing unit-specific deliverability rule, we find that the MISO Market Monitor's argument is outside the scope of this proceeding.

75. Illinois MEA requests that, as a condition of approval of the proposal, the Commission require that otherwise eligible participants be permitted an open season to change their status to participate in the Fixed Resource Requirement Alternative or terminate their participation in Fixed Resource Requirement Alternative. PJM has not proposed such a provision, and we find that Illinois MEA has not shown why the implementation of Capacity Import Limit rule is unjust and unreasonable without requiring changes to the Fixed Resource Requirement rules.<sup>68</sup>

76. Having found the proposed revisions just and reasonable, we do not find it necessary to implement other procedures, such as a technical conference, as the Maryland Commission requests.

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<sup>67</sup> See, e.g., PJM RAA, art. 2 ("This Agreement is intended to ensure that adequate Capacity Resources . . . will be planned and made available to provide reliable service to loads within the PJM Region, to assist other Parties during Emergencies and to coordinate planning of such resources consistent with the Reliability Principles and Standards.").

<sup>68</sup> We note that Illinois MEA filed a waiver request on this issue in Docket No. ER14-1681-000.

The Commission orders:

The proposed Tariff revisions are hereby accepted, effective January 31, 2014, as discussed in the body of this order.

By the Commission. Commissioner Norris is concurring with a separate statement attached.

( S E A L )

Nathaniel J. Davis, Sr.,  
Deputy Secretary.

UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

PJM Interconnection, L.L.C.

Docket Nos. ER14-503-000  
ER14-503-001

(Issued April 22, 2014)

NORRIS, Commissioner, *concurring*:

Today's order approves PJM's proposal to establish limits on the amount of capacity from external generation resources that can be reliably committed in the PJM forward capacity auction. PJM seeks to mitigate the risk that external systems managing their own congestion will negatively affect the deliverability of energy to PJM load. Parties in this proceeding generally do not dispute the need for PJM to establish a capacity import limit; instead they challenge *how* this limit is calculated.

I write separately to highlight the importance of calculating the optimal capacity import limit and the role this limit plays in creating seams efficiencies. As the Independent Market Monitor for MISO noted:

PJM is only one part of a larger interconnected system... Seams issues raise significant concerns when resource dispatch and investment in a multi-RTO area varies substantially from the dispatch and investment one would expect if one RTO operated the entire area. Therefore, a "seamless" capacity market is one in which investment occurs where deliverable resources can be built at the lowest cost and deliverable existing surplus capacity can be utilized throughout the area... While it may be true that allowing surplus external capacity resources to sell into the PJM capacity market will reduce capacity prices in PJM, this is efficient and is the virtue of competitive, seamless RTO markets. This is a benefit to which PJM's consumers are entitled...<sup>1</sup>

Some view seams as an unavoidable obstacle that divides our interconnected grid. We should instead view seams as an opportunity to stitch things together and optimize the efficiency of the system for the overall benefit of the economy and consumers. Accordingly, going forward I urge PJM and its stakeholders to continue to work towards ensuring that the calculation of the capacity import limit does not unnecessarily limit the most efficient utilization of available resources.

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<sup>1</sup> March 11, 2014 Comments of the MISO Independent Market Monitor at 6-7.

For these reasons, I respectfully concur.

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John R. Norris, Commissioner