

165 FERC ¶ 61,121  
UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Neil Chatterjee, Chairman;  
Cheryl A. LaFleur and Richard Glick.

Radford's Run Wind Farm, LLC

Docket No. EL18-183-000

v.

PJM Interconnection, L.L.C.

ORDER GRANTING COMPLAINT, IN PART, AND ESTABLISHING PAPER  
HEARING PROCEDURES

(Issued November 15, 2018)

1. On June 26, 2018, pursuant to sections 206, 306, and 309 of the Federal Power Act (FPA)<sup>1</sup> and Rule 206 of the Rules of Practice and Procedure,<sup>2</sup> Radford's Run Wind Farm, LLC (Radford) submitted a complaint (Complaint) against PJM Interconnection, L.L.C. (PJM), stating that PJM did not determine or certify Incremental Capacity Transfer Rights (ICTR) as a result of the System Impact Study for its interconnection request.

2. In this order, we grant the Complaint, in part, and establish paper hearing procedures for PJM to assess whether a Customer-Funded Upgrade<sup>3</sup> made by Radford

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<sup>1</sup> 16 U.S.C. §§ 824e, 825e, 825h (2018).

<sup>2</sup> 18 C.F.R. § 385.206 (2018).

<sup>3</sup> A Customer-Funded Upgrade is defined as any Network Upgrade, Local Upgrade, or Merchant Network Upgrade for which cost responsibility (i) is imposed on an Interconnection Customer or an Eligible Customer pursuant to Tariff, Part VI, section 217, or (ii) is voluntarily undertaken by a New Service Customer in fulfillment of an Upgrade Request. PJM Intra-PJM Tariffs, OATT, Definitions - C-D, 15.0.0 (Customer-Funded Upgrade).

increased the Capacity Emergency Transfer Limit (CETL) of a Locational Deliverability Area,<sup>4</sup> and thus is eligible for ICTRs.

## **I. Background**

3. The PJM Open Access Transmission Tariff (OATT or Tariff) defines an Incremental Capacity Transfer Right as “a Capacity Transfer Right allocated to a Generation Interconnection Customer or Transmission Interconnection Customer obligated to fund a transmission facility or upgrade, to the extent such upgrade or facility increases the transmission import capability into a Locational Deliverability Area, or a Capacity Transfer Right allocated to a Responsible Customer in accordance with Tariff, Schedule 12A.”<sup>5</sup> ICTRs are allocated to a New Service Customer obligated to fund a transmission facility or upgrade through a rate or charge specific to such transmission facility or upgrade, to the extent such transmission facility or upgrade increases the transmission import capability into a Locational Deliverability Area.<sup>6</sup> ICTR is based on

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<sup>4</sup> A Locational Deliverability Area is defined as a geographic area within the PJM Region that has limited transmission capability to import capacity to satisfy such area’s reliability requirement, as determined by the Office of the Interconnection in connection with preparation of the Regional Transmission Expansion Plan, and as specified in Reliability Assurance Agreement, Schedule 10.1. PJM Intra-PJM Tariffs, OATT, Definitions - L - M - N, 19.0.0 (Locational Deliverability Area).

<sup>5</sup> See PJM Intra-PJM Tariffs, OATT, Definitions - I - J - K, 9.0.0 (Incremental Capacity Transfer Right). A Capacity Transfer Right is defined as “a right, allocated to a [Load Serving Entity] serving load in a Locational Deliverability Area, to receive payments, based on the transmission import capability into such Locational Deliverability Area, that offset, in whole or in part, the charges attributable to the Locational Price Adder, if any, included in the Zonal Capacity Price calculated for a Locational Delivery Area.” See PJM Intra-PJM Tariffs, OATT, Definitions - C-D, 15.0.0 (Capacity Transfer Right).

<sup>6</sup> Transmission Facilities are defined as facilities that: (i) are within the PJM Region; (ii) meet the definition of transmission facilities pursuant to FERC’s Uniform System of Accounts or have been classified as transmission facilities in a ruling by FERC addressing such facilities; and (iii) have been demonstrated to the satisfaction of the Office of the Interconnection to be integrated with the PJM Region transmission system and integrated into the planning and operation of the PJM Region to serve all of the power and transmission customers within the PJM Region. PJM Intra-PJM Tariffs, OA, Definitions - S - T, 13.0.0 (Transmission Facilities). Network Upgrades are defined as modifications or additions to transmission-related facilities that are integrated with and support the Transmission Provider’s overall Transmission System for the general benefit

the incremental increase in import capability across a locational constraint that is caused by the transmission facility or upgrade.<sup>7</sup> For Locational Deliverability Areas in which a Base Residual Auction (BRA) for a Delivery Year results in a positive locational price adder with respect to the immediate higher level Locational Deliverability Area, the holder of an ICTR for a Customer-Funded Upgrade into a constrained Locational Deliverability Area receives a payment equal to the average weighted locational price adder multiplied by the megawatt (MW) amount of ICTRs allocated to the holder.<sup>8</sup>

## II. Projects Addressing ComEd Locational Deliverability Area Transfer Capability

### A. Radford Upgrade

4. Radford states that it owns and operates an approximately 306 megawatt (MW) wind-powered electric generation facility in Macon County, Illinois that interconnects with the transmission system of Commonwealth Edison (ComEd) within the PJM region.<sup>9</sup>

5. On November 17, 2010, Radford states that it submitted an interconnection request to be studied in the PJM generation interconnection queue.<sup>10</sup> PJM identified the request as Queue No. W4-005. In December 2015, Radford states that PJM provided a System Impact Study for Queue No. W4-005 and identified the need for Radford to mitigate the overload on the Loretto-Wilton Center 345 kV line (Radford Upgrade).<sup>11</sup> In

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of all users of such Transmission System. PJM Intra-PJM Tariffs, OATT, Definitions - L - M - N, 19.0.0 (Network Upgrades).

<sup>7</sup> ICTRs received by a New Service Customer shall be effective for thirty (30) years from, as applicable, commencement of Interconnection Service, Transmission Service, or Network Service for the affected New Service Customer or the life of the pertinent facility or upgrade, whichever is shorter, subject to any subsequent *pro rata* reallocations of all Capacity Transfer Rights (including Incremental Capacity Transfer Rights) in accordance with the PJM Manuals. PJM Intra-PJM Tariffs, OATT, Section 234.4 (Duration of Incremental Capacity Transfer Rights, 0.0.0).

<sup>8</sup> See PJM Intra-PJM Tariffs, OATT, Attachment DD section 5.16 (b).

<sup>9</sup> Complaint at 5.

<sup>10</sup> *Id.* at 6.

<sup>11</sup> *Id.* Radford explains that the rating for the Loretto-Wilton Center 345 kV line had to be raised by at least 41.5 Megavolt Amps (MVA) to relieve the overload attributed

July 2016, Radford, ComEd, and PJM executed an Interconnection Service Agreement (ISA) that required the funding of the Radford Upgrade.<sup>12</sup> In June 2017, Radford, ComEd, and PJM executed an amended ISA in order to allow Radford to split the 2016 ISA into two ISAs, so it could bring the project online in two phases.<sup>13</sup> Among other things, the amended ISA revised the language in the section regarding ICTRs from “none” to “ICTRs are to be granted in accordance with Section 234 of the Tariff.”<sup>14</sup>

**B. ComEd Market Efficiency Project b2778**

6. While the studies related to Radford’s interconnection request were pending, Radford states that PJM, in October 2014, opened the 2014/2015 Long-Term Market Efficiency Proposal Window to address congestion on the Loretto-Wilton Center 345 kV line,<sup>15</sup> on which the Radford Upgrade would be built.<sup>16</sup> Radford states that, in July 2015, ComEd proposed Project b2778 (ComEd Market Efficiency Project) to address the congestion on that line.<sup>17</sup> Radford states that PJM determined that none of the proposals

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to the project. The Radford Upgrade increases the circuit rating by 47 MVA.

<sup>12</sup> *Id.* at 7. See Original Service Agreement No. 4518, effective August 18, 2016. In July 2016, Radford also executed an Interconnection Construction Service Agreement. The scope of work was specified in Schedule I of the Interconnection Construction Service Agreement, and required ComEd to raise two towers to increase the Loretto-Wilton Center 345 kV line sag clearances.

<sup>13</sup> See *PJM Interconnection, L.L.C.*, Docket No. ER17-2195-000, delegated letter order issued Sep. 11, 2017.

<sup>14</sup> Complaint at 7.

<sup>15</sup> See PJM Intra-PJM Tariffs, OA, Schedule 6, Section 1.5.8 (Development of Long-lead Projects, Short-term Projects, Immediate-need Reliability Projects, and Economic-based Enhancements or Expansions), subsection (c), Project Proposal Windows.

<sup>16</sup> Complaint at 8.

<sup>17</sup> The pleadings use the term Market Efficiency Project and Economic-based Enhancement or Expansion to describe the ComEd Market Efficiency Project. Economic-based Enhancement or Expansion are defined as an enhancement or expansion described in Operating Agreement, Schedule 6, section 1.5.7(b) (i) - (iii) that is designed to relieve transmission constraints that have an economic impact. PJM Intra-PJM Tariffs, OA Definitions E - F, 11.0.0 (Economic-based Enhancement or Expansion).

submitted in response to the proposal window satisfied the energy market benefit component of the market efficiency test and the proposals, including the ComEd Market Efficiency Project, were rejected.<sup>18</sup> Radford states that, between August 2015 and December 2015, PJM reevaluated the proposals submitted in response to the 2014/2015 Long-Term Market Efficiency Proposal Window by adding in the capacity benefit resulting from the August 2015 BRA for the 2018/2019 Delivery Year.<sup>19</sup> As a result of this reevaluation, Radford states that PJM determined that the ComEd Market Efficiency Project passed the market efficiency benefit-to-cost ratio test.<sup>20</sup> For the ComEd Locational Deliverability Area, Radford states that PJM explained that the Loretto-Wilton Center 345 kV line was a limiting facility, and the ComEd Market Efficiency Project would relieve that constraint.<sup>21</sup>

7. In March 2016, PJM submitted revisions to the PJM Regional Transmission Expansion Plan (RTEP) approved by the PJM Board of Directors, including the ComEd Market Efficiency Project as a market efficiency upgrade.<sup>22</sup>

### **III. Complaint**

8. Radford contends that PJM was obligated under the Tariff to include an ICTR determination with the System Impact Study performed as a result of its interconnection request.<sup>23</sup> Specifically, Radford states that section 234.1 of the Tariff states that a New Service Customer that reimburses the transmission provider or undertakes responsibility for constructing upgrades “*shall be entitled to receive any Incremental Capacity Transfer*

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<sup>18</sup> Complaint at 8 (citing PJM Deficiency Letter Response, Docket No. ER16-1232). The ComEd Market Efficiency Project was one of the proposals received in response to the 2014/2015 Long-Term Market Efficiency Proposal Window to address congestion on the Loretto-Wilton Center 345 kV line.

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

<sup>20</sup> Complaint at 8-9.

<sup>21</sup> *Id.* at 8-9.

<sup>22</sup> In the PJM cost allocation report including the ComEd Market Efficiency Project in the RTEP, PJM described the ComEd Market Efficiency Project as mitigating sag limitations on the Loretto-Wilton Center 345 kV line and replacing station conductor at Wilton Center. *See* Docket No. ER16-1232, Attachment A at 3.

<sup>23</sup> With its Complaint, Radford included an affidavit of Thomas M. Piasick (Piasick Affidavit).

Rights associated with such required facilities and upgrades...”<sup>24</sup> Radford further states that PJM “*shall determine* the increase in Capacity Emergency Transfer Limit resulting from the interconnection or addition of . . . a Customer-Funded Upgrade *in the System Impact Study* for the related New Service Request.”<sup>25</sup>

9. Radford states that it funded upgrades to the Loretto-Wilton Center 345 kV line and contends that its investment has facilitated the deliverability of lower cost resources, which reduced prices in the ComEd Locational Deliverability Area, yet Radford states “[it] is receiving no compensation through an ICTR allocation.”<sup>26</sup> Radford states that the December 2015 System Impact Study included no ICTR information, analysis, or determination from PJM, as required under the Tariff.<sup>27</sup> In response to PJM’s claim that the Tariff required Radford to request ICTRs, Radford maintains that the Tariff does not require an Interconnection Customer to request ICTRs as a prerequisite for PJM to include a determination in the System Impact Study. Radford states that the Tariff obligates PJM to include an ICTR determination with the System Impact Study and that, in failing to do so, PJM violated the filed-rate.<sup>28</sup>

10. Radford states that, at the time of the December 2015 System Impact Study, it was not aware that the Radford Upgrade relieved a constrained facility that limited capacity imports to the ComEd Locational Deliverability Area, and it could not have been aware because the Loretto-Wilton Center 345 kV line had been described differently in the

August 2015 BRA.<sup>29</sup> Radford states that, in February 2017, after becoming aware of the inconsistency in describing the Loretto-Wilton Center 345 kV line and that the Radford Upgrade relieved the ComEd Locational Deliverability Area thereby raising the CETL,

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<sup>24</sup> Complaint at 3 (emphasis added).

<sup>25</sup> *Id.* (emphasis added).

<sup>26</sup> *Id.* at 21.

<sup>27</sup> *Id.* at 14.

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

<sup>29</sup> Radford states that PJM described the circuit in the December 15 System Impact Study as the “O51 – Wilton Center 345kV line,” and in the PJM planning parameters for the August 2015 RPM auction for the 2018/2019 period as the “Loretto – Wilton 345 kV Blue line.”

Radford submitted a request for PJM to certify 240 MW of ICTRs based on its estimate of the CETL increase so it could be reflected in the upcoming BRA for the 2020/2021 Delivery Year. Radford states that PJM responded that, for the 2020/2021 Delivery Year, Radford had zero ICTRs, noting that another line had been identified as the limiting facility.<sup>30</sup>

11. With respect to the use of the results of the 2015 BRA in determining whether the ComEd Market Efficiency Project passed the market efficiency test, Radford argues that PJM has engaged in unduly discriminatory and preferential behavior by evaluating capacity transfer increases for upgrades paid for by incumbent transmission owners, but not doing the same for the upgrade paid for by Radford. Radford contends that it is similarly situated to incumbent transmission owners and that both classes of customers funded upgrades to the PJM grid and created capacity transfer increases that benefit consumers. Radford requests that the Commission direct PJM to rectify this discrimination and preference by awarding ICTRs to Radford.<sup>31</sup>

12. Radford argues that its own upgrade had a queue priority over the ComEd Market Efficiency Project and requests that the Commission find that Radford is entitled to 279 MW of ICTRs into the ComEd Locational Deliverability Area beginning with the 2020/2021 Delivery Year. Radford states that PJM already determined that removing the limiting element into the ComEd Locational Deliverability Area provides 279 MW of capacity benefit applying the results of the 2018/2019 BRA in reevaluating the ComEd Market Efficiency Project. Accordingly, Radford contends that the ICTR MW value of Radford Upgrade has already been validated by PJM.<sup>32</sup>

#### **IV. Notice and Interventions, and Responsive Pleadings**

13. Notice of the Complaint was published in the *Federal Register*, 83 Fed. Reg. 31,385 (2018), with answers, interventions and protests due on or before July 16, 2018.

14. Timely motions to intervene were filed by Monitoring Analytics, LLC,<sup>33</sup> Northern Indiana Public Service Company, LLC, Dominion Energy Services, Inc.,

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<sup>30</sup> Complaint at 3.

<sup>31</sup> *Id.* at 20.

<sup>32</sup> *Id.* at 18-19, 22.

<sup>33</sup> Monitoring Analytics, LLC as the PJM Independent Market Monitor.

Illinois Municipal Electric Agency, American Municipal Power, Inc., Exelon Corporation, and H-P Energy Resources, LLC.

15. PJM filed an answer to the Complaint, and Radford filed an answer to the PJM answer.

**V. Answers**

**A. PJM**

16. PJM argues that the Tariff does not require PJM to automatically determine and award ICTRs to all interconnection requests.<sup>34</sup> Rather, PJM argues that the Tariff and manuals provide for customers wanting ICTRs to take certain actions so that PJM “can take that customer’s desire for ICTRs into account.”<sup>35</sup> PJM states that Radford never gave PJM any indication that it wanted ICTRs at any time before PJM prepared the System Impact Studies for Radford’s interconnection request. PJM states that Radford expressly confirmed its lack of expectation for ICTRs eight months after PJM completed the System Impact Study by executing an ISA agreeing that the ICTRs for its project were “none.”<sup>36</sup>

17. PJM argues that, assuming it knew Radford wanted ICTRs and was required to investigate any and all Locational Deliverability Areas where such ICTRs might arise, Radford still would not be entitled to any ICTRs.<sup>37</sup> PJM states that, when requested, ICTRs are determined on a forward-looking basis beginning with the Delivery Year addressed by the first BRA for which the ICTRs can be certified.<sup>38</sup> PJM argues that, assuming for the sake of argument that PJM was required to determine ICTRs in the 2015 System Impact Study, the Commission should not order PJM to determine ICTRs on a backwards-looking basis to the Delivery Year associated with a BRA that has already been run, as proposed by Radford, because ICTRs change a critical auction parameter (i.e., the CETL) that would affect the cleared resources’ offers and clearing

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<sup>34</sup> With its answer, PJM included the affidavit of Steven R. Herling (Herling Affidavit).

<sup>35</sup> PJM Answer at 10.

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

<sup>37</sup> *Id.* at 12.

<sup>38</sup> *Id.* at 13.

prices in any past auction.<sup>39</sup> Accordingly, PJM states that, had it studied ICTRs in a December 2015 System Impact Study, the first year for which ICTRs should be certified would have been the May 2016 BRA for the 2019/2020 Delivery Year. PJM states that Radford's upgrades would not entitle it to any ICTRs in the model for that Delivery Year, and when Radford asked for ICTRs in February 2017 for the May 2017 BRA for the 2020/2021 Delivery Year, its investigation of whether Radford's upgrades would give rise to ICTRs in the 2020/2021 Delivery Year found they would not.<sup>40</sup>

18. PJM notes that Radford bases its claim on section 234 of the Tariff, which provides, in part, that PJM "shall determine the [ICTRs] to be provided to New Service Customers in accordance with . . . Tariff [Attachment DD] and pursuant to the procedures specified in the PJM Manuals" and that PJM "shall allocate [ICTRs] to a New Service Customer [directly charged for a facility or upgrade if] such upgrade or facility increases the Import Capability into a[n] [Locational Deliverability Area]."<sup>41</sup> PJM argues that the flaw in Radford's argument is that "the procedures specified in the PJM Manuals" recognize the customer's responsibility when seeking ICTRs, and that Manual 18 provides that "[p]articipants must request PJM to certify the [ICTRs] into the constrained [Locational Deliverability Areas] modeled in [the Reliability Pricing Model] at least 90 days prior to the [BRA]."<sup>42</sup> PJM contends that ICTRs thus are not "automatic"; the customer must affirmatively request that PJM take action for the customer to realize an ICTR benefit. Similarly, PJM asserts that Manual 14E states that "[a] New Service Customer wishing to request ICTRs must provide PJM with three [Locational Deliverability Areas] to determine the rights."<sup>43</sup> PJM states that it will then "provide the amount of rights that will be received in the System Impact Study."<sup>44</sup> As noted, PJM concedes, however, that these manual provisions were not in place at the time of the

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

<sup>40</sup> *Id.* at 13-14.

<sup>41</sup> *Id.* at 10 (citing PJM Intra-PJM Tariffs, OATT, Attachment DD section 5.16 (a)).

<sup>42</sup> *Id.* at 10-11 (emphasis added).

<sup>43</sup> *Id.* at 11. PJM explains that although this language was added to Manual 14E in May 2016, it states that this merely memorialized a long-standing practice. Herling Affidavit at 2.

<sup>44</sup> PJM Answer at 11.

Radford upgrade, but it maintains that it nonetheless followed this same procedure prior to the manual changes.<sup>45</sup>

19. PJM states that, by the time system upgrades for Radford were identified, ComEd had already proposed the ComEd Market Efficiency Project.<sup>46</sup> PJM explains that it did not, as Radford contends, justify cost recovery for the ComEd Market Efficiency Project based on the additional CETL it would create going forward.<sup>47</sup> PJM states that the ComEd Market Efficiency Project was justified based on a cost/ benefit ratio that includes estimates for economic benefits using data from historic market results that PJM adjusts to estimate (for capacity market benefits) cleared MWs and clearing prices “without and with the [E]conomic-[B]ased [E]nhancement or [E]xpansion.”<sup>48</sup> In a cost-benefit estimate for Economic-Based Enhancement or Expansion, PJM states that it can prepare scenarios “without and with” the upgrade that use cleared auction data but that does not change any participant’s auction clearing results. For ICTRs, by contrast, PJM states that it must determine the upgrade’s change in CETL that will be incorporated into the next BRA and that affects clearing results. PJM explains that it should not be required to do that for past auctions, because it would retroactively change the clearing results.<sup>49</sup> PJM contends that the Complaint therefore makes a false comparison between cost/benefit studies using historic data and forward-looking ICTR determinations.<sup>50</sup>

#### **B. Radford’s Answer**

20. Radford argues that PJM blurs the distinction between the Tariff requirement to determine the initial ICTR and the requirement that a customer must ask PJM to certify ICTRs before a BRA in order to realize a capacity transfer increase from its Customer-Funded Upgrade.<sup>51</sup> Radford contends that the requested “certification” has nothing to do

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<sup>45</sup> *Id.*

<sup>46</sup> PJM Answer at 11.

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

<sup>48</sup> *Id.* at 18-19.

<sup>49</sup> *Id.* at 19.

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

<sup>51</sup> Radford Answer at 4, 8.

with PJM's Tariff obligation to "determine" whether an upgrade results in ICTRs.<sup>52</sup> Radford asserts that it was entitled to an initial ICTR determination for the Radford Upgrade at the time of the System Impact Study, noting that the Radford Upgrade had a queue priority over the ComEd Market Efficiency Project according to past PJM statements on queue prioritizations.<sup>53</sup> Radford answers that the date a project enters the queue is the determining factor for prioritization, not the date that upgrades are identified.<sup>54</sup> Radford requests that the Commission find that Radford had a priority right to any ICTR created by relieving the limiting element into the ComEd Locational Deliverability Area. Radford further contends that its request to certify ICTRs for the 2017 BRA for the 2020/2021 Delivery Year was timely.<sup>55</sup>

## **VI. Determination**

### **A. Procedural Matters**

21. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2018), the timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding.

22. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2018), prohibits an answer to an answer unless otherwise ordered by the decisional authority. We accept the Radford answer because it has provided information that assisted us in our decision-making process.

### **B. Complaint**

23. We grant the Complaint, in part, because, as discussed below, PJM did not comply with its Tariff, and establish paper hearing procedures for PJM to assess whether the Radford Upgrade increases the CETL of a Locational Deliverability Area, and thus is eligible for ICTRs, as discussed below.

#### **1. Requirement to Identify ICTRs in System Impact Studies**

24. We find that the Tariff provides that PJM must determine in the System Impact Study whether a customer, such as Radford, is entitled to any ICTRs resulting from a

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<sup>52</sup> *Id.* at 4.

<sup>53</sup> *Id.* at 20.

<sup>54</sup> *Id.* at 22-23.

<sup>55</sup> *Id.* at 16-17.

Customer-Funded Upgrade that it has funded and that results in an increase in CETL to a Locational Deliverability Area. Specifically, section 234.2 of the Tariff provides:

The Office of the Interconnection shall determine the increase in Capacity Emergency Transfer Limit resulting from the interconnection or addition of Merchant Transmission Facilities or a Customer-Funded Upgrade in the System Impact Study for the related New Service Request.

Section 234.2 of the Tariff further provides:

The Office of the Interconnection shall allocate the Incremental Capacity Transfer Rights associated with a Customer-Funded Upgrade to the New Service Customer(s) bearing cost responsibility for such facility or upgrade in proportion to each New Service Customer's cost responsibility for the facility or upgrade.

Section 234.1 of the Tariff provides:

[A] New Service Customer that (a) reimburses the Transmission Provider for the costs of, or (b) pursuant to its Construction Service Agreement, undertakes responsibility for, constructing or completing Customer-Funded Upgrades shall be entitled to receive any Incremental Capacity Transfer Rights associated with such required facilities and upgrades as determined in accordance with this section.

25. Radford states, and PJM does not contest, that it made a Customer-Funded Upgrade to the Loretto-Wilton Center 345 kV line.<sup>56</sup> Importantly, PJM points to no provision of the Tariff that requires an interconnection customer to specifically request ICTRs. Instead, PJM points to procedures specified in the PJM manuals that recognize the customer's responsibility to request ICTRs. As the Commission has found, however, manual provisions cannot change or revise tariff obligations.<sup>57</sup> Moreover, as PJM

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<sup>56</sup> Complaint at 12.

<sup>57</sup> *Keyspan-Ravenswood, LLC v. FERC*, 474 F.3d 804, 810 (D.C. Cir. 2007) (rejecting the Commission's reliance on manual provisions, "concluding that the Commission acted arbitrarily and capriciously in ruling that NYISO had not violated the filed rate doctrine" as reflected in its Tariff); *Midwest Indep. Transmission, Sys. Operator, Inc.*, 115 FERC ¶ 61,108, at P 30 (2006); *accord Tennessee Gas Pipeline Co.*, 95 FERC ¶ 61,272, at 61,959 (2001) ("Pipelines must act in accordance with their filed

concedes, these manuals were not even in place at the time Radford submitted its interconnection request on November 17, 2010. We, therefore, conclude that PJM should have determined any ICTRs available to Radford that result from the increased CETL from its Customer-Funded Upgrade in performing the System Impact Study.

26. Further, while the fact that “[n]one” was specified in the original ISA with respect to the number of ICTRs could potentially support a view that PJM believed that Radford had to first request ICTRs before PJM was required to make that determination, this does not override the Tariff’s requirement that PJM should have determined any ICTRs available to Radford that result from the increased CETL from the Radford Upgrade in performing the System Impact Study.<sup>58</sup> The Tariff requires that PJM “shall allocate the Incremental Capacity Transfer Rights associated with a Customer-Funded Upgrade to the New Service Customer(s) bearing cost responsibility for such facility or upgrade in proportion to each New Service Customer’s cost responsibility for the facility or upgrade,”<sup>59</sup> and PJM failed to do so here.

## **2. Determining the Level of ICTRs**

27. Radford contends that it should have been awarded 279 MW of ICTRs starting with the 2020/2021 Delivery Year.<sup>60</sup> Radford based the requested ICTRs on the December 2015 representations by PJM that upgrading the Loretto-Wilton Center 345 kV line would increase the CETL into the ComEd Locational Deliverability Area by 279 MW for the 2018/2019 Delivery Year. On the other hand, PJM contends that no studies had been performed as specified in the Tariff and that there were no already-determined ICTRs to certify. Following Radford’s February 2017 request for ICTRs,

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tariffs and are not permitted to implement policies through policy manuals or otherwise that are not permitted by its tariff.”); *Transcontinental Gas Pipe Line Corp.*, 83 FERC ¶ 61,050 (1998) (tariff controls over an operating policy handbook). *See generally*, *ISO New England Inc.*, 137 FERC ¶ 61,112, at n.36 (2011) (operating manuals can provide the details for implementing tariff requirements, but “all practices that significantly affect rates, terms and conditions” must be contained in the tariff).

<sup>58</sup> PJM Intra-PJM Tariffs, OATT, Section 234.2 (Procedures for Assigning Incremental Capacity Transfer Rights).

<sup>59</sup> *Id.*

<sup>60</sup> Radford’s 2017 request that PJM certify 240 MW of ICTRs for the 2020/2021 Delivery Year was based on its estimate of CETL increases to the ComEd Locational Deliverability Area. The Piascik Affidavit indicates that increases in CETL for the ComEd Locational Deliverability Area attributed to the Radford Upgrade is 259 MW based on a 2019/2020 Delivery Year analysis.

PJM determined that the Loretto-Wilton Center 345 kV line was no longer the limiting element, and no ICTRs resulted from the Radford Upgrade.

28. We are unable to determine, from the record here, if Radford should have been allocated ICTRs if PJM had followed its Tariff. Accordingly, we find that additional information is necessary and establish paper hearing procedures for PJM to assess whether the Radford Upgrade increases the CETL of a Locational Deliverability Area, and thus is eligible for ICTRs. Specifically, PJM must respond, within 60 days, to the following questions, and other parties may also respond to the questions at the same time as PJM responds:

- Q1. Explain the PJM process for identification of ICTRs resulting from increases in the CETL for a Locational Deliverability Area and the modeling assumptions that are used to identify these increases in the System Impact Study process.
- Q2. Explain the PJM process for determining whether ICTRs result from a Customer-Funded Upgrade and how PJM would make the determination as to the Locational Deliverability Area to which the ICTRs would be applied. Specifically, explain whether there were increases to the CETL to other Locational Deliverability Areas outside of the ComEd Locational Deliverability Area for which the Radford Upgrade could have resulted in ICTRs and how PJM would make such a determination.
- Q3. Explain how generation interconnection requests and Customer-Funded Upgrades are coordinated with PJM's Market Efficiency Analysis in the RTEP for identifying economic constraints. Explain whether (and if so, how) one may impact the other in terms of the modeling of approved upgrades and projects in a Locational Deliverability Area for a particular Delivery Year, as modeled as a CETL planning parameter prior to a BRA, when there are similarly timed generation interconnection requests requiring System Impact Studies and proposals in response to Project Proposal Windows.
- Q4. Explain how PJM coordinates Market Efficiency Projects with the Customer-Funded Upgrades in the interconnection process. Does PJM's prioritization among projects impact any attendant rights related to the Customer-Funded Upgrades or the market efficiency proposals or any awards of ICTRs? More specifically, please respond to these prioritization questions with respect to the ComEd Market Efficiency Project and the Radford Upgrade.

- Q5. Please explain how the coordination of Market Efficiency Projects with Customer-Funded Upgrades in the interconnection process affects the modeling of CETL increases as a RPM planning parameter for a particular Delivery Year. Specifically, explain how PJM applied this method for the ComEd Market Efficiency Project and the Radford Upgrade. Explain whether Radford should have been allocated ICTRs created by the Radford Upgrade due to this project's position in the queue relative to the ComEd Market Efficiency Project.
- Q6. Explain, in detail, the specific upgrades required for the Radford Upgrade and the ComEd Market Efficiency Project. Please explain the statements that “the [Radford Upgrade] and the [ComEd Market Efficiency Project] are not the same upgrade,” and that “the [Radford Upgrade] is a portion of the larger [ComEd Market Efficiency Project].”<sup>61</sup> Please explain what specific portions of the larger ComEd Market Efficiency Project was funded by the Radford Upgrade, if any.
- Q7. Explain how PJM analyzed whether the specific upgrades required for the Radford Upgrade and the ComEd Market Efficiency Project independently impacted the CETL into the ComEd LDA. Specifically, what effect did the Radford Upgrade and the ComEd Market Efficiency Project have on increases in the CETL to the ComEd Locational Delivery Area? Explain how, or whether, PJM determined which project resulted in increases to the CETL (and provide any supporting documentation). Explain the modeling assumptions that are used to identify these impacts.
- Q8. Please explain whether mitigating sag limitations of the Loretto-Wilton Center 345 kV line was provided by either Radford's Customer-Funded Upgrade or the ComEd Market Efficiency Project. Was Radford allocated the cost associated with mitigating sag limitations on the Loretto-Wilton Center 345 kV line?
- Q9. Identify the BRA(s), and related in-service Delivery Year(s), PJM used to model both the ComEd Market Efficiency Project and the Radford Upgrade.
- Q10. Determine the ICTRs to which Radford should be entitled, if any, had PJM assessed ICTRs in the 2015 System Impact Study as required by the PJM Tariff. Provide documentation, and explanation of the

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<sup>61</sup> See PJM Answer at 18.

methodology used to make this determination.

Q11. Assuming that some amount of ICTRs are identified as a result of the 2015 System Impact Study resulting from the Radford Upgrade:

- i. State which BRA(s), and associated Delivery Year(s), that the Radford Upgrade and the Market Efficiency Project would be modeled under this assumption;
- ii. Explain how the Radford Upgrade and the ComEd Market Efficiency Project impacted the CETL for the ComEd Locational Deliverability Area;
- iii. Explain how such a misallocation of ICTRs would be addressed and how it would impact BRAs in future Delivery Years. Specifically, explain how this changes or does not change the certification of ICTRs for future Delivery Years beginning with 2020/2021 Delivery Year and the 2017 BRA.

Q12. Assuming that a Customer-Funded Upgrade results in ICTRs, explain what the annual certification process entails and how long it takes PJM to complete. Also, in a general sense, explain how a misallocation of ICTRs affects the certification of ICTRs for a future BRA.

Q13. Address the implications of identifying CETL increases not modeled for a Locational Deliverability Area on a BRA that has already been conducted.

Q14. Explain why certification of ICTRs for a past BRA would not require simply a reassignment of payments among ICTR-holders.

Q15. Provide a detailed response to the methodology and calculation of ICTRs provided in the Radford Affidavit, which supports Radford's entitlement to ICTRs.

29. Responses to the requested information by PJM and other parties are due 60 days from the date of issuance of this order. Comments on those responses are due 90 days after the date of issuance of this order.

30. After reviewing responses to comments received in response to the hearing procedures established in this proceeding, staff may require further clarification of PJM's assessment of whether the Radford Upgrade increases the CETL of a Locational Deliverability Area, and thus is eligible for ICTRs and of the number of ICTRs that PJM determines should have been allocated to Radford, if any, as a result of the Radford

Upgrade on the Loretto-Wilton Center 345 kV line. Accordingly, the Commission may convene a staff-led workshop, if needed, to further clarify the issues. Details regarding any such staff-led workshop will be issued in a subsequent notice in this docket.

The Commission orders:

(A) The Complaint is hereby granted, in part, as discussed in the body of this order.

(B) A paper hearing procedure is established for PJM to assess whether the Radford Upgrade increases the CETL of a Locational Deliverability Area, and thus is eligible for ICTRs, as discussed in the body of this order. Responses are due 60 days from the date of issuance of this order and comments on those responses are due 90 days from the date of issuance of this order, as discussed in the body of this order.

By the Commission. Commissioner McIntyre is not voting on this order.

( S E A L )

Nathaniel J. Davis, Sr.,  
Deputy Secretary.