# 168 FERC ¶ 61,112 UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Neil Chatterjee, Chairman;

Cheryl A. LaFleur, Richard Glick,

and Bernard L. McNamee.

Brookfield Energy Marketing LP

Docket No. EL19-34-000

V.

PJM Interconnection, L.L.C.

#### ORDER ON COMPLAINT, ESTABLISHING PAPER HEARING PROCEDURES

(Issued August 26, 2019)

1. On January 18, 2019, Brookfield Energy Marketing LP (Brookfield), pursuant to sections 206, 306, and 309 of the Federal Power Act (FPA), and Rule 206 of the Commission's Rules of Practice and Procedure, filed a complaint against PJM Interconnection, L.L.C. (PJM) (Complaint). Brookfield alleges that PJM wrongly determined that two of Brookfield's hydroelectric generation resources, Calderwood and Cheoah (the Facilities), which are pseudo-tied into the PJM Balancing Authority Area

<sup>&</sup>lt;sup>1</sup> 16 U.S.C. §§ 824e, 825e, 825h (2012).

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

<sup>&</sup>lt;sup>3</sup> The Facilities had originally obtained a pseudo-tie into PJM (herein referred to as the Brookfield Pseudo-Tie) to comply with the 2015 Capacity Import Limit (CIL) Order. *See PJM Interconnection, L.L.C.,* 147 FERC ¶ 61,061 (2014) (CIL Order), *order on reh* 'g, 150 FERC ¶ 61,040 (2015).

- (BAA),<sup>4</sup> did not pass the Market-to-Market Flowgate test<sup>5</sup> (M2M Flowgate Test) and do not satisfy the Extraterritorial Deliverability Requirements,<sup>6</sup> and are therefore ineligible to participate in PJM's capacity auction for the 2022/2023 Delivery Year.
- 2. In this order, we establish paper hearing procedures to examine issues raised in the Complaint regarding PJM's application of the M2M Flowgate Test and deliverability requirements to the Facilities, and set a refund effective date of January 18, 2019.

### I. Background

3. In order for new, external generation resources to participate in PJM's capacity auctions, they must be pseudo-tied from their native BAA into PJM.<sup>7</sup> In order to be eligible for a pseudo-tie into PJM, an external resource must meet a set of threshold requirements that the Commission approved in a November 17, 2017 order accepting proposed enhancements to PJM's pseudo-tie procedures.<sup>8</sup> In the Pseudo-Tie Enhancement Order, the Commission also approved a five-year transition period for resources that had an existing pseudo-tie, had cleared in a capacity market auction prior

<sup>&</sup>lt;sup>4</sup> The Facilities are located in the Tennessee Valley Authority (TVA) and Duke Energy (Duke) BAAs. A BAA is "[t]he collection of generation, transmission, and loads within the metered boundaries of the Balancing Authority. The Balancing Authority maintains load-resource balance within this area." *See Glossary of Terms Used in NERC Reliability Standards*, North American Electric Reliability Corporation (NERC Glossary),

https://www.nerc.com/pa/Stand/Glossary%20of%20Terms/Glossary of Terms.pdf.

<sup>&</sup>lt;sup>5</sup> See PJM, Open Access Transmission Tariff (Tariff), Attachment DD, Section 5.5A(b)(i)(B). PJM filed the Tariff provisions regarding the New Pseudo-Tie Requirements in a compliance filing on December 15, 2017, in the Pseudo-Tie Tariff Revision Proceeding, which remains pending.

<sup>&</sup>lt;sup>6</sup> Brookfield uses the term "Extraterritorial Deliverability Requirements" to refer to the requirement in Section 5.5A(b)(ii) of Attachment DD to PJM's Tariff that Firm Point-to-Point Service over an external BAA satisfy PJM's deliverability standards. Brookfield Complaint at 4.

<sup>&</sup>lt;sup>7</sup> See PJM Interconnection, L.L.C., 151 FERC ¶ 61,208, at PP 96-97 (2015), order on reh'g, 155 FERC ¶ 61,157 (2016).

 $<sup>^8</sup>$  PJM Interconnection, L.L.C., 161 FERC  $\P$  61,197 (2017) (Pseudo-Tie Enhancement Order).

to May 9, 2017, and met certain other operational and deliverability requirements. Pseudo-tied resources subject to the transition period are required to comply with PJM's new pseudo-tie requirements, including the M2M Flowgate Test and deliverability requirements for the 2022/2023 Delivery Year in order to be eligible to offer into the capacity auction.

### A. <u>Deliverability Requirements</u>

4. PJM's Tariff requires external generators to have:

obtained long-term firm point-to-point transmission service (evaluated for deliverability from the unit-specific physical location of the resource to PJM load pursuant to a study that is reviewed and approved by PJM in accordance with PJM deliverability criteria to ensure uniformity for internal and external resource deliverability requirements), with rollover rights for the term of the transmission service that is confirmed by the Balancing Authority for the Balancing Authority Area where such resource is geographically located. <sup>10</sup>

### B. <u>M2M Flowgate Test</u>

5. Although the M2M Flowgate Test determines the eligibility of a pseudo-tied *external* resource, the test also relies on the availability of *internal* resources, because PJM may need to use an internal resource to alleviate the impact of congestion caused by the external pseudo-tied resource. In order for an external resource to pass the M2M Flowgate Test, the pseudo-tied resource must meet the following requirement:

at least one generation resource that has a historic economic minimum offer lower than its historic economic maximum offer, located inside the metered boundaries of the PJM Region, has a minimum flow distribution impact of 1.5 percent on each eligible coordinated flowgate resulting from such Pseudo-Tie.<sup>11</sup>

<sup>&</sup>lt;sup>9</sup> *Id.* PP 119, 134-138.

<sup>&</sup>lt;sup>10</sup> PJM Tarff at Attachment DD, Section 5.5A(b)(ii). See also supra note 7.

<sup>&</sup>lt;sup>11</sup> Pseudo-Tie Enhancement Order, 161 FERC ¶ 61,197 at P 79 (directing PJM to revise PJM, Intra-PJM Tariffs, OATT, Attachment DD, § 5.5A(b)(i)(B), and setting forth the M2M Flowgate Test to include the 1.5 percent impact level, as quoted above);

When PJM proposed the M2M Flowgate Test, PJM explained that the purpose of the M2M Flowgate Test is to prevent "adding new coordinated flowgates unless PJM has adequate options to manage congestion on that flowgate in addition to reducing the output of the pseudo-tied resource itself." <sup>12</sup>

- 6. PJM recently elaborated on the steps it takes to conduct the M2M Flowgate Test in response to the Commission's September 20, 2018 order establishing paper hearing procedures with respect to a complaint by Tilton Energy, LLC. (Tilton) regarding the application of the M2M Flowgate Test to Tilton's external generators. <sup>13</sup> PJM listed those steps as:
  - (1) Compile a list of flowgates that might be affected by a requested Pseudo-Tie using input from affected Balancing Authorities ("BAs") and review of an authoritative North American flowgate reference, and then determine from that list the flowgates on which the requested Pseudo-Tie would have an impact of five percent or greater, such flowgates being categorized as Eligible Coordinated Flowgates;
  - (2) Compile a list of dispatchable generation resources physically located in the PJM Region;
  - (3) Calculate the percentage impact generation output changes from the PJM Region dispatchable generation would have for relieving congestion on the Eligible Coordinated Flowgates identified in Step (1); and

see also PJM, Compliance Filing, Docket No. ER17-1138-002 (filed Dec. 15, 2017) (pending).

<sup>&</sup>lt;sup>12</sup> Pseudo-Tie Enhancement Order, 161 FERC ¶ 61,197 at P 63; *see also* PJM Filing, Docket No. ER17-1138-000, at 14-15 (filed Mar. 9, 2017).

<sup>&</sup>lt;sup>13</sup> Tilton Energy LLC v. PJM Interconnection, L.L.C., 164 FERC ¶ 61,204 (2018).

(4) Determine whether each Eligible Coordinated Flowgate has at least one PJM Region dispatchable generation resource with an impact of at least 1.5 percent on the flowgate.<sup>14</sup>

### II. Complaint

- 7. Brookfield states that the Facilities are hydroelectric plants located in TVA's BAA with access to Duke Energy's BAA. Brookfield explains that the Facilities have maintained Firm Point-to-Point Service over the complete path from TVA into PJM, enabling it to participate in the capacity market and that the Facilities have held capacity supply obligations in PJM since 2014. Brookfield explains that the Facilities obtained an exception to PJM's Capacity Import Limit (CIL) on capacity imports by committing to become pseudo-tied, having Firm Point-to-Point Service from TVA into PJM (at a cost of approximately \$5 million/year) and agreeing to be subject to the same must-offer requirements as PJM's internal resources. Brookfield states that on March 26, 2018, PJM informed it that the Facilities failed the M2M Flowgate Test for 38 flowgates and that pursuant to a June 18, 2018 re-test, the Facilities had failed 19 "transmission elements." 17
- 8. Brookfield states that on February 27, 2018, it presented PJM with a report by Quanta Technology explaining how Brookfield's Firm Point-to-Point Service complies with PJM's deliverability requirements. Brookfield states that on March 15, 2018, PJM informed Brookfield that its existing Firm Point-to-Point Service (and Quanta Technology's analysis thereof) "was not sufficient to satisfy PJM's Extraterritorial Deliverability Requirements and that further testing was necessary." 19
- 9. According to Brookfield witness Aleksandar Mitreski, due in part to the lack of clarity of how to arrange for payment and construction of upgrades to satisfy PJM's deliverability requirements in external BAAs, Brookfield has not pursued further testing

<sup>&</sup>lt;sup>14</sup> PJM, Response to Paper Hearing Order, Docket No. EL18-145-000 at 9-10 (filed Nov. 5, 2018).

<sup>&</sup>lt;sup>15</sup> Brookfield Complaint at 2-3.

<sup>&</sup>lt;sup>16</sup> *Id.* at 8-9.

<sup>&</sup>lt;sup>17</sup> *Id.* at 14-15.

<sup>&</sup>lt;sup>18</sup> *Id.* at 15.

<sup>&</sup>lt;sup>19</sup> *Id*.

to attempt to satisfy these requirements. <sup>20</sup> Mr. Mitreski indicates that PJM made clear in a phone call discussing the Facilities' failure of the Extraterritorial Deliverability Requirements that none of the external entities conducted studies when granting the Facilities Firm Point-to-Point Service with the dispatch requirements that PJM uses. <sup>21</sup>

- 10. Brookfield asserts that PJM informed it that the Facilities passed the M2M Flowgate Test in a preliminary analysis, but that the Facilities failed 38 flowgates in an updated test and a distinct set of 19 "transmission elements," some of which are flowgates, in a subsequent reassessment.<sup>22</sup>
- 11. Brookfield seeks to have its existing pseudo-ties for its external generation facilities as well as other external resources located in non-market BAAs grandfathered so that they are not subject to PJM's pseudo-tie requirements; or, in the alternative, requests an extension of the five-year transition period for an additional three years, or longer, as may be appropriate.<sup>23</sup> Brookfield also requests that the Commission direct PJM to work with stakeholders to redesign its capacity import rules.<sup>24</sup>

# III. Notice and Responsive Pleadings

12. The Notice of Complaint was published in the *Federal Register*, 84 Fed. Reg. 699 (2019), with answers, interventions and protests due on or before February 7, 2019. The following parties filed timely motions to intervene: Monitoring Analytics, LLC, in its capacity as the Independent Market Monitor for PJM (IMM); Electric Power Supply Association; NRG Power Marketing LLC, American Municipal Power, Inc.; Consolidated Edison Company of New York, Inc.; North Carolina Electric Membership Corporation; Tatanka Wind Power, LLC; and Cube Yadkin Generation LLC. Tilton Energy LLC submitted a motion to intervene and comments. Exelon Corporation

<sup>&</sup>lt;sup>20</sup> *Id.* at 16-17 and Exhibit B (Affidavit of Aleksandar Mitreski at 13-15 (Mitreski Aff.)).

<sup>&</sup>lt;sup>21</sup> Mitreski Aff. at 13-15.

<sup>&</sup>lt;sup>22</sup> Brookfield Complaint at 14. In discussing a subsequent in-person meeting with PJM to better understand the Facilities' failure of PJM's M2M Flowgate Test, Brookfield witness Mr. Aleksandar Mitreski states "[t]hese new 19 transmission facilities appear to include some flowgates and some transmission facilities that are currently "monitored" by an external Non-Market BAA." Mitreski Aff. at 9-10.

<sup>&</sup>lt;sup>23</sup> Brookfield Complaint. at 6.

<sup>&</sup>lt;sup>24</sup> *Id*.

(Exelon) and Potomac Economics, Ltd. (Potomac Economics) submitted motions to intervene out of time.

- 13. On February 6, 2019, PJM filed an unopposed motion for extension of time and on February 7, 2019, PJM filed an errata to its February 6, 2019 unopposed motion for extension of time. On February 11, 2019, PJM filed a motion for leave to file answer one day out-of-time.
- 14. On February 8, 2019, PJM filed its answer to the Complaint (First Answer). On February 25, 2019, Brookfield filed its first answer to PJM's answer. On March 22, 2019, PJM filed an answer to Brookfield's answer (Second Answer). On April 4, 2019, Brookfield filed a second answer. On April 12, 2019, the IMM filed an answer. On April 19, 2019, PJM filed a third answer. On April 26, 2019, Brookfield filed a third answer. On May 22, 2019, PJM filed a fourth answer. On June 28, 2019, Brookfield filed a motion for prompt Commission action. On July 8, 2019, PJM filed an answer to Brookfield's motion for prompt Commission action.

#### A. PJM's First Answer

15. PJM explains that following issuance of the Pseudo-Tie Enhancement Order, PJM applied the M2M Flowgate Test to the Brookfield Pseudo-Tie and notified Brookfield on March 26, 2018, that due to the Brookfield Pseudo-Tie's failure to pass the M2M Flowgate Test, the Facilities will not be eligible to participate in the capacity market auctions for Delivery Years after the end of the transition period. PJM further explains that on June 18, 2018, it issued a revised M2M Flowgate Test analysis confirming that the Facilities had failed the M2M Flowgate Test and identified a list of numerous flowgates for which it failed the test. PJM states that on March 15, 2018, it informed Brookfield that PJM had evaluated a report prepared by Quanta Technology on behalf of Brookfield (Quanta Study) and that the Quanta Study was insufficient to demonstrate that the Facilities satisfy PJM's deliverability requirements. PJM states that on March 15 and PJM is deliverability requirements.

### B. Brookfield's First Answer

16. Brookfield asserts that the different results obtained in previous studies involving the Facilities' pseudo-ties demonstrates that PJM continues to conduct the M2M Flowgate Test inconsistently. <sup>27</sup> Brookfield bases this assertion on the results PJM posted

<sup>&</sup>lt;sup>25</sup> PJM First Answer at 5.

<sup>&</sup>lt;sup>26</sup> *Id.* at 6.

<sup>&</sup>lt;sup>27</sup> Brookfield First Answer at 6.

of the 2018 M2M Flowgate Test, which identified 203 generators that preliminarily passed the test. According to Brookfield, several of those passing resources appeared to have flow impacts of greater than 5 percent on at least one of the flowgates that PJM reported as causing Brookfield to fail the test, Flowgate No. 93209.<sup>28</sup> Brookfield asserts that it is not possible that PJM is applying the test consistently if similarly-situated external resources obtain different test results.<sup>29</sup>

### C. PJM's Second Answer

17. PJM states that there are significant distinctions between the generators that passed and failed the M2M Flowgate Test. According to PJM, the seven generators shown to pass Flowgate No. 93209 in the Reply Affidavit attached to Brookfield's Answer. Answer. Answer are interconnected to a 500 kV transmission system with direct paths to PJM or connected to a 161 kV transmission system but in close proximity to the TVA 500 kV transmission system. By contrast, PJM states that the Brookfield Pseudo-Tie is interconnected to a discrete 161 kV transmission system with limited, lower voltage access to PJM. PJM explains that one of the factors evaluated in determining eligibility under the M2M Flowgate Test is voltage, and therefore contends that the voltage disparity between the Facilities and the other resources identified by Brookfield demonstrates that these resources were not similarly situated. In the seven generators and that the seven generators are placed to PJM, the seven generators are placed to PJM or connected to a 500 kV transmission system with direct paths to PJM or connected to a 161 kV transmission system with direct paths to PJM or connected to a 161 kV transmission system with direct paths to PJM or connected to a 161 kV transmission system with direct paths to PJM or connected to a 161 kV transmission system with direct paths to PJM or connected to a 161 kV transmission system with direct paths to PJM or connected to a 161 kV transmission system with direct paths to PJM or connected to a 161 kV transmission system with direct paths to PJM or connected to a 161 kV transmission system with direct paths to PJM or connected to PJM or connected to a 161 kV transmission system with direct paths to PJM or connected to a 161 kV transmission system with direct paths to PJM or connected to a 161 kV transmission system with direct paths to PJM or connected to a 161 kV transmission system with direct paths to PJM or connected to a 161 kV transmission system with direct paths to PJM or connected to a 161 kV tra

# D. <u>Brookfield's Second Answer</u>

18. Brookfield explains the Facilities' failure of the M2M Flowgate Test necessarily means that the Facilities' pseudo-tie had at least a five percent impact on Flowgate No. 93209, and there are no dispatchable generation resources internal to PJM that have a 1.5 percent or greater flow distribution impact on Flowgate No. 93209. According to Brookfield, this also means that any other external generation resource having a five percent or greater flow impact on Flowgate No. 93209 cannot possibly pass the

<sup>&</sup>lt;sup>28</sup> *Id.* at 7-8.

<sup>&</sup>lt;sup>29</sup> *Id.* at 8.

<sup>&</sup>lt;sup>30</sup> Brookfield First Answer, Exhibit A (Reply Affidavit of Johannes Pfeifenberger and Akarsh Sheilendranath) at 10 (Reply Aff.).

<sup>&</sup>lt;sup>31</sup> PJM Second Answer at 4.

<sup>&</sup>lt;sup>32</sup> Brookfield Second Answer at 2-3.

M2M Flowgate Test, since there are no flexible generation resources internal to PJM with the necessary 1.5 percent impact on that flowgate.

- 19. Brookfield argues that PJM's Second Answer does not refute the analysis and conclusions of Brookfield's witnesses Messrs. Pfeifenberger and Sheilendranath regarding Flowgate No. 93209, <sup>33</sup> instead attempting to explain the discrepancy by stating for the first time that "voltage" is a factor evaluated in determining whether a Pseudo-Tie satisfies the M2M Flowgate Test. <sup>34</sup>
- 20. Brookfield explains that its consultant, Quanta Technology, found at least seven external generation resources close to the Facilities that had a five percent or greater flow impact on Flowgate No. 93209, but yet were reported by PJM in the 2019 M2M Flowgate Test Results as passing the M2M Flowgate Test. Brookfield argues that it has thus demonstrated that PJM is either inconsistently administering the M2M Flowgate Test or the M2M Flowgate Test produces inconsistent and contradictory results.<sup>35</sup>

# E. PJM's Third Answer

21. PJM responds that Brookfield wrongly asserts that if no PJM-internal generator can relieve flows on a flowgate by at least 1.5 percent from the Facilities, then PJM's internal generators "cannot possibly" relieve flows on that flowgate by 1.5 percent from a different external generator. <sup>36</sup> PJM explains that system topology and facility voltage can, and will, result in different impacts of a flowgate from different dispatch scenarios of different generators. <sup>37</sup>

<sup>&</sup>lt;sup>33</sup> Reply Aff. at 9. ("For any one of these those 16 generating units to have passed the M2M Flowgate Test, there would have had to be at least one PJM-internal generation resource with a 1.5% or greater flow impact on flowgate 93209. But if such a PJM-internal generation resource existed, the BSM Pseudo-Tie should have passed the test for that flowgate as well.").

<sup>&</sup>lt;sup>34</sup> *Id.* at 4.

<sup>&</sup>lt;sup>35</sup> *Id.* at 5. Brookfield requests that the Commission establish paper hearing procedures to ask PJM to explain, consistent with PJM's explanation of the steps involved in the M2M Flowgate Test, why the Brookfield Pseudo-Tie failed Flowgate No. 93209 while other similarly-situated pseudo-ties passed.

<sup>&</sup>lt;sup>36</sup> PJM Third Answer at 5.

<sup>&</sup>lt;sup>37</sup> *Id*.

- 22. PJM explains that the Flowgate No. 93209 is a transformer where 500 kV transmission lines meet 161 kV lines. PJM asserts that the Facilities are at the far end of a succession of 161 kV lines extending south from that transformer, while all of the other TVA generator buses Brookfield cites are located on, or very close to, the 500 kV lines that pass through the transformer.<sup>38</sup>
- 23. PJM argues that it is expected that "a PJM-internal generator located on the extension of a 500 kV transmission line into the PJM region would be more capable of pushing back on flows from other generators on that 500 kV system than it would as to flow from the 161 kV lines interconnected to that transformer." PJM asserts that the mere possibility that a PJM internal generator could be more effective at relieving flows from some generators on a given flowgate, and less effective at relieving flows from other generators on the same flowgate, is not a "discrepancy." <sup>40</sup>

### F. Brookfield's Third Answer

24. Brookfield responds that the voltage of the transmission line on which an external generation resource is interconnected is irrelevant to the calculation of the flow impact of an internal PJM generation resource on a particular flowgate. Brookfield's consultants explain that the flow impact of an internal PJM generation resource on any particular flowgate remains constant and does not depend on the location of external generation resources or the voltage rating of external transmission for which the M2M Flowgate Test is performed. Brookfield states this is true because the transmission topology and the flow impact of that dispatchable internal resource on that flowgate is unique to that internal generator. and the state of the transmission topology and the flow impact of that dispatchable internal resource on that flowgate is unique to that internal generator.

<sup>&</sup>lt;sup>38</sup> *Id.* at 4-6.

<sup>&</sup>lt;sup>39</sup> *Id.* at 5-6.

<sup>&</sup>lt;sup>40</sup> *Id.* at 6.

<sup>&</sup>lt;sup>41</sup> Brookfield Third Answer, Exhibit A (Supplemental Affidavit of Pfeifenberger and Sheilendranath) at 3-4.

<sup>&</sup>lt;sup>42</sup> *Id.* at 4-6.

<sup>&</sup>lt;sup>43</sup> *Id* 

#### G. PJM's Fourth Answer

25. PJM responds by agreeing with Brookfield that, for a single flowgate, the impacts of an existing internal PJM resource on that single flowgate are indeed the same regardless of the location of the requested pseudo-tie resource. PJM argues that, nonetheless, "the set of eligible flowgates" determined as a result of any given external pseudo-tie resource will be different. Therefore, PJM asserts that each requested pseudo-tie will have a different set of eligible flowgates that is used as part of the M2M Flowgate Test and each one of these eligible flowgates will have different impacts from existing internal PJM resources. 46

### IV. <u>Discussion</u>

### A. <u>Procedural Matters</u>

- 26. 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. Pursuant to Rule 214(d) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214(d) (2018), the Commission will grant the late-filed motions to intervene submitted by Exelon and Potomac Economics given their interest in the proceeding, the early stage of the proceeding, and the absence of undue prejudice or delay.
- 27. Pursuant to Rule 214(d) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214(d) (2018), we grant PJM's unopposed motion for extension of time, PJM's errata to its unopposed motion for extension of time, PJM's motion for leave to file answer one day out-of-time, and PJM's February 8, 2019 answer.
- 28. 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 answers of the IMM, PJM, and Brookfield because they have provided information that assisted us in our decision-making process.

# **B.** Substantive Matters

29. We find that Brookfield has raised questions of material fact about the manner in which PJM administers its deliverability requirements and the M2M Flowgate Test that

<sup>&</sup>lt;sup>44</sup> PJM Fourth Answer at 3-4.

<sup>&</sup>lt;sup>45</sup> *Id.* at 4.

<sup>&</sup>lt;sup>46</sup> *Id*.

cannot be resolved based on the current record in this proceeding. Accordingly, as discussed below, we establish paper hearing procedures regarding PJM's application of its deliverability requirements and M2M Flowgate Test to Brookfield's Facilities.

- 30. First, we note that the Tariff and Manuals do not specify the "deliverability criteria" <sup>47</sup> PJM must use for its evaluation. The record is not clear as to what deliverability criteria PJM uses to determine whether pseudo-tied resources can participate in the auctions, whether it uses those deliverability criteria consistently for all projects, or how PJM evaluated the Brookfield Facilities. <sup>48</sup>
- 31. The record developed thus far in this proceeding also raises questions regarding PJM's application of the M2M Flowgate Test. PJM has not sufficiently explained why the Brookfield Facilities failed the M2M Flowgate Test while other external generators affecting the same flowgate (Flowgate No. 93209) did not, even though the M2M Flowgate Test depends not on the location of the generator, but on whether a generator located inside the metered boundaries of the PJM Region has a minimum flow distribution impact of 1.5 percent on each eligible coordinated flowgate resulting from such pseudo-tie. For example, PJM states in its Third Answer that "a PJM-internal generator located on the extension of that 500 kV transmission into the PJM region would be more capable of pushing back on flows from other generators on that 500 kV system than it would as to flows from the 161 kV lines interconnected to that transformer." <sup>49</sup> This statement could be read to suggest that M2M Flowgate test is based on the line voltages inside the coordinating BAA. PJM, however, later states in its Fourth Answer that "for a single flowgate the impacts of existing internal PJM resources are indeed the same on that single flowgate regardless of the location of the requested pseudo-tie resources." 50 The record in this proceeding is also unclear as to whether the M2M Flowgate Test was applied correctly to the Facilities with respect to Flowgate No. 93209.
- 32. We therefore establish paper hearing procedures to examine these issues. PJM is required to respond to the questions posed below, accompanied by supporting documents or affidavits, if necessary, within 30 days of the date of this order, with replies due within 15 days of PJM's filing. After receipt of these filings, Commission staff is authorized to establish additional procedures, including a staff technical conference, if further information on these issues is needed.

<sup>&</sup>lt;sup>47</sup> PJM Tarff at Attachment DD, Section 5.5A(b)(ii).

<sup>&</sup>lt;sup>48</sup> Mitreski Aff. at 15.

<sup>&</sup>lt;sup>49</sup> PJM Third Answer at 5-6.

<sup>&</sup>lt;sup>50</sup> PJM Fourth Answer at 3-4.

- 1. Please explain with specificity:
  - (a) The "deliverability criteria" PJM considers, as the term is used in Section 5.5A(b)(ii) of Attachment DD to the PJM Tariff, when reviewing a deliverability study for purposes of determining whether to accept a proposed pseudo-tie;
  - (b) As applied to the Facilities, the dispatch requirements PJM deemed excluded from the Quanta Study;
  - (c) If, as PJM states in its First Answer, there was an insufficiency in the Quanta Study, what steps PJM took to coordinate with the external BAA and Brookfield to ensure that the Quanta Study was not deficient; <sup>51</sup>
- 2. Please explain whether the generators identified in Figure 1 of the Brattle Group Reply Affidavit<sup>52</sup> have a 5 percent or greater impact on Flowgate No. 93209. Please provide the generation-to-load distribution factors (GLDFs) value with respect to Flowgate No. 93209 for these generators, rounded to the nearest ten thousandths place;
- 3. Please explain whether either of Brookfield's Calderwood or Cheoah generators have a 5 percent or greater impact on Flowgate No. 93209. Please provide the GLDF values with respect to Flowgate No. 93209 for these generators, rounded to the nearest ten-thousandths place. Please explain any key modeling assumptions made by PJM (i.e., assumptions on sources/sinks, contingency list) or different dispatch scenarios (i.e., scaling method, participation factors) that would impact how PJM derived these values;
- 4. Please explain whether there are any existing internal PJM generators that have at least a 1.5 percent GLDF on Flowgate No. 93209. Please provide the highest GLDF of an existing internal PJM generator with respect to the Flowgate No. 93209 based on the M2M Flowgate Test results PJM posted in February 2019;
- 5. Please explain how the statement on pages 5-6 of the PJM April 19 Answer, which states that "a PJM-internal generator located on the extension of that 500 kV transmission into the PJM region would be more capable of pushing back on flows from other generators on that 500 kV system than it would as to

<sup>&</sup>lt;sup>51</sup> See Pseudo-Tie Enhancement Order, 161 FERC ¶ 61,197 at P 173.

<sup>&</sup>lt;sup>52</sup> Reply Aff. at Figure 1.

flows from the 161 kV lines interconnected to that transformer" comports with the statement on pages 3-4 of PJM's May 22 Answer which states "for a single flowgate the impacts of existing internal PJM resources are indeed the same on that single flowgate regardless of the location of the requested pseudo-tie resources."

33. Section 206(b) of the FPA provides that upon the filing of a complaint, the Commission must establish a refund effective date that is no earlier than the date of the complaint and no later than five months subsequent to the date of the complaint. In such cases, in order to give maximum protection to customers, and consistent with our precedent, we have historically tended to establish the section 206 refund effective date at the earliest date allowed by section 206, and we do so here as well. That date is January 18, 2019, the date of the Complaint.

### V. Other Matters

- 34. On June 28, 2019, Brookfield filed a motion requesting that the Commission issue an order granting the Complaint by no later than August 1, 2019, or, in the alternative, that the Commission grant the Complaint to the extent necessary to provide as interim relief a remedy extending by one year the current five-year transition period for external resources with existing pseudo-ties that wish to remain pseudo-tied so that these resources can participate in the upcoming 2019 PJM capacity market auction. <sup>54</sup> Brookfield explains that if the Commission grants the Complaint at a later date finding that PJM's new pseudo-tie requirements are unjust, unreasonable, and unduly discriminatory and preferential, the existing Brookfield pseudo-tied resources and other similarly situated resources will have been irreparably harmed by their inability to participate in the PJM capacity auction for the 2022/2023 Delivery Year.
- 35. On July 8, 2019, PJM filed an answer opposing Brookfield' request for interim relief on the grounds that the five year transition period is embedded in PJM's Tariff and would require a showing under section 206 of the FPA that the current five year transition period is unjust and unreasonable. <sup>55</sup>

 $<sup>^{53}</sup>$  See, e.g., Idaho Power Co., 145 FERC  $\P$  61,122 (2013); Canal Elec. Co., 46 FERC  $\P$  61,153, order on reh'g, 47 FERC  $\P$  61,275 (1989).

<sup>&</sup>lt;sup>54</sup> Brookfield Motion for Prompt Commission Action at 2-3.

<sup>&</sup>lt;sup>55</sup> PJM Answer to Motion for Prompt Commission Action at 2.

36. We deny Brookfield's motion. Brookfield has presented neither a basis on which the Commission could grant its requested interim relief nor a demonstration such relief would be appropriate in these circumstances. <sup>56</sup>

### The Commission orders:

- (A) Pursuant to the authority contained in and subject to the jurisdiction conferred upon the Federal Energy Regulatory Commission by section 402(a) of the Department of Energy Organization Act and the FPA, particularly section 206 thereof, and pursuant to the Commission's Rules of Practice and Procedure and the regulations under the FPA (18 C.F.R. Chapter I), the Commission hereby institutes paper hearing procedures in Docket No. EL19-34-000, concerning issues raised in the Complaint, as discussed in the body of this order.
- (B) The refund effective date in Docket No. EL19-34-000 established pursuant to section 206 of the FPA shall be January 18, 2019, the date of the Complaint.
- (C) PJM is hereby directed to submit the filing discussed in the body of this order, accompanied by documents or affidavits, if necessary, within 30 days of the date of this order. Reply testimony, evidence, and/or argument may be submitted no later than 15 days thereafter, or 45 days from the date of this order, as discussed in the body to this order.

By the Commission.

(SEAL)

Kimberly D. Bose, Secretary.

<sup>&</sup>lt;sup>56</sup> See Complaint Procedures, Order No. 602-A, 88 FERC ¶ 61,114, FERC Stats. & Regs. ¶ 30,067, at 30,863-64 (1999) (cross-referenced at 88 FERC ¶ 61,114) ("[t]he Commission will eliminate all references to preliminary relief, other than stays or extensions of time, in the complaint regulations…these changes should eliminate certain parties' concern that the Commission was attempting to establish procedures for granting injunctive-type relief").