

**UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION**

**PJM Interconnection, L.L.C.**

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**Docket No. ER20-584-000**

**MOTION FOR LEAVE TO ANSWER  
AND ANSWER OF PJM INTERCONNECTION, L.L.C.**

PJM Interconnection, L.L.C. (“PJM”), pursuant to Rule 213 of the Federal Energy Regulatory Commission (“Commission”),<sup>1</sup> submits this Motion for Leave to Answer (“Motion”) and limited Answer (“Answer”) to respond to the comments filed by Brookfield Renewable Trading and Marketing LP (“Brookfield”) dated January 13, 2020.<sup>2</sup> As further explained below, PJM’s December 12 Compliance Filing<sup>3</sup> is consistent with the Commission’s directive to “submit Tariff provisions reflecting its minimum run-time rules and procedures applicable to all resources.”<sup>4</sup>

**I. MOTION FOR LEAVE TO ANSWER**

The Commission’s rules provide that a party may answer comments where the decisional authority permits the answer for good cause shown. The Commission has accepted responses to protests when doing so will ensure a more accurate and complete record or will assist the

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<sup>1</sup> 18 C.F.R. § 385.213.

<sup>2</sup> PJM Interconnection, L.L.C., *Motion to Intervene and Protest of Brookfield Renewable Trading and Marketing, LP*, Docket No. ER20-584-000 (filed January 13, 2020) (“Brookfield Protest”).

<sup>3</sup> PJM Interconnection, L.L.C., *Compliance Filing*, Docket No. ER20-584-000 (filed December 12, 2019) (“December 12 Compliance Filing”).

<sup>4</sup> *PJM Interconnection, L.L.C.*, 169 FERC ¶ 61,049 at P143 (2019) (“October 17 Order”).

Commission in its deliberative process by clarifying the issues.<sup>5</sup> Here, PJM respectfully requests that the Commission grant its Motion because the Answer will help clarify the record and contribute to an understanding of the issues.

## II. ANSWER

The October 17 Order “directed [PJM] to submit tariff provisions reflecting its minimum run-time rules and procedures applicable to all resources . . . .”<sup>6</sup> In accordance with this directive, PJM submitted revisions to PJM’s Reliability Assurance Agreement Among Load Serving Entities in the PJM Region (“RAA”), Schedule 9 to reflect the minimum run duration requirements applicable for all resources. PJM did so by grouping all resources into three distinct categories: *i.e.*, generating units: (i) that are able to maintain a stated level of output without interruption for an extended period of time, (ii) with limited energy capability, or (iii) with output that varies as a function of energy source that is non-continuous and cannot be directly controlled.<sup>7</sup>

At the outset, it should be noted that in keeping with the two-part assignment set forth in the Commission’s October 17 Order, PJM has proposed to reserve to the second phase of this proceeding for providing further evidence to justify the reasonableness of its tariff.<sup>8</sup> The December 12 Compliance Filing merely involved the ministerial incorporation of a structure which categorizes all resources in an effort to bring PJM’s existing rules into its tariff as directed by the

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<sup>5</sup> The Commission regularly allows answers in such cases. See, e.g., *PJM Interconnection, L.L.C.*, 139 FERC ¶ 61,165, at P 24 (2012) (accepting answers to a protest because “they have provided information that assisted [the Commission] in [its] decision-making process”); *PJM Interconnection, L.L.C.*, 104 FERC ¶ 61,031, at P 10 (2003) (accepting answer because “it will not delay the proceeding, will assist the Commission in understanding the issues raised, and will [e]nsure a complete record upon which the Commission may act”).

<sup>6</sup> October 17 Order at ordering para. (D).

<sup>7</sup> December 12 Compliance Filing at p. 5.

<sup>8</sup> This second phase of the proceeding refers to the Commission’s investigation concerning the just and reasonableness of PJM’s minimum run duration requirements in Docket No. EL19-100-000. See October 17 Order at ordering para. (C).

Commission. As a result, PJM notes Brookfield's request and affirms that Brookfield's challenges are more appropriately dealt with in the second phase of this proceeding at which time PJM stands prepared to propose and explain capacity valuations for resources with limited energy capability. As a result, PJM believes that the Commission should hold in abeyance any ruling on the issues raised by Brookfield.

Nevertheless, should the Commission seek to transform this phase of the proceeding into a full scale examination of the duration requirements for this particular resource, PJM notes that the December 12 Compliance Filing meets the Commission's directive to incorporate its minimum run duration requirements for all resources into the tariff. The Commission has vast discretion under Section 206 as to how it wishes to sequence its examination of these issues and PJM urges the Commission to await a ruling on Brookfield's claims until further evidence is presented by PJM in the next phase of this proceeding.

With respect to the merits of Brookfield's protest, PJM maintains that the December 12 Compliance Filing is consistent with the requirements provided in the PJM Manuals. More particularly, PJM Manual 21, section 2.1(5)<sup>9</sup> explicitly provides that a resource that can sustain continuous operation for 10 hours or more shall be deemed an "unlimited energy capability" resource. All other resources that are unable to sustain 10 hours of continuous operation for each day of the Delivery Year are considered to be limited energy capability resources.

Notably, Brookfield does not dispute that its run-of-river hydro resources (with or without storage) are unable to maintain an output at a stated capability on a continuous daily basis without interruption. Thus, it is undisputed that its run-of-river hydro resources do not have "unlimited

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<sup>9</sup> PJM, *Manual 21: Rules and Procedures for Determination of Generating Capability*, § 2.1(5) (rev. 14, Aug. 1, 2019), <https://www.pjm.com/-/media/documents/manuals/m21.ashx>.

energy capability.” In fact, many hydro resources must maintain minimum hourly flow requirements that prevent such resources from operating at full capability for greater than 10 hours at a time.<sup>10</sup>

As a result, run-of-river hydro resources must be either (i) resources with limited energy capability or (ii) output that cannot be continuously and directly controlled (*i.e.*, intermittent resources). PJM appropriately categorized run-of-river hydro *with storage* as a resource with limited energy capability because, similar to other storage resources, a run-of-river hydro unit with storage is capable of producing a sustained level of output over a continuous period of time. At the same time, however, such resources cannot be categorized as unlimited energy capability resources because the storage inventory of run-of-river hydro relies, in part on nature replenishing the water inventory. Likewise, categorizing run-of-river hydro without storage as resources that cannot be continuously and directly controlled is appropriate because the capability of such a resource is dependent on the stream flow, governing agreements, or regulatory requirements.<sup>11</sup>

Brookfield suggests that the capacity value for run-of-river hydro resources with storage is based on a one hour requirement that takes into account the inflows, storage capacity, and other relevant operating restrictions.<sup>12</sup> The PJM Manual section cited by Brookfield to support this invalid assertion pertains to testing requirements for run-of-river hydro resources to maintain their

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<sup>10</sup> While it is possible that a portion of total plant ICAP’s can run continuously for more than 10 hours, there is often insufficient streamflow and/or water in inventory to run all units at total plant ICAP for 10 hours or more. There are also significant daily and seasonal stream flow fluctuations.

<sup>11</sup> This is further supported by the language in PJM, *Manual 21: Rules and Procedures for Determination of Generating Capability*, § 2.1.4 (rev. 14, Aug. 1, 2019), <https://www.pjm.com/-/media/documents/manuals/m21.ashx>, which explicitly categorizes run-of-river hydro units without storage as intermittent resources. The fact that this section states “other than wind and solar” does not mean run-of-river hydro is not an intermittent resource. Rather, it is intended to clarify that expected head and streamflow factors do not apply to wind and solar resources.

<sup>12</sup> Brookfield Protest at p.8.

existing Capacity Interconnection Rights (“CIRs”) and to demonstrate the ability to generate up to the committed capacity levels.<sup>13</sup> These requirements are still relevant and valid as a pragmatic mechanism to periodically test the resource and ensure it can achieve its CIR value. However, these provisions are not used for determining the CIR values themselves.

Further, PJM clarifies that the letters referenced in Brookfield’s protest that PJM “signed off” on its methodology<sup>14</sup> refer solely to the MW quantity that Brookfield intended to offer into the capacity auction. The sell offer quantity for any Generation Capacity Resource can never exceed the capacity value as defined by the MW quantity of a resource’s CIRs. Thus, the letters do not state that PJM agreed with Brookfield’s methodology for determining the capacity value of the resources that were in excess of the available CIRs. Rather, the letters are solely in reference to the sell offer quantity that may be offered as Capacity Performance Resources into the RPM Auction based on the resources’ available CIRs.

PJM did not promulgate new rules or procedures addressing stream flow, reservoir storage, and mechanical limitations for run-of-river hydro resources.<sup>15</sup> To the contrary, PJM’s December 12 Compliance Filing retains the existing RAA, Schedule 9 language for those factors that impact the ability of units to maintain output at a stated level, *including* stream flow, reservoir storage, and mechanical limitations.<sup>16</sup> Thus, these factors must continue to be accounted for in developing

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<sup>13</sup> Further, the determination of Net Capability is supposed to be the normal cycle of the resource’s capability under summer peak conditions. PJM, *Manual 21: Rules and Procedures for Determination of Generating Capability*, § 2.1.3 (rev. 14, Aug. 1, 2019), <https://www.pjm.com/-/media/documents/manuals/m21.ashx>. To the extent Brookfield derived a capacity value that is not representative of its resources true capability, such values may have not been consistent with an annual Capacity Performance product as the resource may not have reasonably been expected to supply that amount of capacity on a daily sustained output over a Delivery Year.

<sup>14</sup> Brookfield Protest at p.11.

<sup>15</sup> See Brookfield Protest at p. 9.

<sup>16</sup> See December 12 Compliance Filing, Attachment A.

the capacity values for run-of-river hydro unit, in conjunction with the relevant minimum run duration requirements. Thus, run-of-river hydro resources must be appropriately rated based on these factors, along with meeting the minimum run duration requirements.

### III. CONCLUSION

Based on the foregoing, PJM requests that the Commission grant PJM's Motion and take this Answer into consideration when reviewing the Brookfield's protest. PJM's compliance filing is consistent with the Commission's directive from the October 17 Order and does not adopt new rules for any resources.<sup>17</sup> In any event, Brookfield's challenges are more appropriately dealt with in the second phase of this proceeding so the Commission should hold in abeyance any ruling on the issues raised by Brookfield. PJM intends to reevaluate the rules pertaining to resources with limited energy capability, including run-of-river hydro resources with storage, through a future stakeholder process to further address Brookfield's protest.

Respectfully submitted,



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Dated February 5, 2020

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<sup>17</sup> In fact, nothing in PJM's December 12 Compliance Filing is intended to alter the capacity value for any of Brookfield's existing run-of-river hydro resources.

**CERTIFICATE OF SERVICE**

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated at Audubon, PA, this 5<sup>th</sup> day of February, 2020.



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