

June 11, 2021

Honorable Kimberly D. Bose, Secretary  
Federal Energy Regulatory Commission  
888 First Street, N.E., Room 1A  
Washington, D.C. 20426

Re: *PJM Interconnection, L.L.C.*, Docket No. ER21-1635-00\_,  
Submission of Response to Deficiency Letter

Dear Secretary Bose:

PJM Interconnection, L.L.C. (“PJM”) submits for filing this response to the letter dated May 21, 2021, in the referenced docket requesting additional information.<sup>1</sup> On April 7, 2021, pursuant to section 205 of the Federal Power Act (“FPA”), 16 U.S.C. § 824d, PJM submitted revisions to the PJM Open Access Transmission Tariff (“Tariff”), Schedule 6A.<sup>2</sup> The proposed revisions are intended to clarify and rationalize the requirements for Black Start Units,<sup>3</sup> and provide for transparency and annual updates to the Capital Recovery Factor (“CRF”) component of Black Start payments for units that require new or additional capital investment.

## **I. REQUESTED EFFECTIVE DATE**

PJM respectfully renews its request for an effective date of June 6, 2021, or as soon thereafter as practicable, for the proposed revisions to Tariff, Schedule 6A. Good cause exists to grant PJM’s requested effective date. First, the Commission often permits applicants to retain their original requested effective date when a filing is made in good faith to cure a deficiency.<sup>4</sup> Second, the April 7 Filing provided the required notice as to the timing of the proposed revisions’ impact on Black Start rates, terms, and conditions, and this filing gives notice of PJM’s desire to retain that date in the wake of the deficiency letter. As such, no party will be prejudiced by adoption of the originally requested effective date. Third, adoption of the originally requested effective date will provide certainty for Black Start Unit owners, which will encourage their participation in a solicitation PJM has issued to address a forecast September 2022 shortfall in Black Start Service in a

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<sup>1</sup> *PJM Interconnection, L.L.C.*, Deficiency Letter, Docket No. ER21-1635-000 (May 21, 2021) (“May 21 Letter”).

<sup>2</sup> *PJM Interconnection, L.L.C.*, Tariff, Schedule 6A, Black Start Revisions of PJM Interconnection, L.L.C., Docket No. ER21-1635-000 (Apr. 7, 2021) (“April 7 Filing”).

<sup>3</sup> Capitalized terms not otherwise defined herein shall have the meaning ascribed to them in the Tariff.

<sup>4</sup> See, e.g., *Midwest Indep. Transmission Sys. Operator, Inc.*, 105 FERC ¶ 61,076 (2003) (granting requested effective date following supplemental filing in response to deficiency letter).

transmission Zone due to the announced retirement of Black Start Service from several units.<sup>5</sup>

## II. RESPONSES TO THE MAY 21 LETTER'S SPECIFIC QUESTIONS

- 1. You explain that the stated [Capital Recovery Factor (“CRF”)] values currently in the Tariff are “essentially ‘black box’ numbers” because neither the Tariff nor PJM’s Business Practice Manuals specify their bases or how they were calculated. You further state that “these CRF percentages will remain in the Tariff to govern continued recovery of past investments made by existing Black Start Units.” Please support PJM’s decision to retain the current stated CRF values for calculating prospective annual revenue requirements for existing Black Start Units. In your response, please address how PJM’s proposal addresses Commission precedent regarding reductions to stated transmission rates following passage of the Tax Cuts and Jobs Act of 2017.**

### Response

PJM’s decision to retain the existing stated CRF percentages in the Tariff for the existing investments of existing providers of Black Start Service is based on the critical importance of Black Start Service to system reliability and the need to respect the expectations Black Start Service providers had at the time they evaluated the risks and rewards of providing Black Start Service and voluntarily committed their units to Black Start Service. Black Start Service is not only uniquely important; it also presents providers with unique risks. First, it is the only service PJM procures on a multi-year basis, requiring unit owners to evaluate risks over a longer time frame thus introducing more uncertainty. Also, because Black Start Service must be available even in the face of severe grid disruptions, Black Start Service is subject to specific requirements under North American Electric Reliability Corporation (“NERC”) standards. NERC’s Emergency Preparedness and Operations Standard EOP-005-3, which specifically concerns System Restoration from Black Start Resources, underscores the importance of system restoration planning by establishing unique training, testing, and drill requirements for Generation Operators with Black Start Resources.<sup>6</sup> These Black Start Resource-specific NERC requirements establish increased risk of NERC audits and NERC penalties for non-compliance identified in an audit or through the required testing. Existing Black Start Service providers had the opportunity to evaluate both the longer term uncertainty (from multi-year commitments) and the added risk and exposure from Black Start-specific NERC requirements when

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<sup>5</sup> See April 7 Filing at 21 & Attachment A, Affidavit of Michael E. Bryson on Behalf of PJM Interconnection, L.L.C. ¶¶ 11-12; *PJM Interconnection, L.L.C.*, Motion for Leave to Answer, Clarification, and Answer of PJM Interconnection, L.L.C., Docket No. ER21-1635-000, at 3-4 (May 21, 2021).

<sup>6</sup> North American Electric Reliability Corp., Emergency Preparedness and Operations Standard No. EOP-005-3, System Restoration from Blackstart Resources, at R11-R16 (approved Jan. 18, 2018, in Docket No. RM17-12-000).

considering the stated CRF percentages in the Tariff at the time they entered into their commitments. However, they did not have an opportunity to evaluate the proposed new formulaic, annually adjusted CRF percentages before entering these current commitments. Thus, there are legitimate reasons to retain the stated CRF percentages in the Tariff for existing Black Start Units providing Black Start Service at present. As shown below, the Commission has approved different treatment for resources in instances where there are legitimate policy reasons for doing so,<sup>7</sup> and should do the same here to allow PJM to retain the existing stated CRF percentages in the Tariff for its existing Black Start Service providers.

Further, retaining the CRF percentages currently stated in the Tariff for existing Black Start Unit owners providing Black Start Service is just and reasonable and not unduly discriminatory because there are legitimate, factual differences between existing and new Black Start Unit owners. As an initial matter, PJM notes there can be more than one just and reasonable rate.<sup>8</sup> Therefore, given that the new units and existing units are not similarly situated due to the different expectations and understandings each group had at the time they entered into a Black Start Service commitment, maintaining different rate structures (i.e., retaining the existing just and reasonable rate for existing Black Start Units and implementing a different just and reasonable rate for new Black Start Units going forward) is just and reasonable. Further, the Commission has accepted different rates, and non-rate terms and conditions, for existing and new customers as just, reasonable, and not unduly discriminatory where there are distinctions in timing, notice, and expectations between the two groups.<sup>9</sup> Maintaining the existing CRF percentages for existing Black Start Units under Tariff, Schedule 6A, section 6, is consistent with the Commission's precedent finding that discrimination is "due" when there are justifiable differences between two differently situated groups.<sup>10</sup>

For example, in *Missouri River Energy Services v. FERC*, the D.C. Circuit affirmed the Commission's acceptance of Southwest Power Pool, Inc.'s ("SPP") decision to allow existing members to be exempt from certain charges based on a distinction between

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<sup>7</sup> See, e.g., *Sw. Power Pool, Inc.*, 158 FERC ¶ 61,063, at P 12 (2017) (approving SPP's proposal to treat all new non-wind variable resources as dispatchable while allowing existing variable non-wind resources to remain non-dispatchable, in part based on the policy benefit of increasing dispatchable non-wind resources in SPP).

<sup>8</sup> See *Am. Elec. Power Serv. Corp. v. Midwest Indep. Transmission Sys. Operator, Inc.*, 122 FERC ¶ 61,083, at P 88 ("As the courts have found, on the same set of facts there can be 'multiple just and reasonable rates' and the resolution may depend on whether the proceeding is initiated under section 206." (quoting "Complex" *Consol. Edison Co. of NY v. FERC*, 165 F.3d 992, 1003 (D.C. Cir. 1999))), *order on reh'g*, 125 FERC ¶ 61,341 (2008).

<sup>9</sup> See *Mo. River Energy Servs. v. FERC*, 918 F.3d 954, 958 (D.C. Cir. 2019) ("*Missouri River*") ("A mere difference in the treatment of two entities does not violate that provision [FPA section 206(b)]; instead, undue discrimination occurs only if the entities are 'similarly situated,' such that 'there is no reason for the difference.'" (quoting *State Corp. Comm'n of Kan. v. FERC*, 876 F.3d 332, 335 (D.C. Cir. 2017) & *Transmission Access Policy Study Grp. v. FERC*, 225 F.3d 667, 721 (D.C. Cir. 2000) (per curiam))).

<sup>10</sup> See *id.*

existing and prospective members of SPP.<sup>11</sup> The court affirmed the Commission's reasoning that there was no undue discrimination between new and existing members because the new members had the opportunity to consider the costs and benefits of joining SPP.<sup>12</sup> In the underlying SPP orders, the Commission relied on the precedent in *Dairyland I*<sup>13</sup> and *Dairyland II*<sup>14</sup> where the Commission found that prospective members can weigh the costs and benefits of joining and choose not to join an independent system operator ("ISO") or regional transmission owner ("RTO") if they do not wish to accept the terms, or if the costs outweigh the benefits, while existing members have no such opportunity.<sup>15</sup>

Similarly, in *ISO New England*, the Commission approved ISO New England Inc.'s ("ISO-NE") proposal to apply its financial assurance policy to only new non-commercial capacity clearing in the upcoming forward capacity auction.<sup>16</sup> The Commission found that new non-commercial capacity was not similarly situated with existing non-commercial capacity that cleared before the upcoming auction policy because "existing capacity would have secured financing and/or made arrangements in anticipation of, and contingent upon, the incumbent financial assurance requirements."<sup>17</sup> The Commission also noted that the distinction was necessarily limited to the finite period before the non-commercial capacity resources became commercial.<sup>18</sup>

In *Southwest Power Pool*, the Commission approved SPP's proposal to treat all new non-wind variable resources as dispatchable while allowing existing non-wind variable resources and previously exempted wind variable resources to remain non-dispatchable, based on the fact that new non-wind variable resources have sufficient notice of the new terms.<sup>19</sup> The Commission found that through its proposal, SPP "maintain[ed] the expectations under which existing non-wind resources entered the market."<sup>20</sup>

This precedent clearly demonstrates that new and existing customers are not similarly situated in certain cases where existing customers relied on certain material terms

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<sup>11</sup> *Id.* at 958-60.

<sup>12</sup> *See id.* at 959; *see also Sw. Power Pool, Inc.*, 160 FERC ¶ 61,115, at PP 47-48 (2017), *reh'g denied*, 163 FERC ¶ 61,063, at P 27 (2018).

<sup>13</sup> *Midwest Indep. Transmission Sys. Operator, Inc.*, 129 FERC ¶ 61,221 (2009) ("*Dairyland I*").

<sup>14</sup> *Midwest Indep. Transmission Sys. Operator, Inc.*, 131 FERC ¶ 61,163 (2010) ("*Dairyland II*").

<sup>15</sup> *See Sw. Power Pool, Inc.*, 160 FERC ¶ 61,115, at PP 47-48, *reh'g denied*, 163 FERC ¶ 61,063, at PP 44, 47; *Dairyland I* at PP 39-41; *Dairyland II* at P 22.

<sup>16</sup> *ISO New England Inc.*, 170 FERC ¶ 61,011, at PP 14-15 (2020) ("*ISO New England*").

<sup>17</sup> *Id.* at P 15.

<sup>18</sup> *Id.*

<sup>19</sup> *Southwest Power Pool, Inc.*, 158 FERC ¶ 61,063, at PP 12-14 (2017) ("*Southwest Power Pool*").

<sup>20</sup> *Id.* at P 12.

when they elected to take service, join an RTO, or provide a service.<sup>21</sup> As in *Missouri River*,<sup>22</sup> at the time existing Black Start Service providers made the tailored Black Start Service facility investments addressed by a CRF, they did not have notice of the new formulaic, annually updated CRF, or the opportunity to consider this new approach's costs and benefits. In contrast, Black Start Service providers committing to new facility investments after these Tariff changes take effect can take account of these new terms, and their costs and benefits, before committing to such new investments. Similarly, the owners of existing section 6 Black Start Units, like existing non-commercial capacity that cleared before the auction in *ISO New England* have "settled expectations" and have made arrangements in anticipation of, and that are contingent upon, the existing stated CRF percentages. These arrangements are expressly directed at recovering the capital costs of discrete targeted investments tied to the critical task of system restoration.

Also, similar to the distinction between new and existing non-commercial capacity in *ISO New England*, where the Commission found the distinction was limited to a finite period, the number of existing section 6 Black Start Units will decline to zero over time, as the commitment periods for those existing Black Start Units terminate.<sup>23</sup> Thus, the difference in CRF percentages will be temporary, not a permanent feature of PJM's Black Start program.

Further, as in *Southwest Power Pool*, by retaining the stated CRF percentages in the Tariff for existing section 6 Black Start Units, PJM is "maintain[ing] the expectations" under which the existing section 6 Black Start Units' owners elected to commit their units and incur *additional* Black Start Capital Costs.<sup>24</sup> Black Start Service entails a multi-year commitment, unlike any other service or product in PJM, and, as explained above, Black Start Units are subject to additional NERC requirements, which bring additional risks. Existing Black Start Unit owners weighed the risks and rewards of providing Black Start Service and committed their units in good faith reliance on the stated percentages applicable at the time they made that commitment. If PJM were to change the CRF for

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<sup>21</sup> The *Memphis* clause set forth in Tariff, Part I, section 9, permits PJM to make prospective changes to its Tariff rates, terms, conditions, and charges. *United Gas Pipe Line Co. v. Memphis Light, Gas & Water Div.*, 358 U.S. 103, 110-13 (1958). Like the PJM Tariff, the tariffs of ISO-NE and SPP contain *Memphis* clauses. See *ISO New England Inc. Transmission, Markets and Services Tariff § II.9 Regulatory Filings*; *Southwest Power Pool, Inc. Open Access and Transmission Tariff § 9 Regulatory Filings*. The presence of a *Memphis* clause did not change the Commission analysis in *ISO New England* or *Southwest Power Pool* and should not affect the analysis here.

<sup>22</sup> 918 F.3d at 958.

<sup>23</sup> See April 7 Filing, Attachment B, Affidavit of Thomas Hauske on Behalf of PJM Interconnection, L.L.C. ¶ 8 (explaining there are forty-three existing section 6 Black Start Units, noting that these units have differing commitment periods, but stating that approximately half of these units have a five-year commitment period). Thus, half of the existing section 6 Black Start Units, which will continue to receive the stated CRF percentages, will reach the end of their current commitment period within the next five years, while the other half will reach the end of their commitment periods within the next ten to twenty years, after which there will be no Black Start Units that receive the existing stated CRF percentages.

<sup>24</sup> *Southwest Power Pool* at P 12.

existing section 6 Black Start Units, those existing Black Start Unit owners would not be able to change the commitment they have already made.

With regard to the portion of Question No. 1 asking how PJM's proposed revisions address Commission precedent regarding reductions to stated transmission rates following passage of the Tax Cuts and Jobs Act of 2017 ("TCJA"), citing *Alcoa Power Generating Inc.—Long Sault Division*, 162 FERC ¶ 61,224 (2018) ("*Alcoa*"), PJM notes that not all utilities with stated transmission rates that were subjects of the show cause order in *Alcoa* filed to reduce their stated transmission rates to reflect the lower federal corporate income tax rate. The May 21 Letter does not reference Order No. 864, which required utilities with transmission formula rates to include mechanisms in their formula rates that accurately reflect excess or deficient Accumulated Deferred Income Taxes ("ADIT") in their cost of transmission service following a change in income tax rates.<sup>25</sup> The Commission decided not to require similar changes to stated transmission rates to reflect the impact of TCJA, instead directing utilities with stated transmission rates to address TCJA's impact on ADIT in their next rate case.<sup>26</sup> Here, PJM is not filing a new stated rate case, but rather is maintaining the existing stated CRF percentages for existing Black Start Service providers and filing a formula rate for CRF going forward.

The question of whether the change in the federal tax rate should be applied retrospectively to the existing stated CRF percentages for existing Black Start Service Providers, as some parties have proposed,<sup>27</sup> does not render PJM's proposed prospective Tariff revisions that will apply to new Black Start Service providers unjust and unreasonable. To the extent the Commission sees merit in the arguments of those seeking to apply the tax law changes to existing units, the Commission should, as it did in the show cause orders in *Alcoa*, use FPA section 206 to address this issue. In this way, PJM's need to contract for needed new Black Start Service as a result of announced retirements will not be delayed while the retrospective issue is litigated.

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<sup>25</sup> *Public Utility Transmission Rate Changes to Address Accumulated Deferred Income Taxes*, Order No. 864, 169 FERC ¶ 61,139, at PP 28, 42 (2019), *order on reh'g & clarification*, Order No. 864-A, 171 FERC ¶ 61,033 (2020).

<sup>26</sup> Order No. 864 at PP 86-90.

<sup>27</sup> *PJM Interconnection, L.L.C.*, Comments of the Independent Market Monitor for PJM, Docket No. ER21-1635-000, at 2, 8, 15 (Apr. 29, 2021) ("IMM Comments"); *PJM Interconnection, L.L.C.*, Protest of American Municipal Power, Inc. and Old Dominion Electric Cooperative, Docket No. ER21-1635-000, at 2, 12 (Apr. 28, 2021).

2. **You state that the proposed changes to the commitment period provisions “will apply to Black Start Units that are electing to recover *new or additional* Black Start Capital Costs *on a going-forward basis only*” but that those proposed changes will not affect *existing* Black Start Units that have elected to recover new or additional Black Start Capital Costs prospectively. You similarly state that the proposed formulaic CRF will apply to “Black Start Units that elect to recover Black Start Capital Costs *after the effective date* of these Tariff revisions.”**
  - a. **Please clarify the meaning in the marked tariff of “Black Start Units *selected to provide Black Start Service* prior to June 6, 2021” as it relates to an existing Black Start Unit that requires an incremental capital investment to continue offering Black Start Service after June 6, 2021 and wishes to recover those costs pursuant to Schedule 6A section 6. In your response, please specify whether the rules that would apply to such a Black Start Unit’s incremental capital investment are those under section 6(i) or 6(ii).**

Response

Black Start Units selected to provide Black Start Service prior to June 6, 2021, that elect, *after* June 6, 2021, to make an incremental capital investment to continue offering Black Start Service, and that wish to recover those costs pursuant to Schedule 6A, section 6, shall be subject to the new rules under section 6(ii), including (without limitation) the annually updated formulaic CRF, as to such new investment.

All new rules proposed in the April 7 Filing will apply to these units’ new incremental capital investment. To further clarify, Black Start Capital Costs incurred prior to June 6, 2021 will continue to be recovered for the equipment’s remaining service life using the pre-existing stated CRF percentages, while new, post-June 6, 2021 Black Start Capital Costs will be recovered over the new equipment’s remaining service life using the new formulaic, annually updated CRF.

In addition, if an existing Black Start Unit elects to make incremental capital investment after June 6, 2021, it will be required to commit to providing Black Start Service for the remaining life of the Black Start equipment. In other words, while cost recovery can be parsed for old and new investments, the service commitment cannot. New investments made after the effective date of Tariff, Schedule 6A, section 6(ii)’s service commitment revisions will subject the provider to that new service commitment rule, for the entirety of its service. As a result of this rule, all Black Start Service providers recovering Black Start Capital Costs will eventually be those committed for the remaining life of their Black Start equipment (after all units committed prior to June 6, 2021, have reached the end of their commitment periods).

- b. **Please explain how PJM intends to evaluate requests by existing Black Start Units that require incremental capital investments and whether PJM’s approval of such investments would constitute “select[ion] to provide Black Start Service.” In your response, please address whether such requests would be evaluated using the proposed tariff revisions specifically those applicable to new Black Start Units seeking to make incremental capital investments.**
- c. **To the extent that PJM intends to apply the rules under section 6(i) in such circumstances, please support the proposed distinction between existing Black Start Units that undertake incremental capital investments on or after June 6, 2021 as opposed to new Black Start Units that may be required to make similar incremental capital investments in the future.**

Response

PJM does not intend to apply the rules under section 6(i) to existing Black Start Units that undertake incremental capital investments on or after June 6, 2021. As discussed above, existing Black Start Units that make incremental capital investments after June 6, 2021, will be subject to the rules under section 6(ii).

3. **In your filing, you state that PJM will apply a formulaic process for updating annually the CRF to be used in the Capital Cost Recovery Rate for new Black Start Units, using as inputs to the formula a combination of fixed values and values that will be annually updated pursuant to terms based in PJM’s Business Practice Manuals. You state that PJM Manual 15 will be updated to set forth the details for the CRF calculation formula, components, and assumptions.**
  - a. **Please explain PJM’s rationale for the expression of the CRF formula, either as a fixed value or as an input whose value will be determined pursuant to Manual 15 for each component.**

Response

PJM understands this question to be asking how PJM chose which inputs would be described in Manual 15 as fixed, and which inputs would be described in Manual 15 as changing each year.

PJM chose the annually changing value approach where there is an external, authoritative, publicly available source for such annual changes. Thus, annual changes (if



any) in federal income tax rates and federal depreciation rates<sup>28</sup> are readily available from the U.S. Internal Revenue Service. State income tax rate annual changes (if any) are readily available from each state; PJM will simply average those. The debt interest rate can change each year (from a base set in the after-tax weighted average cost of capital (“ATWACC”) determination in the most recent Reliability Pricing Model quadrennial review) based on whether there has been a change of two percent or more in the Moody’s Utility Index for bonds rated Baa1.

The debt term is similarly determined by reference to another source but is essentially fixed, because it is set as equal to the recovery period from the table set forth in Tariff, Schedule 6A, section 18 that provides the “applicable recovery period” for various “capital improvement lifespans” (“Recovery Period-Lifespan Table”). This results in a CRF percentage calculated for each recovery period in the Recovery Period-Lifespan Table.

The capital structure (50% debt/50% equity) and internal rate of return on equity are fixed, largely because (unlike the other inputs discussed above) there is no clear or simple source for annual updates to those inputs. PJM is therefore setting those at fixed values that can fairly be considered as within a range of reasonableness, taking into account the CONE ATWACC research and discussion in the consultant reports in recent quadrennial reviews. Maintaining these values at set levels also promotes stability and certainty, as they are key parameters Black Start Service providers may take into account when deciding whether to commit to Black Start Service that requires capital investment. To be clear, PJM is not saying that these values will not be changed, only that they are not designed at the outset to change annually.

To the extent this question is asking more broadly about the expression of the CRF formula, PJM proposes to use a standard financial model, as PJM has explained before. However, as also explained before,<sup>29</sup> the results produced by the formula for calculating a CRF provided by the Independent Market Monitor (“IMM”) in its comments filed in this proceeding on April 29, 2021, are nearly identical to the results produced by PJM’s financial model.<sup>30</sup> Therefore, as PJM stated in its May 13 Answer, PJM is amenable, in response to a compliance directive, to including that formula, and the accompanying table of inputs, in Tariff, Schedule 6A, section 18, in the subsection pertaining to compensation

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<sup>28</sup> Depreciation as applicable under the tax code at the date a unit commences providing Black Start Service will be used to calculate the CRF for that unit throughout the unit’s commitment period. Any change in the federal depreciation rates will be used to calculate the CRF percentages for new Black Start Units commencing Black Start Service after that change.

<sup>29</sup> *PJM Interconnection, L.L.C.*, Motion for Leave to Answer and Answer of PJM Interconnection, L.L.C., Docket No. ER21-1635-000, at 3-4 (May 13, 2021) (“May 13 Answer”).

<sup>30</sup> IMM Comments at 16.

for Black Start Units entering Black Start Service after the effective date of the Black Start Filing and seeking new or additional capital cost recovery.<sup>31</sup>

- b. Please describe the sources you intend to use to determine the relevant recovery period and the debt interest rate and support the decision to include these terms in the Business Practice Manuals.**

Response

The relevant recovery period is determined based on the age of the Black Start Unit and currently is expressed in the Recovery Period-Lifespan Table. PJM had proposed to remove that table from the Tariff for new incremental capital investments, but is willing to retain that table (for this purpose) if the Commission directs it.

The debt interest rate is based on the most recent Net CONE quadrennial review ATWACC and modified on annual basis if there is a 2% or greater change in the Moody's Utility Index for bonds rated Baa1.

While PJM has proposed to describe the fixed and annually varying inputs in Manual 15,<sup>32</sup> PJM wishes to make clear that if the Commission determines that approach is not just and reasonable, PJM is agreeable to stating these descriptions in the Tariff. To that end, PJM would describe these fixed and varying inputs in Tariff, Schedule 6A, section 18 as follows:

Capital Recovery Factors are calculated using an economic pro forma calculation for a 100 MW Combustion Turbine with a \$1 million capital investment for a recovery period based on the age of the Black Start unit. The following assumptions are used in the calculation:

- Current federal tax and depreciation rates as established by U.S. Internal Revenue Service;
- An average of the income tax rates for all the states in the PJM Region;
- 50 percent equity for the capital investment necessary to make a unit qualify for Black Start Service;

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<sup>31</sup> May 13 Answer at 4.

<sup>32</sup> Manual 15 is well suited to contain this information as, unlike PJM's other Business Practice Manuals, Manual 15 includes conditions that preclude PJM amendments to Manual 15's contents without stakeholder input and review by the PJM Board of Directors.

- 50 percent debt for the capital investment necessary to make a unit qualify for Black Start Service;
- Debt interest rate based on the most recent Net CONE quadrennial review after-tax weighted average cost of capital (ATWACC) and modified on annual basis by a two percent or greater change in the Moody Utility Index for bonds rated Baa1;
  - This interest rate will be updated during the Net CONE quadrennial review
  - If the two-year change in the Moody Utility Index for bonds rated Baa1 is more than two percent, this change will be added to the interest rate used in the most recent Net CONE quadrennial review and used for the current year's interest rate
- Debt term equal to the recovery period; and
- An after tax internal rate of return on equity of 12 percent.

**c. Please explain how stakeholders will be able to understand, verify, and contest the annual CRF calculations.**

Response

The formula for the calculation and the inputs to the calculation are specified in the Tariff or in Manual 15, with the sources specified in Manual 15 and publicly available. In addition, the proposed revisions to Tariff, Schedule 6A, section 18 specify the date each year by which PJM will determine the CRF and post the CRF on the PJM website.

PJM is amenable to revising the CRF determination and posting dates to make them a month earlier (to provide additional time for interested parties to verify and potentially contest the annual calculation) and to add a date by which stakeholders can contest the annual calculated CRF, before the CRF is applied in the calculation of Black Start Unit owners' revenue requirements. Specifically, PJM would add to Tariff, Schedule 6A the following dates:

|                                    |          |
|------------------------------------|----------|
| PJM determines annual CRF inputs   | March 1  |
| PJM posts annual CRF               | March 31 |
| Deadline for contesting annual CRF | April 15 |
| Annual CRF in effect               | June 1   |

### III. CONCLUSION

As directed, a copy of this filing will be electronically delivered to John C. Miller. Please contact any of the undersigned if you require additional information.

Respectfully submitted,

Craig Glazer  
Vice President–Federal Government Policy  
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**Attorneys for  
PJM Interconnection, L.L.C.**

cc: John C. Miller

**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 Washington, D.C., this 11th day of June 2021.

*/s/ Wendy B. Warren*  
Wendy B. Warren