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May 27, 2020

**VIA ELECTRONIC MAIL**

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**Re: End of Life (EOL) Conditions and Replacement Projects**

Dear Stakeholders:

Thank you for your letter of May 12<sup>th</sup> presenting your concerns and vision regarding the management of end of life conditions and replacement projects. Thank you also for sharing your proposal and Operating Agreement changes. The PJM Board of Managers appreciates the significant time and effort expended by stakeholders in considering these issues.

The PJM Board has been aware of, and engaged on, the issues surrounding investment in Supplemental Projects, including end of life condition assessments and replacement projects. Indeed, the PJM Board has been closely involved with the issues surrounding Supplemental Projects since 2016, including the prior senior task force and the proceedings before the Federal Energy Regulatory Commission.

Such matters are regularly addressed before the Board Reliability Committee (recently rechartered as the Board Reliability & Security Committee) that has been delegated primary responsibility for these topics, and are regularly reported to the full Board. As stated in the PJM Board letter cited in your correspondence, the PJM Board views the execution of its responsibilities in regional planning as requiring the proper exercise of its authority, appropriate transparency, and a commitment to a non-discriminatory independent process, including the consideration of competitive solutions where appropriate.<sup>1</sup> As noted therein, the PJM Board believes that, in some circumstances, PJM may be in the best position to determine the appropriate regional solution to replace a facility that has been identified as nearing its end of life.

PJM's end of life solution package presented at the recent meetings of the Markets & Reliability Committee appropriately applies PJM's authority. Specifically, the PJM Board supports the conclusion that an appropriate exercise of PJM's regional planning authority is to identify the intersection of potential end of life conditions with regional planning needs, and to identify and plan the cost-effective and efficient regional solution, utilizing a competitive window process where appropriate. The PJM end of life solution package takes a reasonable approach that (i) reflects the guidance provided by FERC in its orders, (ii) respects the authorities defined within the governing documents, and (iii) enhances the existing PJM's Regional Transmission Expansion Plan (RTEP) process. PJM has prepared a more detailed response and feedback to your proposed Operating Agreement revisions, and the PJM Board is providing that feedback as part of its response and its comments on the proposed Operating Agreement revisions.

These are complicated issues and it is apparent that there is not an alignment among the stakeholders and many of the Transmission Owners who are parties to the Consolidated Transmission Owners Agreement. We expect that these issues will be presented to the Commission for resolution in the near future. The PJM Board recognizes its responsibility to ensure that PJM is fulfilling its role as the independent regional planner, maintaining compliance with its governing agreements and system reliability into the future.

Sincerely,

*Dean Oskvig*

Dean Oskvig  
Chair of the Board Reliability & Security Committee

Attachment

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<sup>1</sup> See the October 4, 2019 Letter to the PJM Members Committee from Dean Oskvig, Chair-Board Reliability Committee (available at: <https://www.pjm.com/-/media/about-pjm/who-we-are/public-disclosures/20191004-pjm-board-reliability-committee-chair-dean-oskvig-regarding-supplemental-projects.ashx?a=en>).

## Attachment

### **Comments on the Stakeholder Proposed Operating Agreement Revisions Provided May 12th**

In your letter, you inquire how PJM, as the independent regional transmission organization (RTO), will carry out its regional planning functions in planning the “Grid of the Future.” In the relatively narrow context of end of life replacement projects, this question cannot be addressed without first considering PJM’s role as the regional planner and its core functions.

PJM’s primary planning responsibility is to provide for the safe and reliable operation of the transmission system. In addition to compliance with reliability standards, PJM’s regional planning in this context means planning to serve the native load on PJM’s system, as well as any other firm transmission service obligations. PJM’s RTEP process was designed to ensure that the *expansion* of the transmission system to deliver power to its customers occurs in an efficient, reliable, and non-discriminatory manner. Indeed, a principal focus of PJM’s RTEP is ensuring that the needs of municipalities, cooperatives, and other transmission-dependent utilities are considered on a level playing field with the needs of the larger investor-owned utilities. PJM’s RTEP process has been a tremendous success in this regard.

In ensuring non-discriminatory open access transmission service, PJM must plan for new transmission service requests. Attendant to that obligation, and as part of its commitment to ensure a robust, competitive, and non-discriminatory power market, PJM is charged with the planning associated with the processing of generator (and merchant transmission) interconnection service requests. Finally, among other things, PJM is also charged with enabling market-driven expansions to prevent and relieve congestion, accommodating state-agreement projects, and interregional planning. These regional planning responsibilities provide PJM with the opportunity to utilize the economy of scale provided by PJM’s large regional footprint, leading to more efficient and cost-effective transmission planning. These are the nature of the “planning” responsibilities conferred to PJM. But PJM did not assume all of the Transmission Owner operation, maintenance or planning responsibilities – and it is the interplay of PJM’s regional transmission planning responsibilities and the Transmission Owner reserved responsibilities that make these issues so complex.

#### ***I. PJM’s Planning Authority as the Independent Regional Planner***

PJM’s regional planning role is partially defined in the FERC’s regulations for RTOs,<sup>2</sup> in the Operating Agreement,<sup>3</sup> and in the Consolidated Transmission Owners Agreement (CTOA) wherein the PJM Transmission Owners transfer to PJM the responsibility to prepare a regional transmission expansion plan.<sup>4</sup> The RTEP is defined in the Operating Agreement as the plan prepared by PJM for the expansion

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<sup>2</sup> 18 C.F.R. § 35.34(7)(k)(7) (2019).

<sup>3</sup> See Amended and Restated Operating Agreement of PJM Interconnection, L.L.C. (Operating Agreement), Schedule 6.

<sup>4</sup> Consolidated Transmission Owners Agreement (CTOA), Rate Schedule FERC No. 42, section 4.1.4.

and enhancement of the transmission system *to meet the demands for firm transmission service* within its region.<sup>5</sup>

PJM's role has limitations. The Transmission Owners were explicit in the CTOA that any rights not specifically transferred by the Transmission Owners to PJM therein were expressly reserved by the Transmission Owners.<sup>6</sup> Thus, PJM's role is bounded by numerous regulatory constraints and contractual obligations that define the limits of its authority over the planning process.

## **II. Determinations of Transmission Asset Condition**

We are appreciative that the stakeholder proposal recognizes that PJM does not have the information or authority to make assessments or determinations regarding asset condition. The physical operation and maintenance of all transmission facilities was reserved to the Transmission Owners, and clear obligations were placed upon the Transmission Owners to perform these responsibilities in accordance with Good Utility Practice.<sup>7</sup> All physical inspections, condition assessments, and asset condition determinations are the domain of the Transmission Owners. Importantly, the Transmission Owners explicitly reserved the right to determine when their facilities have reached their end of useful life.<sup>8</sup>

## **III. Criteria Used to Assess End of Life Conditions**

Notwithstanding the foregoing, PJM is supportive of transparency regarding such end of life determinations and replacement projects. Currently, a significant amount of transparency is provided regarding end of life replacement project determinations through the recently adopted Attachment M-3 process for Supplemental Projects, including a review of the assumptions, the need, and the solution.<sup>9</sup> Indeed, in the California orders discussed further herein, FERC observed that, to the extent Supplemental Projects included projects that were identified as "asset management activities," the level of transparency that was being provided in PJM for Supplemental Projects through the Attachment M-3 process exceeded that which would be required by FERC for the California utilities.<sup>10</sup> To the extent that certain end of life replacement projects are addressed through a Transmission Owner's FERC Form 715 criteria, those projects are addressed as baseline projects under PJM's Operating Agreement with appropriate transparency.

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<sup>5</sup> Operating Agreement, Schedule 6, section 1.1 (as well as to support competition). Hand-in-hand with preparing the RTEP is the responsibility to include in the models used by PJM all system changes to ensure open, non-discriminatory access to the transmission system. And it is important that those models be as accurate as reasonably possible to support the processing of transmission service requests, including generator and merchant transmission interconnection service requests.

<sup>6</sup> CTOA, section 5.6.

<sup>7</sup> CTOA, section 4.5; *see also* CTOA, section 4.1.4.

<sup>8</sup> CTOA, sections 4.4 and 5.2.

<sup>9</sup> Tariff, Attachment M-3, sections 2 and 3.

<sup>10</sup> *Southern Cal. Edison Co., et al.*, 164 FERC ¶ 61,160 (2018) (SoCal Edison Order), *order on reh'g*, 168 FERC ¶ 61,170 (Sept. 19, 2019) (SoCal Edison Order on Rehearing); *Cal. Pub. Util. Comm'n v. Pac. Gas & Elec. Co.*, 164 FERC ¶ 61,161 (2018) (PG&E Order), *order on reh'g*, 168 FERC ¶ 61,171 (Sept. 19, 2019) (PG&E Order on Rehearing) (collectively, the California Orders).

However, we believe more could be done with respect to the Transmission Owners providing transparency regarding how they assess their assets and make end of life determinations. Thus, PJM is supportive of a requirement that each Transmission Owner make available, in writing, its criteria for making an end of life determination and, that each Transmission Owner review such criteria surrounding such determinations annually. PJM should not assume the role of specifying what the criteria should be, or otherwise providing guidelines to the Transmission Owners.

It is a legitimate expansion of PJM's authority to require that the Transmission Owners clearly delineate their end of life planning criteria to identify end of life needs. Specifically, in connection with its preparation of the RTEP, PJM has the general authority to request planning criteria from the Transmission Owners. Under the terms of the CTOA, the Transmission Owners have explicitly agreed to provide information reasonably requested by PJM to prepare the RTEP and to otherwise cooperate with PJM in the preparation of the RTEP.<sup>11</sup> This transfer of authority was memorialized in the Operating Agreement. Specifically, Schedule 6 of the Operating Agreement requires the Transmission Owners to provide to PJM in the form and manner specified by PJM all criteria, assumptions and models used by the Transmission Owners, including those used to develop Supplemental Projects.<sup>12</sup>

Additionally, FERC made clear in its recent Show Cause Orders relative to the Transmission Owners' Supplemental Projects that, while the Transmission Owners' Tariff, Attachment M-3 process and the PJM Operating Agreement are adequate to ensure compliance with Order No. 890's transparency requirements, the Transmission Owners must make available the criteria guiding their decisions.<sup>13</sup> Thus, while PJM does not want the role of specifying what the criteria should be, nor did FERC assign that responsibility to PJM, PJM has the authority to require that the Transmission Owners provide their criteria and explain their programs.

#### **IV. Advance Notice of End of Life Candidates**

Although PJM does have the ability to look further forward, given the lack of material load growth, PJM plans system improvements five years forward and uses the resulting five-year model generated from its RTEP process to evaluate service requests and any resulting necessary improvements. Thus, requiring each Transmission Owner to provide advance notice of its potential end of life facilities (i.e., "candidates") five years forward at the start of an annual RTEP cycle is appropriate because it aligns with PJM's planning process. There is little value to PJM to attempt to identify end of life facilities ten years forward because of the uncertainty of any determination made that far ahead and, such an advance notice would not be utilized in PJM's five-year forward planning process. Furthermore, any requirement for such notice, even at the five year mark, must provide the Transmission Owners with the flexibility to add projects, delay retirements

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<sup>11</sup> CTOA, section 4.1.4.

<sup>12</sup> Amended and Restated Operating Agreement of PJM Interconnection, L.L.C. Schedule 6, section 1.5.4(a). Moreover, the Operating Agreement, Schedule 6, section 1.5.4(e) requires PJM to provide access through its website to all of the Transmission Owner's criteria, assumptions and models used by the Transmission Owners in their internal planning processes, including the development of Supplemental Projects.

<sup>13</sup> *Monongahela Power Co., et al.*, 164 FERC ¶ 61,217 at P 30 (Sept. 26, 2018) (September 26 Order on Rehearing and Compliance).

or replacements, or otherwise adjust course due to changes in condition assessments, unforeseen conditions, changes in circumstances (e.g., weather/wind damage), or other developments. And Transmission Owners also need the flexibility to both expedite replacement projects to avoid run-to-failure scenarios and to delay replacement projects when condition assessments indicate that the continued operation of the facilities can be done without jeopardizing reliability.

#### **V. End of Life Replacement Projects – Form 715**

Under the PJM RTEP planning processes, the determination of when and how to replace facilities at their end of useful life can occur in two ways.<sup>14</sup> One occurs when a Transmission Owner chooses to include end of life replacement criteria in its FERC Form 715.<sup>15</sup> Under the Operating Agreement, because FERC Form 715 is designed to set forth a Transmission Owner's *planning* criteria, PJM includes projects identified by Transmission Owners as Form 715 projects in its planning process and, historically, has treated projects stemming from Form No. 715 criteria as baseline reliability projects.<sup>16</sup> And, as a result of a recent order issued by FERC,<sup>17</sup> PJM will have a role in planning Form 715 projects, and such projects may be subject to its competitive planning process (unless certain exemptions apply) and to regional cost-allocation. It is not apparent that any changes are needed or appropriate for such Form 715 projects.

#### **VI. End of Life Replacement Projects – Supplemental Projects**

The other category or type of end of life replacement projects can be found in Supplemental Projects. Supplemental Projects are defined in the Operating Agreement as any transmission expansion or enhancement that is not required for compliance with the PJM planning criteria. While the placement of this definition in the Operating Agreement may suggest an ability for the stakeholders to modify this definition, the definition is closely tied back to the rights transferred to PJM and to the rights reserved by the Transmission Owners under the CTOA. Indeed, this definition has served as the foundation for the boundary between PJM's regional planning role and the individual Transmission Owners' reserved

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<sup>14</sup> End of life replacement projects initiated by a Transmission Owner that do not enhance or expand the transmission system could be conducted outside of both the Form No. 715 and Supplemental Project processes.

<sup>15</sup> FERC Form 715 requires "submission of transmission planning reliability criteria that the Transmission Owner uses to assess and test the strength and limits of its transmission system."

<sup>16</sup> See *PJM Interconnection, L.L.C.*, 171 FERC ¶ 61,013 (Apr. 3, 2020) (Order on Compliance supporting PJM's reassignment of Form 715 projects using reliability cost allocation methodology)..

<sup>17</sup> See *PJM Interconnection, L.L.C.*, 170 FERC ¶ 61,049 at P 2 (Jan. 23, 2020) (accepting PJM's revisions to its Operating Agreement to eliminate the exemption from the competitive proposal window process for transmission projects addressing Form 715 criteria); see also *PJM Interconnection, L.L.C.*, 168 FERC ¶ 61,133 at P 34 (August 30, 2019) (accepting PJM Transmission Owners removal of the Form 715 cost allocation methodology from Tariff, Schedule 12).

authority. This authority was recognized in Order No. 1000,<sup>18</sup> as well the Commission's Orders relative to the creation of the Transmission Owners' Attachment M-3 process.<sup>19</sup> While there may be a desire to broaden the category of projects under PJM's authority by creating a new category of projects and thus effectively amending the definition of Supplemental Projects, such an amendment is beyond the scope of the authority transferred to PJM by the PJM Transmission Owners.<sup>20</sup> Moreover, these issues were recently litigated before FERC in the Attachment M-3 dockets and FERC rejected the attempts to move the planning of Supplemental Projects under PJM's RTEP processes and determined that the Attachment M-3 process provides the appropriate level of transparency to satisfy Order No. 890 requirements.<sup>21</sup> In so doing, FERC reaffirmed Supplemental Projects as being Transmission Owner directed.

## **VII. Asset Management Activities**

In addition, the two California Orders involving California utilities provide precedential guidance regarding the boundary between asset management activities and transmission planning activities subject to the Order No. 890 planning requirements.<sup>22</sup> In those orders, FERC offered clarity as to the meaning and characterization of asset management activities and projects. Importantly, FERC determined that asset management activities are not "planning" so long as any capacity increase is only incidental to the replacement project.<sup>23</sup> Some stakeholders disagree as to the relevance of the California orders to the PJM paradigm, but we believe that FERC was simply observing that Supplemental Projects is a broader

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<sup>18</sup> *Transmission Planning & Cost Allocation by Transmission Owning & Operating Pub. Utils.*, Order No. 1000, 136 FERC ¶ 61,051 at P 64 (2011), *order on reh'g*, Order No. 1000-A, 139 FERC ¶ 61,132, *order on reh'g and clarification*, Order No. 1000-B, 141 FERC ¶ 61,044 (2012), *aff'd sub nom. S.C. Pub. Serv. Auth. v. FERC*, 762 F.3d 41 (D.C. Cir. 2014) clarifying that:

In some regions, transmission facilities not selected for purposes of regional or interregional cost allocation nonetheless may be in a regional transmission plan for informational purposes, and the presence of such transmission projects in the regional transmission plan does not necessarily indicate an evaluation whether such transmission facilities are more efficient or cost-effective solutions to a regional transmission need . . . [and] we do not intend to disturb regional practices with regard to other transmission facilities that also may be in the regional transmission plan.

See also *PJM Interconnection, L.L.C.*, 142 FERC ¶ 61,214 at P 65 (Mar. 22, 2013) (accepting PJM's Order No. 1000 Compliance Filing, including: "Supplemental Projects, which are projects that are not identified by PJM as necessary for reliability or economic reasons, but may address local planning criteria or public policy requirements . . . that may be included in the RTEP for information purposes and its costs are not eligible for cost allocation under Schedule 12.").

<sup>19</sup> See *Monongahela Power Co.*, 162 FERC ¶ 61,129 (Feb. 15, 2018) (accepting in part and requiring further compliance filing relative to Tariff, Attachment M-3 provision); see also September 26 Order on Rehearing and Compliance at P 37 (finding Attachment M-3 and the Operating Agreement, as revised, adequate to ensure compliance with Order No. 890).

<sup>20</sup> Arguments that Transmission Facilities turned over to PJM's operational control are subject to PJM's planning authority are without basis. Under the CTOA, the Transmission Owners explicitly separated the authority transferred to PJM relative to the operational control of their assets and the authority transferred to PJM relative to planning the transmission system.

<sup>21</sup> See, e.g., *Appalachian Power Co., et al.*, 170 FERC ¶ 61,196 at P 59 (Mar. 17, 2020) (citing to September 26 Order on Rehearing and Compliance at PP 13, 14, and 22 stating "[i]n *Monongahela Power Co.*, the Commission made clear that the PJM Transmission Owners retain responsibility for planning Supplemental Projects, and therefore 'retain the filing rights to make modifications to [the Supplemental Project planning] provisions' in the Tariff."

<sup>22</sup> See SoCal Edison Order at P 55 and PG&E Order at P 37:

Whether or not other transmission planning regions are considering asset management projects and activities through their regional transmission planning process does not, in and of itself, determine whether Order No. 890 requires them to do so.

<sup>23</sup> In the stakeholder process, PJM proposed to clarify the definition of incidental: "*Incidental expansion is defined as those achieved by advancements in technology and/or replacements consistent with current TO design standards, industry standards, codes, laws or regulations.*"

category than asset management activities, including replacement projects that increase the capacity of the grid beyond an incidental increase.<sup>24</sup> The question before FERC in the show cause orders related to Attachment M-3 was simply whether Supplemental Projects were being treated consistent with PJM's Order No. 890-compliant transmission planning process.<sup>25</sup> As recognized by FERC in the *CPUC v. PG&E* orders, to the extent PJM's Supplemental Projects include asset management activities, then the Attachment M-3 process actually provides *greater* transparency than what FERC ultimately required in California for asset management activities.<sup>26</sup>

### **VIII. Intersection of Supplemental Projects and Regional Needs**

PJM's role in regional planning and the intersection of end of life replacement facilities can be further clarified. Specifically, PJM has proposed reviewing the five-year forward candidate list and comparing that list with any identified regional needs. Where there is an intersection of a candidate with a regional need, it is appropriate for PJM, as the regional planner, to pursue the more efficient and cost-effective solution for the regional need, which may include an end-of-life replacement project. In those cases where there is an intersection, the solution may be different than a Transmission Owner-identified replacement project and, accordingly, would be part of the baseline regional solution.

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<sup>24</sup> In the California Orders, the Commission observed that PJM's Supplemental Projects provided greater transparency than was required under Order No.890. See SoCal Edison Order on Rehearing at P 57 and PG&E Order on Rehearing at P 57.

<sup>25</sup> See *Southern California Edison Co.*, 168 FERC ¶ 61,170 at P 54 (Sept. 19, 2019).

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