February 11, 2020

VIA ELECTRONIC DELIVERY

PJM Board of Managers

c/o Ake Almgren, Ph.D., Chairman
2750 Monroe Boulevard
Audubon, PA 19403

Attention: Dr. Almgren and PJM Board of Managers:


Dear PJM Board of Managers:

Ameren Transmission Company of Illinois (ATXI) writes today to express its concerns regarding the 2018/19 RTEP Long Term Proposal Window and, more specifically, the process utilized by PJM staff in the evaluation, selection and recommendation of the above referenced proposal. As documented below, due to multiple failures in the PJM process, the PJM Board of Managers should reconsider its decision to include Proposal HL_622 in the Regional Transmission Expansion Plan ("RTEP") and should direct PJM staff to objectively and transparently re-evaluate HL_469 and HL_622. ATXI does not make this request lightly, but believes it is necessary to ensure that the process is just and reasonable and that customers receive the benefit of the process which is supposed to result in the more efficient and/or cost-effective project being selected. On two separate prior occasions\(^1\), ATXI expressed its concerns to the PJM Staff and/or the Board of Managers regarding the process that PJM staff applied to evaluate proposals. ATXI's concerns have not been addressed and are two-fold. There is a lack of specificity in the PJM Operating Agreement that mystifies the basis of decisions, and discussions and decisions on the merits of a proposal are not transparent and thus not consistent with the Operating Manual. The Operating Manual clearly states that "Stakeholders will be

\(^1\) The 2014 30 Day Reliability Window No. 2 and the 2016/17 Long-Term Market Efficiency Window.
provided the opportunity to comment and ask questions about all aspects of the proposal review process and recommended projects." If you are unwilling to reconsider your decision to include Proposal HL_622 in the RTEP, ATXI requests that revisions be made to the PJM Operating Agreement and Operating Manual to address the concerns raised. Under Order No. 1000, the Federal Energy Regulatory Commission requires "each public utility transmission provider to amend its OATT to describe a transparent and not unduly discriminatory process for evaluating whether to select a proposed transmission facility in the regional transmission plan for purposes of cost allocation. This process must comply with the Order No. 890 transmission planning principles, ensuring transparency, and the opportunity for stakeholder coordination. The evaluation process must culminate in a determination that is sufficiently detailed for Stakeholders to understand why a particular transmission project was selected or not selected in the regional transmission plan for purposes of cost allocation."\(^2\)

Based on ATXI's recent experience with the PJM process, ATXI questions whether PJM staff is implementing the requirements of its Operating Agreement and Manuals consistent with the spirit and intent of Order Nos. 890 and 1000. ATXI appreciates that the Operating Agreement provides PJM with considerable discretion. Section 1.5.8(e) of Schedule 6 of the PJM Operating Agreement requires consideration of the listed criteria only "if applicable" and provides for "other factors" to be considered. However, transparency is necessary when there is this level of discretion, and PJM staff appear to have forgotten that. Section 1.58(d) of Schedule 6 of the PJM Operating Agreement states the following regarding the process for posting and review of projects, for potential inclusion in the Recommended Transmission Expansion Plan:

"The Office of the Interconnection shall review all proposals submitted during a proposal window and determine and present to the Transmission Expansion Advisory Committee the proposals that merit further consideration for inclusion in the recommended plan. In making this determination, the Office of the Interconnection shall consider the criteria set forth in the Operating Agreement, Schedule 6, sections 1.5.8(e) and 1.5.8(f). The Office of the Interconnection shall post on the PJM website and present to the Transmission Expansion Advisory Committee for review and comment descriptions of the proposed enhancements and expansions, including any proposed Supplemental Projects or state public policy projects identified by a state(s). Based on review and comment by the Transmission Expansion Advisory Committee, the Office of the Interconnection may, if necessary conduct further study and evaluation. The Office of the Interconnection shall post on the PJM website and present to the Transmission Expansion Advisory Committee the revised enhancements and expansions for review and comment. After consultation with the Transmission Expansion Advisory Committee, the Office of the Interconnection shall determine the more efficient or cost-effective transmission enhancements and

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\(^2\) Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities, Order No. 1000, FERC Stats. & Regs. ¶ 31,323 (2011), order on reh'g, Order No. 1000-A, 139 FERC ¶ 61,132, order on reh'g, Order No. 1000-B, 141 FERC ¶ 61,044 (2012).
expansions for inclusion in the recommended plan consistent with this Operating Agreement, Schedule 6."³

Unlike section 1.5.8(e) of Schedule 6 of the Operating Agreement, Section 8.1.2 of PJM Operating Manual 14f is more specific and states the following action may be taken as part of a Detailed Feasibility Review which is also referred to as a Constructability Review.

"PJM may perform an in-depth review of the constructability of the project. This review will typically include an evaluation of project scope, complexity and constructability factors that impact the project cost and/or schedule including but not limited to right-of-way acquisition, land acquisition, siting and permitting requirements, project complexity, project coordination complexity, outage coordination and project schedule."⁴

However, here too, PJM staff failed to communicate and provide information in a transparent manner, calling into question the basis for its recommendation to the PJM Board of Managers.

In short, the process leading to the selection of Proposal HL_622 over Proposal HL_469 was neither consistent with the transparency requirements of Order Nos. 890 and 1000 nor compliant with the PJM Operating Agreement and Operating Manuals. PJM staff did not provide necessary details in the November TEAC to Stakeholders explaining why the Detailed Feasibility Review that was performed on Proposal HL_469 resulted in a 53.7% increase to the estimated cost of Proposal HL_469, causing the benefit-to-cost ("B/C") ratio for the project to fall below the B/C ratio for Proposal HL_622. This was a significant factor in PJM staff's decision to recommend Proposal HL_622 to the PJM Board of Managers. Had PJM staff been transparent in the basis for the increased costs and provided the details supporting its decision, ATXI (and potentially other Stakeholders) would have had the opportunity to contest the basis for the additional costs and PJM staff's conclusion. However, as discussed in more detail below, PJM failed to provide that information in a timely manner that allowed for review and discussion in the TEAC and before PJM staff presented their recommendation for approval to the PJM Board of Managers.

Below is a timeline of the significant events that took place over the PJM evaluation period.

**April 11, 2019 TEAC:** PJM staff presented a list of the proposals submitted to address the Hunterstown – Lincoln congestion along with their estimated costs. Proposal HL_469 had the lowest cost estimate.

**July 11, 2019 TEAC:** PJM staff presented preliminary B/C ratios for each proposal to address the Hunterstown – Lincoln congestion. PJM staff advised that Proposal HL_469

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had the highest B/C ratio but noted that Cost and Detailed Feasibility Reviews by PJM were pending.

**July 26, 2019:** At PJM staff's request, ATXI and the vendor participated in a conference call to discuss the details of Proposal HL_469. During this discussion, PJM staff inquired whether circuit breakers were required for this application. In response, the vendor explained that the SmartWires™ device did not require the addition of circuit breakers for protection purposes.

**October 17, 2019 TEAC:** PJM gave a presentation entitled "Market Efficiency Presentation". Page 16 of the presentation ("Status Update: Hunterstown – Lincoln") stated:

- **Preliminary results presented at July 2019 TEAC**
  - Calculated preliminary benefits and determined preliminary B/C ratios

- **Three lower cost proposals fully relieve congestion on the driver with minimal shift in congestion**
  - HL_469: Install SmartWire™ power flow control series device
  - HL_622: Rebuild the Hunterstown-Lincoln 115 kV line
  - HL_960: Build new Hunterstown-Lincoln 115 kV line

- **Proposals currently under Cost/Constructability Analysis**

**November 14, 2019 TEAC:** PJM gave a presentation entitled "Market Efficiency Presentation". On slide 11 ("Hunterstown-Lincoln Proposal Top5 Results"), PJM staff presented project costs and B/C ratios that were adjusted per the results of the completed Cost and Detailed Feasibility Review. On slide 12 ("SmartValve™ vs. Reconductoring Proposal"), PJM staff presented a comparison of selected aspects of the SmartValve Proposal (HL_469) versus the Reconductoring Proposal (HL_622). The comments on this slide included:

- **The SmartValve Solution presented greenfield, permitting risk related to new property for substation due to location near historically sensitive area.**
- **Real-time operations would not be able to fully utilize the dynamic capabilities of this device without additional changes.**
- **May require updating Day-Ahead, Real-Time, SCADA systems to support full operational range of this type of device.**
- **Limited experience with SmartValve device.**

With respect to the first bullet, the permitting risk is not significant because the proposal involves the purchase of one acre of land that could be located at any point along the 2.6 mile circuit. Similarly, bullets 2 and 3 do not represent disadvantages versus the proposed re-conductor solution (Proposal HL_622); they simply acknowledge that additional changes would be required to realize some of the additional benefits that this technology could offer. Finally, the last bullet ignores the fact that the vendor has numerous
commercial applications in service throughout the United States under the control of various RTOs and ISOs and ATXI and the vendor for SmartValve offered this information to PJM staff to demonstrate the reliability of the technology.

While PJM staff provided these conclusions from the Detailed Feasibility Review, they did not provide any explanation to Stakeholders why the costs for Proposal HL_469 had been increased from $4.65 million to $7.15 million; an increase of over 50%. When asked by Stakeholders, PJM staff said they were not prepared to discuss details concerning the Cost and Detailed Feasibility Review and they also avoided answering any questions as to why this review led to a 53.7% cost increase for Proposal HL_469. Finally, Slide 13 of the presentation states:

- **PJM staff will recommend proposal HL_622 to the PJM Board**
  - Proposal will be presented at the December Board meeting."

PJM staff did not clarify at the November TEAC that the December Board meeting would occur before the December TEAC meeting. As a result, Stakeholders were not made aware that they would not be provided any further opportunity to comment on PJM staff's recommendations before they were submitted and approved by the PJM Board of Managers.

**November 21, 2019:** At ATXI's request, PJM staff held a conference call with ATXI to review the results of the Cost and Detailed Feasibility Review for Proposal HL_469. During this discussion PJM staff advised that two breakers had been added to the scope of the project. Further, the addition of these two breakers created a need for an expanded control house and additional relay upgrades. Although PJM staff confirmed that there was nothing in their Tariff or Operating Procedures that specifically required the inclusion of breakers, they stated that, 'in their judgement, breakers were required to connect to the PJM system and provide for a point of demarcation of ownership.' ATXI made it very clear that it disagreed with this conclusion, which significantly raised the cost of the ATXI proposal, for a multitude of reasons not the least of which was that ATXI had provided disconnecting means as a point of demarcation in its proposal. ATXI reiterated its position, originally offered on the July 26th conference call with PJM that breakers were not required for this application and that they provided no reliability or market benefits, and thus should not have been added to the scope of the proposal. PJM staff acknowledged that nothing in the Tariff required the additional equipment. In summary, PJM staff added breakers that: were not technically required, added complexity to the proposed operation, added unnecessary cost, reduced reliability with the addition of elements which themselves may fail, and had no justification to do so. Given these factors, it seems likely that the TEAC community, on behalf of the ratepayers who were saddled with increased costs, would have been interested in the decision to choose the more expensive proposal when there was an innovative technology solution which was available, provided long-term flexibility for operations not just during periods of congestion, and could be applied locally without the need for changes to the systems through which PJM operates.
December 11, 2019: ATXI submits a letter to the TEAC raising its concerns about the additional costs that were inappropriately added to Proposal HL_469.

December 12, 2019 TEAC: PJM gave a presentation entitled "Market Efficiency Update". On slide 3 of the presentation (slide titled "Conclusion of 2018/19 Long-Term Window"), PJM staff advised that "Proposal HL_622, baseline b3145, rebuild the Hunterstown-Lincoln 115 kV line, was approved by the PJM Board of Managers for inclusion in the RTEP."

As stated in PJM Operating Manual 14f, "PJM will present to the TEAC the findings from the technical analysis performed and any other constructability or independent evaluations of the proposed alternatives and the recommended solutions. As part of the project recommendation process, PJM will present a preliminary recommendation at a TEAC meeting and then a final recommendation at a subsequent TEAC meeting. Stakeholders will be provided the opportunity to comment and ask questions about all aspects of the proposal review process and recommended projects. Subsequently, PJM will formalize the recommendation of the projects presented to the PJM Board of Managers for ultimate approval."\(^5\)

As demonstrated above, PJM did not follow this process. PJM staff had seven months to perform the Detailed Feasibility Review and thus had adequate time to review these results with Stakeholders. Instead of using this time, PJM, over the course of less than one month presented the result to stakeholders without discussing any details and then presented their recommendation to the PJM Board of Managers, which approved Proposal HL_622. PJM staff did not follow the procedures, as defined in the Operating Manuals. PJM staff did not present a preliminary recommendation at the October TEAC meeting. Their first and only recommendation was presented at the November TEAC meeting. At the December TEAC meeting, PJM staff advised that their recommendation had already been submitted and approved by the PJM Board of Managers. Second, PJM staff did not provide Stakeholders the opportunity to ask questions about important aspects of the Detailed Feasibility Review that led to the material changes in cost and was a key driver behind the recommendation of Proposal HL_622 over Proposal HL_469. As noted above, in the November TEAC meeting (when Proposal HL_622 was first recommended), PJM staff said to Stakeholders that they were not ready to discuss the details of the cost and constructability review in general and they specifically could not provide any details as to why this review led to the cost increase for Proposal HL_469.' ATXI questions how the actions of PJM staff are in any way consistent with the statement from the Operating Manual that "Stakeholders will be provided the opportunity to comment and ask questions about all aspects of the proposal review process and recommended projects."

In conclusion, for the reasons discussed above, ATXI does not believe that the PJM 2018/19 Long Term Proposal Window was conducted in accordance with the spirit of Order 1000, nor in accordance with the PJM Operating Agreement and Operating Manual 14f. Further, this resulting outcome flies in the face of PJM’s stated goal to leverage new technology to improve efficiencies for customers. Given this additional information, ATXI respectfully requests that the PJM Board of Managers reconsider their previous decision and select Proposal HL_469 as it provides the best value to customers when unwarranted equipment costs are not included in the scope of the proposal. If the PJM Board is unwilling to reconsider their previous recommendation in light of the comments presented in this letter, ATXI would at a minimum request that the PJM Operating Agreement be revised to: a) specifically reference applicable Operating Manuals; or b) move language in the manuals over to the Operating Manuals. The end result of either action would be to make the Operating Agreement more specifically describe the proposal evaluation process to be followed by PJM staff and would be more closely aligned with the principles of Order 1000.

Regards,

Ameren Transmission Company of Illinois

Jeffrey V. Hackman
Senior Director – Transmission Operations, Technical Services, Business Development

CC: Chairman Neil Chatterjee, FERC
Commissioner Richard Glick, FERC
Commissioner Bernard McNamee, FERC
Maria Farinella, Chief of Staff, FERC
James Danly, General Counsel, FERC
David Morenoff, Deputy General Counsel, FERC
Anna Cochrane, Director, Office of Energy Market Regulation, FERC