RMI, Gabel Associates, and Miles Farmer PLLC Comments re: Surplus Interconnection Service Tariff Revisions

Thank you for the opportunity to provide feedback on both PJM's Reliability Resource Initiative (RRI) and proposed changes to surplus interconnection service (SIS). As outlined in our presentation during the PJM Member's Committee meeting on November 21st, 2024,[1] our analyses have shown the high theoretical potential of a workable SIS process to significantly increase the unforced capacity (UCAP) available to PJM to address resource adequacy in a cost-effective and timely manner. With sufficient changes to the relevant language in PJM's tariff and manuals, this opportunity can, in large part, be realized.

Given the time-bound nature of the resource adequacy challenge and the efficiencies that can be gained by adopting existing, already-approved language, **we propose that PJM adopt SIS tariff language mirroring that currently being used in SPP** (see Appendix A). Absent this change, at minimum, PJM must further define and clarify the applicability of "material impacts" to surplus interconnection studies (see Appendix B for suggested language, drawn from the CIR Transfer Efficiency proposal, which has been discussed, vetted, and endorsed by stakeholders in the PC, MC, and MRC).

Because PJM's current manual language interpreting "material impact" excludes entire categories of resources from using surplus interconnection that other RTOs have allowed, adopting the above-proposed language is essential to ensuring that PJM fully enables the SIS pathway to help secure resource adequacy for the region. PJM has noted in several stakeholder presentations regarding the RRI that "we'll take all the megawatts we can get;" leaving this solution off the table would fly in the face of the stated goals driving this intervention. What's more, as awareness of the significant potential for SIS has spread, we are seeing increasing support from both stakeholders and state leaders. For example, Pennsylvania Governor Josh Shapiro expressed support for surplus interconnection in his recent letter to PJM, urging swift adoption of the more build-focused SIS approach taken by neighboring RTOs.[2]

---

[1] RMI, Gabel Associates, and Miles Farmer PLLC. November 21st 2024. Surplus Interconnection Service: The Scale of the Opportunity and the Needed Reforms. https://www.pjm.com/-/media/committees-groups/committees/mc/2024/20241121/20241121-item-04b---6-surplus-interconnection-service---presentation.ashx

[2] Letter from Governor Josh Shapiro to PJM Board Chair and CEO, November 20, 2024

Respectfully submitted,

Katie Siegner
RMI

Sarah Toth Kotwis, PhD
RMI

Miles Farmer
Miles Farmer PLLC

Sarah Yasutake
Gabel Associates

Appendix A: SPP tariff language

36.4 Surplus Interconnection Study

After receiving a valid Surplus Interconnection Study Agreement seeking Surplus Interconnection Service and the requisite deposit set forth in Tariff, Part IV, Subpart A, section 36.1.1B.1.i from the Surplus Interconnection Customer, the Transmission Provider shall conduct a Surplus Interconnection Study.

(1) Scope of Surplus Interconnection Study. A Surplus Interconnection Study shall consist of reactive power, short circuit/fault duty, stability analysis and any other appropriate analyses. Steady-state (thermal/voltage) analyses may be performed as necessary to ensure that all required reliability conditions are studied under off-peak conditions. Off-peak steady state analyses shall be performed to the required level necessary to demonstrate reliable operation of the Surplus Interconnection Service. The Transmission Provider shall use Reasonable Efforts to complete the Surplus Interconnection Study within one hundred eighty (180) days of determination of a valid Surplus Interconnection Service Request pursuant to Tariff, Part IV, Subpart A, section 36.1.1B. If the Transmission Provider is unable to complete the Surplus Interconnection Study within such time period, Transmission Provider shall notify the Surplus Interconnection Customer and provide an estimated completion date and an explanation of the reasons why the additional time is required.

(2) Once the Surplus Interconnection Study is completed and Transmission Provider confirms that (i) no new Network Upgrades are required, or (ii) Network Upgrades are required but they are (a) located at the Point of Interconnection substation and at the same voltage level as the Generating Facility with an effective Interconnection Service Agreement or (b) System Protection Facilities, and such Network Upgrade upgrades can be completed without material adverse impacts on the cost or timing of any Interconnection Requests pending at the time the Surplus Interconnection Service request is submitted, the Transmission Provider shall issue the Surplus Interconnection Study to the Surplus Interconnection Customer. If the Surplus Interconnection Customer is an unaffiliated third party, the Transmission Provider shall issue a Surplus Interconnection Study to the owner of the existing Generating Facility. A revised Interconnection Service Agreement will be prepared and issued to the owner of the existing Generating Facility within sixty (60) days of issuance of the Surplus Interconnection Study including the terms and conditions for Surplus Interconnection Service. Within sixty (60) days of receipt by the owner of the existing Generating Facility of the revised Interconnection Service Agreement, the owner of the existing Generating Facility will execute the revised Interconnection Service Agreement, request dispute resolution or request that the Interconnection Service Agreement be filed unexecuted in accordance with Tariff, Part VI, Subpart A, section 212.4.

(3) If the Transmission Provider determines from the Surplus Interconnection Study that Network Upgrades may be required and (i) such Network Upgrades either (a) are not located at the Point of Interconnection substation and at the same voltage level as the Generating Facility with an effective Interconnection Service Agreement or (b) do not constitute System Protection Facilities, or (ii) such Network Upgrades cannot be completed without material adverse impacts on the cost or timing of any Interconnection Requests pending at the time the Surplus Interconnection Service request is submitted, the Surplus Interconnection Request will be terminated and withdrawn upon issuance of the Surplus Interconnection Study.

Appendix B: Tariff language amended to include definition of material impact standard*

**Drawn from CIR Transfer Efficiency tariff revisions*

36.4 Surplus Interconnection Study

After receiving a valid Surplus Interconnection Study Agreement seeking Surplus Interconnection Service and the requisite deposit set forth in Tariff, Part IV, Subpart A, section 36.1.1B.1.i from the Surplus Interconnection Customer, the Transmission Provider shall conduct a Surplus Interconnection Study.

(1) Scope of Surplus Interconnection Study. A Surplus Interconnection Study shall consist of reactive power, short circuit/fault duty, stability analysis and any other appropriate analyses. Steady-state (thermal/voltage) analyses may be performed as necessary to ensure that all required reliability conditions are studied under off-peak conditions. Off-peak steady state analyses shall be performed to the required level necessary to demonstrate reliable operation of the Surplus Interconnection Service. The Transmission Provider shall use Reasonable Efforts to complete the Surplus Interconnection Study within one hundred eighty (180) days of determination of a valid Surplus Interconnection Service Request pursuant to Tariff, Part IV, Subpart A, section 36.1.1B. If the Transmission Provider is unable to complete the Surplus Interconnection Study within such time period, Transmission Provider shall notify the Surplus Interconnection Customer and provide an estimated completion date and an explanation of the reasons why the additional time is required.

(2) Once the Surplus Interconnection Study is completed and Transmission Provider confirms that (i) no new Network Upgrades are required, and (ii) there are no material impacts on short circuit capability limits, steady-state thermal and voltage limits or dynamic system stability and response, where a "material impact" is defined as a thermal/voltage, stability, or short circuit reliability criteria violation, the Transmission Provider shall issue the Surplus Interconnection Study to the Surplus Interconnection Customer. If the Surplus Interconnection Customer is an unaffiliated third party, PJM shall issue a Surplus Interconnection Study to the owner of the existing Generating Facility. A revised Interconnection Service Agreement will be prepared and issued to the owner of the existing Generating Facility within sixty (60) days of issuance of the Surplus Interconnection Study including the terms and conditions for Surplus Interconnection Service. Within sixty (60) days of receipt by the owner of the existing Generating Facility of the revised Interconnection Service Agreement, the owner of the existing Generating Facility will execute the revised Interconnection Service Agreement, request dispute resolution or request that the Interconnection Service Agreement be filed unexecuted in accordance with Tariff, Part VI, Subpart A, section 212.4.

(3) If the Transmission Provider determines from the Surplus Interconnection Study that the use of Surplus Interconnection Service would cause a material impact, where a “material impact” is defined as a thermal/voltage, stability, or short circuit reliability criteria violation, the Transmission Provider shall provide the Surplus Interconnection Customer an opportunity to amend the Surplus Interconnection Request to cure the violation. If the Surplus Interconnection Customer elects not to amend its Surplus Interconnection Request or if, following opportunity to cure the Transmission Provider continues to find that Network Upgrades may be required, or there may be material impacts on short circuit capability limits, steady-state thermal and voltage limits or dynamic system stability and response, where “material impact” is defined as a thermal/voltage, stability, or short circuit reliability criteria violation, the Surplus Interconnection Request will be terminated and withdrawn upon issuance of the Surplus Interconnection Study.