# ELEVATE RENEWABLES PROPOSED SURPLUS INTERCONNECTION SERVICE TARIFF LANGUAGE ENHANCEMENTS

# Introduction

Under the umbrella of the Reliability Resource Initiative (RRI) discussion, PJM has proposed tariff revisions to both enact the one-time novel fast-track and make a minor language change to its existing Surplus Interconnection Service (SIS) process. In order to ensure that PJM invites all possible resources to be added to the system to address the very real resource adequacy and reliability challenges it faces, PJM should utilize this effort and anticipated tariff revision to thoroughly improve the SIS process as a means to establish a more long-standing solution. SIS can unlock additional unforced capacity (UCAP) without needing additional Capacity Interconnection Rights (CIR), offering both administrative efficiency and cost-savings by design. In light of declining effective load carrying capacity (ELCC) values, SIS will be a useful tool to furnish additional resource adequacy. SIS has the potential to provide a fast, sizeable, and cost-effective injection of viable projects into the resource mix if appropriate changes are made to stimulate further development and investment.

# **Proposed Changes**

SIS must allow for all resource and technology types to participate meaningfully in closing the reserve and resource deficits in PJM. The very restrictive language in the PJM tariff governing SIS should be augmented to allow battery energy storage charging from the grid to be an eligible resource in co-locating at an existing generating facility and taking advantage of the excess or surplus capacity. PJM, unlike other RTOs, currently studies BESS in this format under light load conditions; the results then show the new technology performing differently than the existing generating resource, triggering a flow difference and thus a failure despite no reliability criteria violations triggered. As Rocky Mountain Institute, Miles Farmer PLLC, and Gabel Associates detailed in their presentation during the November 21<sup>st</sup> Members Committee, "surplus potential at existing thermal sites demonstrate large potential for accelerated entry of new resources via SIS ... lowering energy costs at a time of increasing rate pressures on customers"— however, without appropriate changes, this potential remains hypothetical. In support of a wider view of eligible SIS technology and resource types, we echo the RMI coalition's recommendation that PJM update its modeling approach for battery storage resources.

Given PJM is revising its tariff-- including the section addressing Surplus Interconnection Service-- it is incumbent upon PJM to ensure this effort is as efficient as possible if a tariff change is going to be made. The opportunity to update tariff language should not only be used to merely delete one troublesome and restrictive statement but also remove the second, following sentence as well [see Appendix A, 36.1]. In light of recently adopted CIR transfer changes, this opportunity to update the SIS tariff should be used to reflect the new and very relevant treatment of generation replacement [see Appendix A, 36.1 and 36.4]. Ultimately the goal, as PJM has acknowledged, is to address the fact that "PJM's approach may be more conservative than other RTOs... and meaningfully respond to Stakeholders [that] have provided feedback on how the current approach is too restrictive to maximize the system benefits." The present process is, as many developer stakeholders have remarked, not currently a viable option for a majority of projects given the stringency of its governing language at odds with present conditions.

We provide the suggested redlined revision language to the Open Access Transmission Tariff Part IV, Subpart A, Section 36 in the following appendix for PJM's consideration.

# Conclusion

Elevate thanks PJM, Staff, and fellow stakeholders for the opportunity to continue to engage on the broader RRI discussion, in furtherance of the collaboration to create modern solutions for our changing grid.

## Appendix A: Recommended tariff revisions

#### 36.1 General

Requests for Surplus Interconnection Service may be made by the existing Interconnection Customer whose Generating Facility is already interconnected, or one of its affiliates, or by an unaffiliated Interconnection Customer. The existing Interconnection Customer or one of its affiliates has priority to use this service; however, if they do not exercise this priority, Surplus Interconnection Requests also may be made available to an unaffiliated Surplus Interconnection Customer. Surplus Interconnection Service is limited to utilizing or transferring an existing Generating Facility's Surplus Interconnection Service at the pre-existing Point of Interconnection of the existing Generating Facility and cannot exceed the existing Generating Facility's total amount of Interconnection Service, i.e., the total amount of Interconnection Service used by the Generating Facility requesting Surplus Interconnection Service and the existing Generating Facility shall not exceed the lesser of the Maximum Facility Output stated in the existing Generating Facility's Interconnection Service Agreement or the total "as-built capability" of the existing Generating Facility. If the Generating Facility requests Surplus Interconnection Service associated with an existing Generating Facility that is an Energy Resource, the Generating Facility requesting the Surplus Interconnection Service shall be an Energy Resource; and if the existing Generating Facility is a Capacity Resource, the Generating Facility requesting Surplus Interconnection Service associated with the Generating Facility may be an Energy Resource or a Capacity Resource (but only up to the amount of Capacity Interconnection Rights granted the existing Generating Facility). Surplus Interconnection Service cannot be granted if doing so would require new Network Upgrades. would have additional impacts affecting the determination of what Network Upgrades would be necessary to New Service Customers already in the New Services Queue or that have a material impact on short circuit capability limits, steadystate thermal and voltage limits, or dynamic system stability and response.

#### OR IN THE ALTERNATIVE IF ADDITIONAL TRIGGERING LANGUAGE IS NEEDED

Surplus Interconnection Service cannot be granted if doing so would require new Network Upgrades or would cause any thermal/voltage, stability, or short circuit planning criteria violations. A voltage increase or decrease, as identified in any applicable voltage analyses, will not automatically trigger a screen failure under the impact study unless a voltage threshold defined in Transmission Provider's documented planning criteria is exceeded would have additional impacts affecting the determination of what Network Upgrades would be necessary to New Service Customers already in the New Services Queue or that have a material impact on short circuit capability limits, steady state thermal and voltage limits, or dynamic system stability and response.

### 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, (ii) there are no impacts affecting the determination of what upgrades are necessary for New Service Customers in the New Services Queue, and (iii) there are no material impacts on short circuit capability limits, steady state thermal and voltage limits or dynamic system stability and response 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 Network Upgrades may be required or there may be impacts affecting the determination of what upgrades are necessary for New Service Customers in the New Services Queue, or there may be material impacts on short circuit capability limits, steady state thermal and voltage limits or dynamic system stability and response, the Surplus Interconnection Request will be terminated and withdrawn upon issuance of the Surplus Interconnection and withdrawn upon issuance of the Surplus Interconnection Request will be terminated and response, the Surplus Interconnection Request will be terminated and withdrawn upon issuance of the Surplus Interconnection Request will be terminated and withdrawn upon issuance of the Surplus Interconnection Request will be terminated and withdrawn upon issuance of the Surplus Interconnection Study.