

Develop PJM Business Rule Proposals for Integrating Storage As a Transmission Asset

Issue Source

PJM needs to initiate a stakeholder process to ensure existing planning rules provide sufficient clarity regarding how storage as a transmission asset (“SATA”) is to be evaluated and incorporated into the PJM RTEP process. This issue must be resolved in order to permit PJM to provide transparent rules for stakeholders to understand how PJM evaluates these assets as opposed to an ad hoc evaluation process to evaluate SATA proposals submitted to mitigate baseline RTEP violations.

Issue Content

The effort will explore existing Transmission Planning criteria, including performance measurement methodology, and developing criteria to be used in evaluating storage as a transmission asset to address elements in the Regional Transmission Expansion Plan (“RTEP”) associated with Reliability, Market Efficiency, Operational Performance, and Public Policy to allow PJM to plan the RTEP effectively.

Key Work Activities and Scope

Phase I

1. Provide educational session in regards to current applicable business rules
2. Engage stakeholders in PJM business rules gap identification as well as developing possible recommendations for changes
3. Ensure Planning criteria adequately addresses both performance measurement methodology and cost measurement methodology
4. Ensure planning criteria reflects System Operations input in an effort to maintain system reliability.
5. Develop criteria for proposal evaluation for the size of the SATA
 - a. Consideration of peak load, load duration, load curve, congestion pattern
 - b. Consideration of SATA effective duration and recharging characteristics
6. Develop comparative framework for evaluating storage in relation to traditional transmission reinforcement
7. Evaluate how to model the SATA (generator/load/standby)
 - a. Reliability analysis
 - b. Sensitivity cases to expose reliability deficiencies
8. Evaluate facility cost determination methodology
 - a. Initial cost and ongoing maintenance cost
 - b. Life expectancy and cost to ensure usable life on par with traditional transmission assets
 - c. Consideration of losses associated with charge/discharge cycles
 - d. Comparability to existing transmission reinforcement

This activity is not intended to address issues associated with storage as a market participant (Energy Storage Resource ESR or Capacity Storage Resource) nor is it intended to address issues associated with dual use (storage as a transmission asset and market participation).

Out of Scope Phase 1 (Potential Future Stakeholder Phases):

- Operational mechanics of implementation (model, telemetry requirements, etc.)
- Evaluation of Planning / Operations / Markets issues and development of rules to address dual usage (storage as transmission asset and market participation).

Expected Deliverables

Deliverables are expected to include proposals to changes in PJM Manual(s) and other governing documents.

Decision-Making Method

Tier 1, consensus (unanimity) on a single proposal

Stakeholder Group Assignment

Recommend PC sub-group

Expected Duration of Work Timeline

The duration of activities in the group are expected to be completed prior to the end of the third quarter of 2020.

Start Date	Priority Level	Timing	Meeting Frequency
5/13/2020	<input type="checkbox"/> High <input checked="" type="checkbox"/> Medium <input type="checkbox"/> Low	<input type="checkbox"/> Immediate <input checked="" type="checkbox"/> Near Term <input type="checkbox"/> Far Term	<input type="checkbox"/> Weekly <input checked="" type="checkbox"/> Monthly <input type="checkbox"/> Quarterly

Charter

(check one box)

<input checked="" type="checkbox"/>	This document will serve as the Charter for a new group created by its approval.
<input type="checkbox"/>	This work will be handled in an existing group with its own Charter (and applicable amendments).