

Integration of HVDC Converter as a New Type of Capacity Resource

Issue Source

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Issue Content

This issue charge is intended to address the specific technical and tariff issues associated with the participation of HVDC converter resources in the PJM Capacity Market, as well as any necessary conforming changes to the governing documents for the energy and ancillary services markets.

Key Work Activities and Scope

The scope of work will focus on the participation of HVDC converters in PJM's capacity market, including their technological capabilities, existing tariff and manual provisions and hurdles to participation, as well as potential tariff changes needed to enable such participation. Potential conforming changes related to tariff and manual provisions regarding energy and ancillary services markets may arise as discussions progress. To the extent such changes are necessary complements to capacity market tariff changes, such changes are not out of scope.

1. *Education*

- Description of HVDC resources and their technological capabilities, particularly dispatchability, VAR support and additional ancillary services.
- Consideration of HVDC resources in the context of load forecast and resource adequacy assumptions, capacity market participation, real-time operations and capacity performance.
- Potential presentation on participation of HVDC resources in other RTO planning, operations and markets.
- Education on bundled energy and capacity supplied via merchant HVDC converters.

2. *Clarification of Existing Provisions in Tariff, OA, manuals*

- Review of existing provisions in PJM Tariff, OA and manuals for interconnection and capacity market participation of HVDC resources.

3. *Consideration of potential New Tariff, OA and manual Provisions to allow for HVDC Resource Participation*

- Creation of HVDC capacity resource definition.
- Identification and discussion of potential changes to Tariff, OA and manuals.

Out of Scope

This issue charge is focused only on HVDC resources and their ability to participate in the PJM capacity markets. In particular, several ongoing issues are out of scope of this problem statement:

- PJM implementation of compliance with FERC Order 845
- Stakeholder engagement related to the FERC directive regarding capability of Energy Storage Resources in the capacity market
- PJM's ongoing proceedings at FERC related to the Minimum Offer Price Rule
- Discussions related to Solar-Hybrid Resources
- Discussions occurring in the Capacity Capability Senior Task Force

Expected Deliverables

1. Comprehensive educational material regarding HVDC resources;
2. Proposed revisions to PJM's Tariff and OA, resulting in a FERC filing; and
3. Proposed revisions to PJM Business Practice Manuals.

Decision-Making Method

Tier 1 consensus (unanimity) on a single proposal.

Stakeholder Group Assignment

Stand-alone senior task force.

Expected Duration of Work Timeline

Given the ~~timing considerations of upcoming RPM auctions, as well as the~~ narrow scope of the assignment and deliverables, it is recommended that this work start immediately in the near term and the Senior Task Force conclude its work within ~~four to~~ six (4-6) months.

Start Date	Priority Level	Timing	Meeting Frequency
6/1/2020	<input checked="" type="checkbox"/> High <input 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).