

Renewable Dispatch

Issue Source

Issue charge being brought forth by PJM.

Issue Content

Review and enhance existing practices regarding the dispatchability of renewable resources or Intermittent Resources.

As renewable resources continue to integrate into PJM, operational issues arise due to inconsistent controllability of resources. A variety of factors can impact unit dispatchability including technological limitations, forecast accuracy, and fuel availability. Unreliable dispatch of renewable resources presents challenges with short-term forward looking analysis.

The following renewable challenges/inefficiencies exist in real-time:

1. High ramping capability combined with volatility complicates constraint control, especially with more localized constraints.
2. Different levels of performance for existing dispatched renewable resources. Only a manual curtailment mechanism for resources like solar.
3. Limited usage of renewable forecasts in operational tools due to limited dispatchability.

Key Work Activities and Scope

1. Review education on existing reserve renewable practices and expectations. This includes both PJM actions and expected Member actions.
2. Education on methods of renewable resources following PJM dispatch signal or instruction and statistics on renewable dispatch performance.
3. Education on solutions from other RTOs/ISOs.
4. Propose solutions to enhance overall renewable dispatch process.
5. Areas in scope:
 - a. Method in which PJM dispatches renewable resources
 - b. Communication of dispatch mode and instructions
 - c. Expectations of renewable resources: data submissions, technological requirements, and performance
 - d. Lost Opportunity Cost eligibility
6. Areas not in scope:
 - a. Market products and calculations
 - b. Existing efforts like ESR modelling, FERC Order 2222, and treatment of Solar/Battery hybrids

Expected Deliverables

- 1. Changes to resource expectations when dispatched in real-time
- 2. Manual language and potential governing document changes to reflect proposal

Decision-Making Method

Tier 1, consensus

Stakeholder Group Assignment

In Operating Committee and/or OC special sessions reporting out to MIC as needed

Expected Duration of Work Timeline

It is estimated the effort could take 6 months. Work will begin as soon as the Issue Charge is approved.

Start Date	Priority Level	Timing	Meeting Frequency
2/10/2022	<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 type="checkbox"/>	This document will serve as the Charter for a new group created by its approval.
<input checked="" type="checkbox"/>	This work will be handled in an existing group with its own Charter (and applicable amendments).

More detail available in M34; Section 6