



DRAFT Problem Statement / Issue Charge

Five minute dispatch and pricing

Problem Statement:

The PJM energy market relies on LMP as the primary price signal. Transparency and consistency in LMP calculations is fundamental to market efficiency and competition. Recent events and subsequent changes to the language describing the process by which PJM calculates LMP have highlighted a lack of transparency and consistency in the process.

Manual 11 describes the real time security constrained economic dispatch and pricing process that PJM uses in the energy market to send dispatch signals to generators and calculate LMPs. PJM manual changes in January 2019 add detail to the process described in Manual 11 Sections 2.7, 2.8 and 2.9.1.¹

The language and the July 10, 2018, low ACE event that triggered review of the language, raise questions regarding the RT SCED case execution and approval process, who approves the SCED cases, what criteria PJM uses to approve RT SCED cases, and what criteria PJM uses for selecting cases to be used in the Locational Pricing Calculator (LPC).² The manual language should include additional detail describing the RT SCED and LPC case execution, selection, and approval processes for market transparency and to ensure efficient market pricing.

Issue Source:

Investigation of the July 10, 2018 low ACE event and PJM's subsequent Manual 11 changes.

Stakeholder Group Assignment

MIC

¹ See "Manual 11 Updates," PJM presentation to the Markets Implementation Committee (January 9, 2019). <<https://www.pjm.com/-/media/committees-groups/committees/mic/20190109/20190109-item-01a-manual-11-updates.ashx>>.

² See "July 10, 2018, ACE/Frequency Excursion Apparent Cause Analysis Report," PJM presentation to the Operating Committee (September 11, 2018). <<https://www.pjm.com/-/media/committees-groups/committees/oc/20180911/20180911-item-04a-july-10-low-frequency-event-update.ashx>>.

Key Work Activities

1. Review and provide education on current SCED execution process, including but not limited to the frequency of cases, the target interval of the cases, the number of cases, difference in inputs to cases, solution time frame, use of solution output.
2. Review and provide education on the SCED case approval process, the criteria for approval, approval rates, reasons for not approving cases.
3. Review and provide education on the current LPC execution process, including but not limited to the frequency of cases, the inputs used, the target interval of the cases, approval process, solution time frame, and use of solution output.
4. Review and provide education on the criteria for selecting SCED cases to be used in LPC.
5. Review and provide education on the criteria for triggering reruns of LPC cases, and LMPs.
6. Identify areas where manual language does not provide the details about the processes outlined in the areas described above, and draft manual language.
7. Identify opportunities and develop market rules for streamlining and improving the processes outlined in the areas described above in order to increase market transparency and efficient market pricing.
8. Review LMP related tariff provisions, FERC orders, PJM manuals, and PJM processes to ensure consistency.