

Performance Assessment Hour Ramp Rate

Problem / Opportunity Statement

On July 9, 2015 PJM submitted compliance filings in the Capacity Performance proceeding (Docket Nos. ER15-623 and EL15-29) which revised the Tariff, Operating Agreement, and RAA to comply with the FERC's directives related to issues including: (1) capacity resource performance requirements; (2) Non-Performance Charges; (3) Fixed Resource Requirement plans; (4) market power mitigation; (5) credit requirements; and (6) parameter limited schedules. FERC has yet to issue an Order related to the compliance filings and therefore leaves stakeholders with uncertainty.

During various Operating Committee meetings, PJM presented its view of the Operating Agreement, Tariff and Manual language regarding parameter limitations and Performance Assessment Hour exceptions per the June 9, 2015 Order. One of the views included a non-ramp limited basepoint that would expect resources to achieve the desired output communicated by PJM instantaneously. Stakeholders provided feedback that there was another view of the language and disagreed with PJM's view.

To reduce stakeholder uncertainty, PJM submitted an informational filing on December 22, 2015 asking FERC to issue an Order on PJM's July 9, 2015 Compliance Filing as well as issue Orders on the outstanding rehearing requests. PJM explained in the filing how it plans to proceed under the accepted language as clarified in its compliance filing, unless the Commission issues an Order otherwise. The filing also addressed a reliability concern of the potential for resources to ramp to full output in an attempt to reduce charges during a Performance Assessment Hour. The excerpt from the December 22, 2015 filing below provides an example of this reliability concern.

By way of example, had the Capacity Performance provisions been in place during the Polar Vortex and resources responded as they have indicated – that they will immediately ramp to full load to ensure maximum output during a Performance Assessment Hour – the following may have occurred: At 4:30hrs on January 7, 2014, PJM issued an RTO-wide call for 2-hr lead time Load Management to be reduced at 06:30hrs. At the time of issuing this procedure, there were approximately 6,000 megawatts of generation available to increase within 30 minutes. If the resources responded by moving to full output, which in a similar future scenario they have informed us they will to ensure full compliance with their Capacity Performance obligations, the Eastern Interconnection frequency could have been driven as high as 60.4Hz due to PJM's frequency bias of 1,555 megawatts / .1Hz as PJM struggled to individually dispatch units down to their base points. This could more than likely have resulted in generators tripping on over-speed protection. The potential loss of generation resources was exactly the opposite of what was necessary given the impending shorting conditions later in the morning on January 7, 2014. If the sequence of events would have played out in this manner, then PJM would have likely been driven to implement even more severe emergency procedures than were actually implemented on this critical peak day.



Problem Statement

Even when FERC provides an Order, whether it be by February 1, 2016 as PJM suggested, or thereafter, the stakeholder's issue of including a resource's ramp rate while dispatching during a Performance Assessment Hour remains open. PJM believes that an online resource's ramp rate should be included in the dispatch algorithm during a Performance Assessment Hour when determining what level of output to schedule the unit, which would result in excused performance during that time to ramp even if during a Performance Assessment Hour. However, the inclusion of ramp rate is not allowed per the current Tariff language.

PJM believes the solution to this issue is "sufficiently simple" (in accordance with Manual 34: PJM Stakeholder Process, section 11.2) and proposes the following:

- Create a new parameter used only during Performance Assessment Hours – Performance Assessment Hour Ramp Rate

To keep the scope narrow, PJM recommends discussing only "ramp rate" in this problem statement. No other parameters appear to have the same impact on performance. Implementation of the changes should happen prior to the implementation of Capacity Performance on June 1, 2016.