



Planning Committee Recommendations for Summer Capability Verification Tests

Markets and Reliability Committee
February 27, 2014



Manual 21: Rules and Procedures for Determination of Generating Capability

- M21 updated to clarify and reinforce that **ALL** steam generating units must correct summer capability verification test results to reflect expected ambient conditions (air and cooling water) under PJM summer peak load conditions.
 - Currently, all CT and CCs provide PJM with ambient corrected capability test results; while, roughly half of steam units provide corrected results.
- M21 revised requirement for hydro and pumped storage units to conduct summer capability test during summer verification window (as opposed to any time during the year).
- Implement starting with the 2014 Summer verification tests.
- Coordinate with MIC in regards to potential need for a transition period/mechanism.

- At 12/12/2013 MIC, some members expressed concern of RPM-related impact of a Summer 2014 implementation of the M21 updates for potentially affected generators (hydro and pumped storage; and steam units that had not previously provided ambient-adjusted data).
 - Potential impact on ability of affected units to satisfy existing RPM commitments for 14/15, 15/16 and 16/17 delivery year.
 - Potential impact on ICAP offer quantity for upcoming 17/18 BRA.
- Some members proposed that recommended changes be delayed or that some transition mechanism be developed.
- Other members expressed concern with a delay of the recommended changes and the inequitable impact that such a delay would create for those steam generating units that already provide corrected capability test results.

- ICAP rating of all generators should be based on expected output under PJM peak load conditions and generator ICAP ratings should be determined on a consistent basis.
- Implement M21 updates starting with 2014 summer verification tests consistent with PC recommendation consider potential RPM-related impact and develop potential transition mechanism in response to MIC concern.

- A summer 2014 implementation of the capability verification test requirements may impact RPM performance of affected resources.
 - Potential future ICAP reduction (if maximum 3-year summer capability test result less than current CIR/ICAP MW value).
 - Potential summer rating test failure charge or peak-hour period availability charge if summer capability test level less than committed ICAP level.
- PJM proposes the transition mechanism described on next two slides for generation owners with affected resources that wish to reflect impact of the M21 revisions on resource ICAP value effective 6/1/2014 thereby avoiding above potential impact.

- Owners of affected units must verify MW impact of new M21 requirements by providing revised summer capability test results meeting the new requirements for the 2011, 2012 and 2013 summer periods by 4/1/2014.
 - The highest revised test value from the 2011, 2012 and 2013 summer periods must be less than unit's existing CIR MW value and RPM ICAP MW value.
 - Unit must be either a hydro unit, pumped storage unit or steam generating unit that had not previously been providing PJM with summer capability test data consistent with the revised M21 requirements.
- Affected unit ICAP MW value is updated in RPM system and set equal to the highest revised test value from the 2011, 2012 and 2013 summer period.



PJM Proposal for Transition Mechanism (cont.)

- ICAP update in RPM is made effective 6/1/2014 which may result in capacity commitment shortfall for any affected unit having an RPM commitment in any of the 2014/15, 2015/16 or 2016/17 delivery years.
- Owner may choose to maintain responsibility for providing replacement capacity to cure the shortfall of each affected unit as per status quo; or may elect instead to use proposed transition mechanism described below:
- Owners electing transition mechanism do so for all affected units and for any affected delivery years
 - Notification for 14/15 DY by 4/1/2014
 - Notification for 15/16 DY by 5/30/2014
 - Notification for 16/17 DY by 7/25/2014
- If elected, then each affected unit's existing capacity commitment is reduced by the UCAP MW equivalent of the difference between the unit's initial ICAP MW value and the unit's updated ICAP MW value.



PJM Proposal for Transition Mechanism (cont.)

- Since commitment quantity associated with M21 change is removed:
 - Shortfall and need for owner to obtain replacement capacity is eliminated.
 - RPM auction credits associated with reduced commitment are relinquished.
 - RPM locational reliability charges paid by load reduced accordingly.
- PJM will offset the total reduction in capacity commitment level associated with election of this option by applying a corresponding adjustment to the quantity that PJM would otherwise seek to procure or release in incremental auctions.
 - For example, if the total UCAP MW impact of electing this option is 300 MW for the 2015/16 delivery year, then PJM will reduce any required PJM sell offer quantity into an IA for that delivery year by 300 MW or increase any required PJM buy bid quantity into an IA for that delivery year by 300 MW.