

Requirements for the Performance of Generator Seasonal Verification Tests

Problem / Opportunity Statement

The rules and procedures regarding generator unit testing and establishment of an installed capacity rating are set forth in PJM Manual 21. Manual 21 requires temperature adjustments of test results for combustion turbine and combined cycle units but does not require temperature adjustments for other types of units. A significant number of generation owners/operators choose not to temperature adjust their test results. In addition, Manual 21 permits hydroelectric generation owners to perform their unit verification tests at any time during the Delivery Year, rather than requiring them to perform the test over the summer period. These two rules in Manual 21 may result in generator ratings that over-state the actual output of some PJM units under peak summer conditions. The use of inaccurate generator ratings in planning studies will result in inaccurate study results.

Issue Source

PJM identified this issue based on a review of Manual 21 procedures. PJM believes that the installed capacity rating of all generators should be based on the generator's demonstrated output under peak summer load conditions. Adopting this approach will ensure that generator ratings are being represented accurately in PJM planning studies.

Stakeholder Group Assignment

This issue will be addressed by the Planning Committee.

Key Work Activities

1. Review all current requirements regarding generator seasonal verification tests. The review should include the following considerations:
 - a. Need for temperature adjustment of test results
 - b. Time period over which test is to be performed
 - c. Actions or events that trigger the need for a test
2. Develop any additional test requirements to ensure that testing is performed on a consistent basis for all generators and that the resulting capability rating is an accurate representation of a generator's output over peak summer conditions.
3. Draft required Manual changes and, if needed, Tariff and RAA changes to implement new generator test requirements.
4. Coordinate any proposed changes with PJM Markets to ensure an equitable transition to the new generator testing requirements.



Problem Statement

Expected Deliverables

Manual changes and potential Tariff/RAA changes that establish a consistent testing procedure for all PJM generators.

Expected Overall Duration of Work

The goal is to have new generator testing requirements implemented for planning purposes in summer 2014.