Day Ahead (DA) Reliability and Reactive Cost Allocation

Problem / Opportunity Statement

The purpose of this group is to analyze and recommend changes, if applicable, to the (1) allocation of Day Ahead operating reserve costs for units called on for reliability and (2) allocation of costs for units providing Reactive Services in day ahead and real time.

History

After the summer of 2012, PJM analyzed Balancing and Operating Reserve (BOR) rates, which are the operating reserve rates incurred in real time operations, and found that one driver of increased rates was due to combustion turbines (CTs) being assigned in the day ahead market, but not called on in real time. These CTs were seen as necessary in the day ahead run and not in real time because after the day ahead market assignments were made additional generation was committed for reliability in real time operations. However the CTs already assigned in the day ahead market were paid Lost Opportunity Cost (LOC), a component of Balancing Operating Reserve rates.

Beginning on September 13, 2012, PJM committed additional units needed for reliability in day ahead that had previously been committed in real time, reducing the amount of CTs committed in the day ahead and not needed in real time. This in turn, caused a reduction in BOR rates. Additionally, there was a corresponding, but smaller, increase in Day Ahead Operating Reserve rates and the allocation of reactive services. The increase in Day Ahead Operating was smaller than the decrease in Balancing Operating Reserve because the methods of cost allocation of costs differ.

On November 7, 2012, the Market Implementation Committee (MIC) approved the problem statement: “Make Whole Payment Cost Allocation for Resources Committed for Reliability in the Day Ahead Market” but requested quick action to implement a short term fix (fast track) and allocate Day Ahead Operating Reserve Charges due to reliability to the same participants and in the same way as Real Time/Balancing Operating Reserves are charged. The MIC also requested the allocation of Black Start Make Whole Payments in both RT and DA be part of the fast track activities. Further, the MIC requested an in-depth stakeholder process to review the allocation of DA operating reserves for reliability. The November 7th MIC the problem statement “Reactive Service and Operating Reserve Credits” was presented by the Independent Market Monitor and approved. The MIC requested this issue be studied included with Day Ahead Reliability Cost Allocation.

November 19, 2012: Open Access Transmission Tariff (OATT) changes were approved at a special MIC along with changes proposed by the MIC to allocate Make Whole Payments for Black Start in real time and day ahead. This change allows for additional logging in day ahead and allocates operating reserves for reliability consistently between the two markets.
Charge

Includes Problem/Opportunity Statement (above)

Issue Source

PJM and the IMM brought these issues to the Market Implementation Committee.

Stakeholder Group Assignment

PJM and the IMM believe this should be assigned to the MIC.

Key Work Activities

For Day Ahead Reliability Operating Reserve Cost Allocation:

1. Review the rules governing the balancing and day ahead operating reserve charge allocation
2. Identify scenarios under which PJM would commit a resource in the Day Ahead Market uneconomically for reliability.
3. Determine the appropriate allocation of the make whole payment for the aforementioned resources and recommend changes, if any.
4. Develop Tariff, Operating Agreement, and Manual changes as necessary.

For Reactive Service Cost Allocation in both Day Ahead and Real Time:

1. Review the rules governing the allocation of the costs of reactive services in both day ahead and real time.
2. Review the history of balancing operating reserve credits paid to units providing reactive services.
3. Recommend changes, if any, to the calculation of reactive service credits.
4. Develop Tariff, Operating Agreement, and Manual changes as necessary.

Items out of scope:

1. Calculation or assignment of credits for Balancing or Day Ahead Operating Reserve
2. Black Start Make Whole Cost Allocation. This item has already been addressed through the stakeholder process and shall not be revisited. (issue tracking)

Expected Deliverables

Revised Tariff, Operating Agreement, and Manual Language, if necessary.

Expected Overall Duration of Work

This work effort is expected to require 6-8 months.