Problem Statement/Issue Charge
Energy Market Up-lift Costs

Problem / Opportunity Statement

In the current PJM market design as documented in the PJM Operating Agreement and PJM Manuals, generation and demand response resources that operate as requested by PJM are guaranteed to fully recover their daily offer amounts. Accounting for these “make-whole” costs is performed on a daily basis, and for both the Day-Ahead Energy Market and the Real-Time Energy Market. Such resources are guaranteed to recover their total offer amounts through Operating Reserve credits that are charged to market participants.

Recently, PJM markets have seen an increase in the magnitude and volatility of make-whole payments. Operating Reserve costs are out-of-market and as such are not included in the pricing signals that are visible and transparent to the entire market. When these “uplift” payments are charged to the market, they are not predictable and cannot be hedged on a forward basis.

Given the increased magnitude and volatility of these charges, as well as stakeholder concern regarding the allocation mechanism in certain circumstances, an effort to examine and revise the entire Operating Reserve construct is necessary, including the sources of these charges and the allocation methodology. Stakeholders should be tasked with creating new methodologies that have the potential to minimize uplift costs while ensuring market prices are consistent with operational reliability needs, decrease charge rates, and reduce transaction risk due to variable fees while maintaining and preserving key principles that underlie current market mechanisms:

- Transparency of Locational Marginal Pricing
- Alignment of the Day-Ahead results with the Real-Time Market
- Commitment in the least costly manner, subject to maintaining reliability in the PJM region
- Accurate representation of actual Real-Time operating conditions in the Day-Ahead energy market
- Equitable allocation of costs consistently between markets based on cost causation/benefit principles
- Simplification and transparency of the calculations and methodologies for both PJM & stakeholders

Therefore, PJM requests that stakeholders perform a holistic review of the rules related to Operating Reserves and explore potential improvements to streamline and enhance them.

Issue Source

PJM

Stakeholder Group Assignment

Considering that this issue may have impacts to both markets and operations, PJM recommends that a senior task force be created that reports to the Markets and Reliability Committee.
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Key Work Activities

1. Perform education (i) on Day-Ahead and Real-Time Energy Market make-whole payment and cost allocation methods and (ii) functions and interactions of Day-Ahead commitments and Real-Time dispatch. Provide education, analysis and examples to understand the calculations and clarify the issue.

2. Identify scenarios under which PJM may commit a resource in the Day-Ahead market that results in out-of-market uplift costs and consider alternative approaches to clearing such resources consistent with reliable operations, and explore possible improvements to the PJM Day-Ahead pricing that have potential to minimize uplift costs while maintaining prices that are consistent with operational reliability needs.

3. Identify scenarios under which PJM may dispatch a resource in the Real-Time market that results in out-of-market uplift costs, consider alternative approaches to pricing, and explore changes to the PJM market mechanisms that have the potential to minimize uplift costs.

4. Explore new methodologies for the allocation of make-whole payments that may include, but are not limited to, methodologies where Operating Reserve make-whole costs are netted with other out-of-market costs and payments (e.g. such as balancing congestion, Marginal Loss Surplus, etc.), that are consistent with cost causation/benefit principles.

5. Explore and determine appropriate methodologies for the allocation of make-whole payments that may include, but are not limited to, methodologies that create variable and fixed charge rates, with the objective of minimizing the variability of such charges, that are consistent with cost causation/benefit principles.

6. Determine the appropriate calculation for eligibility and assignment of credits for make-whole payments, to the extent necessary.

7. Discussion of energy market make-whole payments during adjacent (shoulder) hours where the output of resource may be non-zero (Problem Statement – CT Lost Opportunity Cost approved by MIC on October 10, 2012)

8. Identify potential solutions.


Items out of scope:

1. Black Start and Reactive Power Make-whole Cost Allocation. This item has already been addressed through the stakeholder process and shall not be revisited.

2. Changes to PJM’s Real Time Dispatch and commitment process and procedures that are required to the ensure system reliability.

3. PJM and stakeholders will not discuss any asset information or any data that might be deemed market sensitive.

4. Level or calculation of credits/compensation made to demand response resources dispatched above the net benefits threshold (per FERC 745)

5. Allocation or calculation of Schedule 9 fees (example: Control Area Administration, Market Support Fees, etc.)
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**Expected Deliverables**

- Determination of rule changes required to implement potential solutions, if necessary
- Develop revisions to Governing Agreements and PJM Manuals, as necessary.

**Expected Overall Duration of Work**

Approximately one year.

**Decision-making Method**

Tier one, or consensus on a single proposal is preferred.