Problem Statement and Issue Charge

Opportunity Cost Calculator

Problem Statement

The current rules pertaining to the calculation of costs used in cost-based offers into the energy market allow Market Sellers to include an opportunity cost under certain conditions, such as environmental limitations. PJM developed an opportunity cost calculator, which is included in Markets Gateway, to enable Market Sellers to calculate an opportunity cost. Separately, Monitoring Analytics has developed its own opportunity cost calculator. There is some question about whether the two different opportunity cost calculators produce the same or comparable results and whether either calculator captures all scenarios.

When PJM implemented CP, it established potential penalties for failure to deliver during emergencies. The opportunity cost calculators were not updated to reflect the penalty rates. As such, the opportunity cost calculator may be calculating an opportunity cost that is too low as the resource approaches a run hour limitation.

Key Work Activities

The following are some key work activities that should be undertaken in any stakeholder initiative to address the above stated problems.

- 1. Educate interested stakeholders on opportunity costs. <u>— Complete</u>
- 2. Compare the opportunity cost tools and identify if there are any differences in the results and the reasons for the differences. <u>— Complete</u>
- 3. Identify any modifications to each opportunity cost calculator needed to make the results comparable or fill any existing gaps. Gaps no longer need to be modified; IMM calculator approved for use by PJM.
- 4. Identify modifications needed to address how immature units are to be treated. <u>— Possible M15</u> changes by PJM.
- 5. Identify modifications to incorporate non-performance charge rates into opportunity cost calculators, where appropriate. <u>Stakeholders may propose solution options in matrix to address non-performance charge concerns.</u>
- 6. Identify and propose any tariff or manual changes needed to implement revisions. <u>— M15 changes proposed.</u>

Issue Charge

Stakeholder Group Assignment

This work should be assigned to the MIC.

Expected Deliverables

Possible Tariff, RAA and/or manual changes along with recommendations to modify the opportunity cost calculators.

Expected Overall Duration of Work

The goal is to complete work and make recommendations to the MRC by the December 2017 MRC meeting.

Decision-Making Method

Tier 1, consensus (unanimity) on a single proposal.