

## MIC Special Sessions: Opportunity Cost Calculator

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## What is Opportunity Cost?

- An opportunity cost adder can be included in a unit's Cost Offer when
  - A regulatory agency imposes an environmental run hour restriction
  - An OEM imposes an operational restriction due to a physical equipment limitation
  - The unit experiences a fuel limitation resulting from event of force majeure
- Not related to Lost Opportunity Cost (LOC) uplift payment
- Opportunity Cost Calculator calculates this adder value based on historical LMP data and forecasted future fuel prices
- Objective is to make a generator whole for being scheduled by PJM outside its most economic periods
- PJM and IMM have separate Opportunity Cost Calculators
  - Documented in Section 12 of Manual15



- Issue Charge approved at March 2017 MRC meeting
- Special MIC sessions began in May 2017
  - 10 total meetings
- Key Work Activities
  - Education on Opportunity Cost Calculator
  - Compare PJM/IMM calculator and identify differences
  - Identify modifications to each calculator
  - Address how immature units are treated
  - Incorporate non-performance charge rates into calculator if appropriate
  - Identify tariff and manual changes



- After a detailed analysis, PJM has approved the IMM calculator for Market Seller use on October 24, 2018
- PJM is obligated by the tariff to maintain its own calculator
- PJM will be making Manual15 updates to further clarify/document status quo
  - Immature units, dual fuel units, application functionality
  - Markets Gateway User Guide section on the Opportunity Cost Calculator will also be updated
- Other than these clarifying documentation changes, PJM and IMM support the status quo in regards to changes to their respective calculation engines
- Panda/Dominion have a 3 packages as alternatives to status quo that will be presented for consideration