



December 12, 2023

To: Market Sellers Using an Opportunity Cost Adder in Cost-Based Energy Market Offers

Re: **IMM Opportunity Cost Calculator – Annual Review**

**Background:**

As outlined in Section 12.7 of Manual 15, PJM has an annual obligation to review the inputs and results of the Market Monitor's Opportunity Cost Calculator to verify that it remains compliant with the requirements of Schedule 2 of the Operating Agreement.



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## **12.7 IMM Opportunity Cost Calculator**

The IMM Opportunity Cost Calculator is a constrained optimization software application independently developed and owned by Monitoring Analytics, LLC. Any changes to the IMM Calculator must be approved by Monitoring Analytics, LLC. The IMM will notify PJM of any significant changes to the IMM Opportunity Cost Calculator and any such changes will be reflected in updates to Manual 15 Section 12.7. PJM will review any such changes to verify that the IMM Opportunity Cost Calculator continues to meet the requirements of Schedule 2 of the Operating Agreement.

On an annual basis, PJM will review the inputs and results of the IMM Opportunity Cost Calculator in consultation with the IMM to verify that the IMM Opportunity Cost Calculator continues to meet the documented requirements.

**PJM Review of the IMM Opportunity Cost Calculator:**

Throughout the course of 2023, PJM monitored the level of units' OCC adders as calculated by Monitoring Analytics. The trending of adder values corresponded to what one would expect to see based on the units' remaining run hours as well as natural gas and electricity forward prices.

Additionally, the Market Monitor made changes to their calculation methodology in 2022, updating the minimum run time logic. Section 12.7.9 was added to Manual 15 in August 2023 to document these changes. The Market Monitor confirmed that no additional changes to the calculator have been made in 2023.

**Conclusion:**

At this time, PJM believes that the Market Monitor's Opportunity Cost Calculation methodology remains in accordance with Schedule 2 of the Operating Agreement and PJM has no concerns with the IMM's Opportunity Cost Calculator.

Additional questions on the PJM calculator may be addressed to Jennifer Freeman at [Jennifer.Freeman@pjm.com](mailto:Jennifer.Freeman@pjm.com).

Sincerely,  
Glen Boyle  
Manager, Performance Compliance