



Review Market Outcomes for July 15 EEA 2

Updated 8/19/2026
Slide 3 - adjusted
Conservative Ops
start time

August 20, 2026
Market Subcommittee

Purpose & Key Takeaway

Purpose

To discuss market outcomes from the July 15, 2026, EEA 2 which included reliably serving peak summer load but also a Market Implementation Error related to LMR termination

Key Takeaways

- A multi-day heat advisory across the Eastern Interconnect drove a significant sufficiency deficit projection for the North and Central regions
- Emergency steps up to an EEA 2 were needed to maintain reliability, contributing to ex-post prices set near the Emergency Offer Floor (EOF) of ~\$1,000
- MISO's peak load was lower than forecast by ~5GW due in part to effective LMR response and wildfire smoke (PJM also saw material over forecast) leading to a surge of imports to MISO in response to higher RT ex-post prices
- A technical issue caused the pricing engine to miss LMR termination, raising prices and requiring declaration of a Market Implementation Error (MIE) and recalculation of prices per Module C Section 48.3 of the Tariff

MISO issued declarations up to two days in advance of expected peak loads

DECLARATIONS

Hot Weather Alert

Jul 13, 06:00 EST – Jul 17 23:59 EST

Conservative Operations (North/Central)

Jul 13, 00:00 EST – Jul 16, 23:59 EST

Capacity Advisory (North and Central)

Jul 13, 12:00 EST – Jul 16, 20:22 EST

WARNING

Maximum Generation Warning (North and Central)

Jul 15, 13:00 EST – Jul 15, 14:00 EST

Jul 15, 17:52 EST – Jul 15, 20:00 EST

EVENTS

Max Gen Event Step 1 (North and Central)

Jul 15, 14:00 EST – Jul 15, 16:00 EST

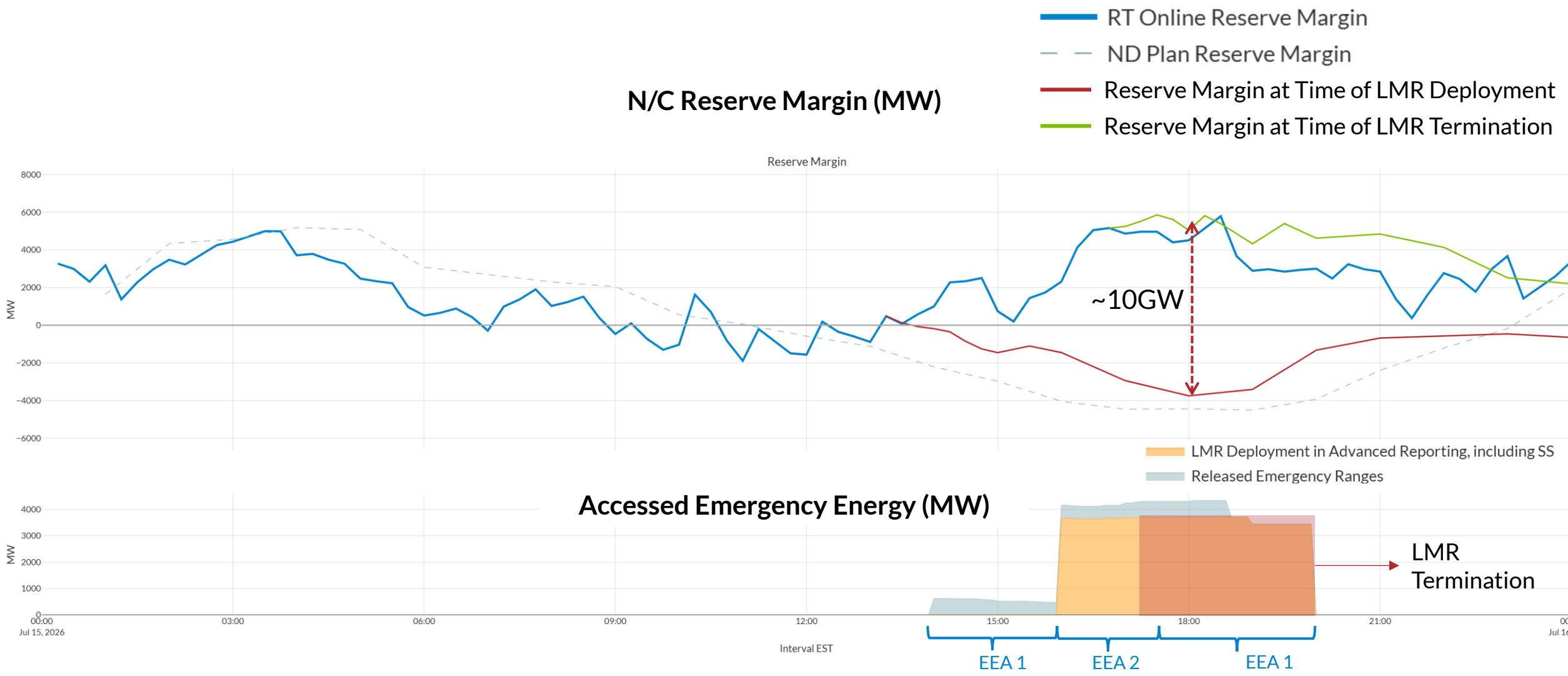
Max Gen Event Step 2 (North and Central)

Jul 15, 16:00 EST – Jul 15, 17:30 EST

Max Gen Event Step 1 (North and Central)

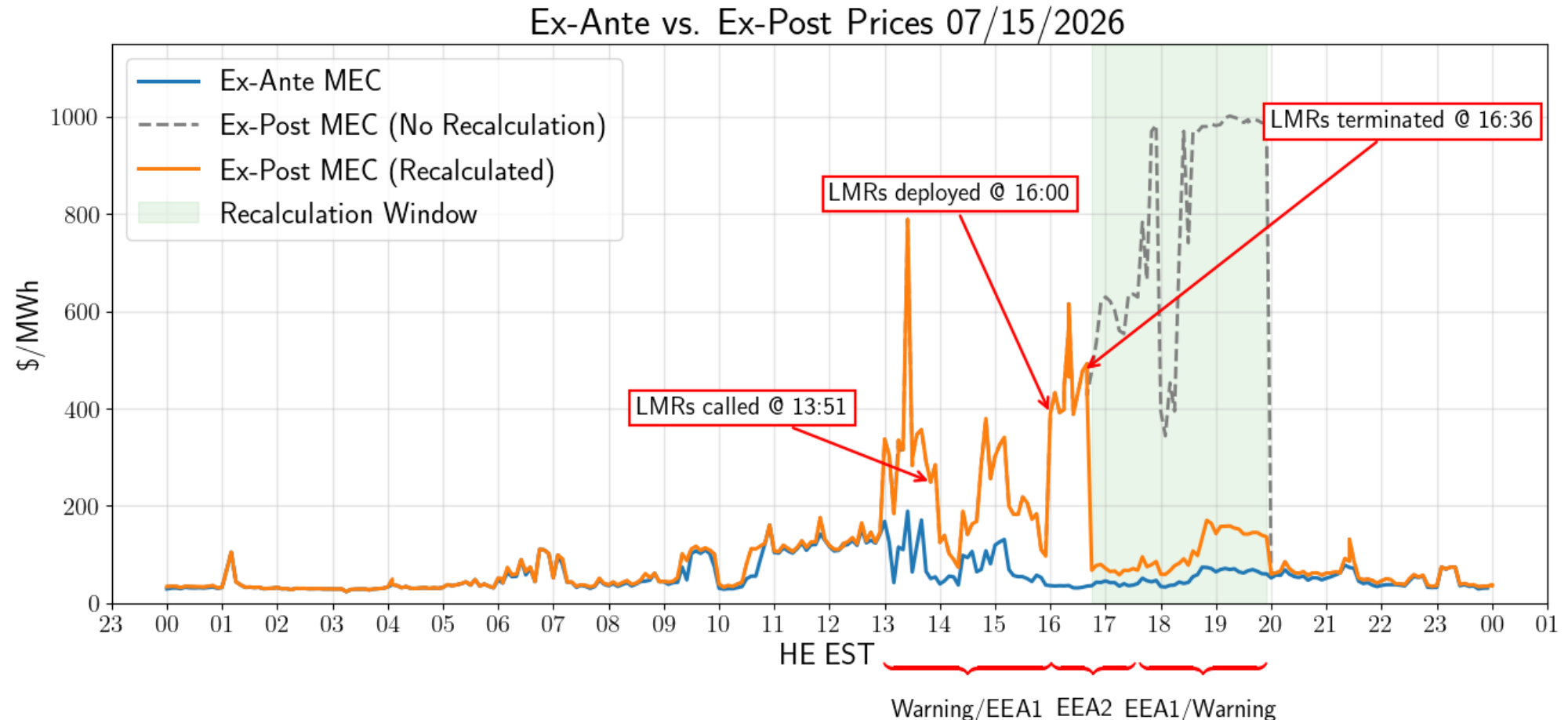
Jul 15, 17:30 EST – Jul 15, 17:52 EST

Severe low-capacity margins in the North and Central regions were projected for July 15, prompting MISO to take emergency actions to maintain system reliability



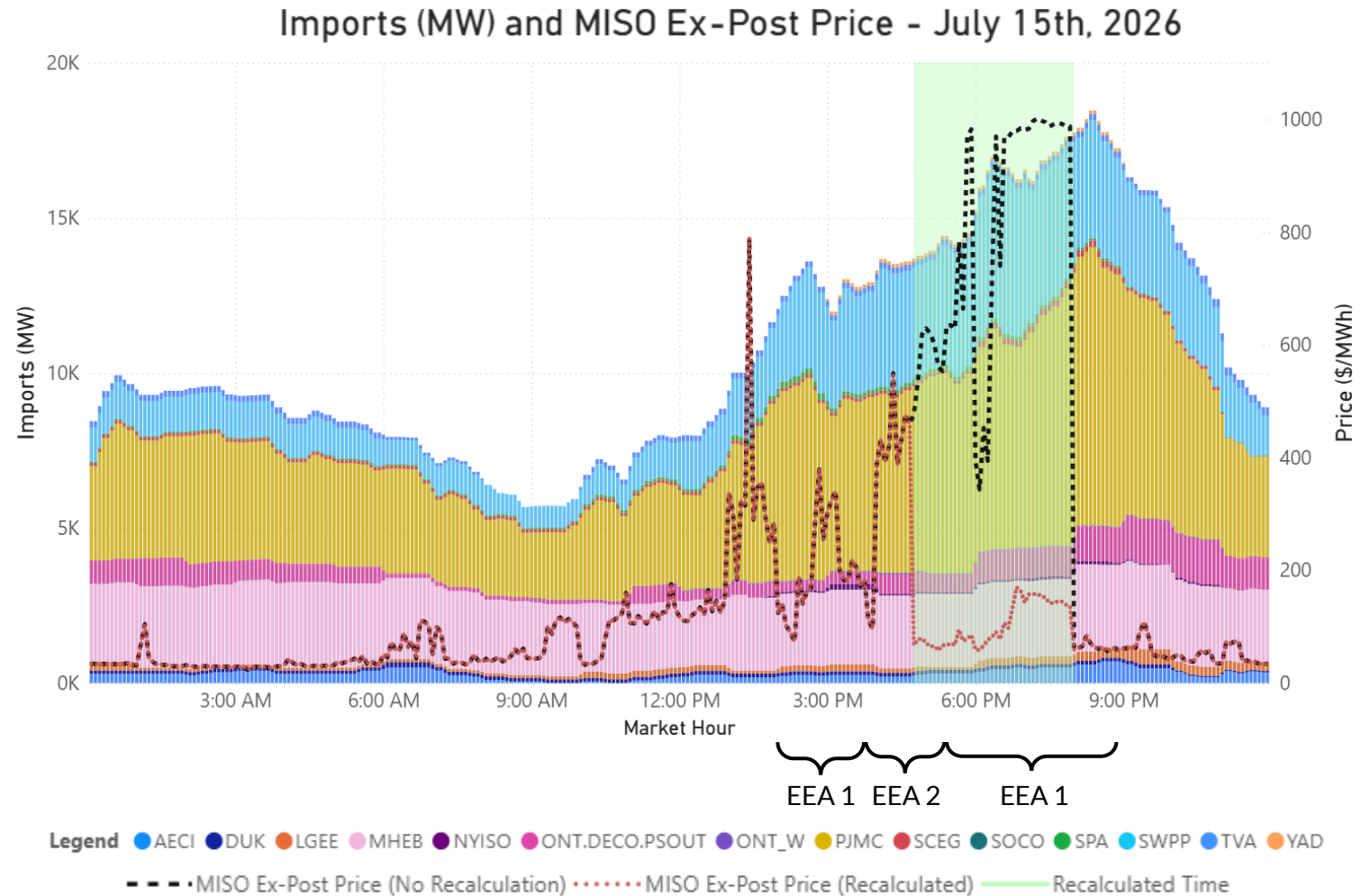
MISO deployed emergency resources to mitigate risk in the North & Central regions which engaged emergency pricing to avoid suppression of ex-post prices

- Emergency resources deployed at HE14 to mitigate capacity insufficiency were not used to set ex-post prices until after the LMRs deployed at HE16 were terminated early around 45 minutes into the planned event
- The cancellation did not propagate to the pricing engine due to a software error requiring declaration of a MIE and recalculation of prices per Module C Section 48.3 of the Tariff



High prices encouraged imports reducing the need for LMR deployment, but prices stayed high due to the MIE and were later corrected

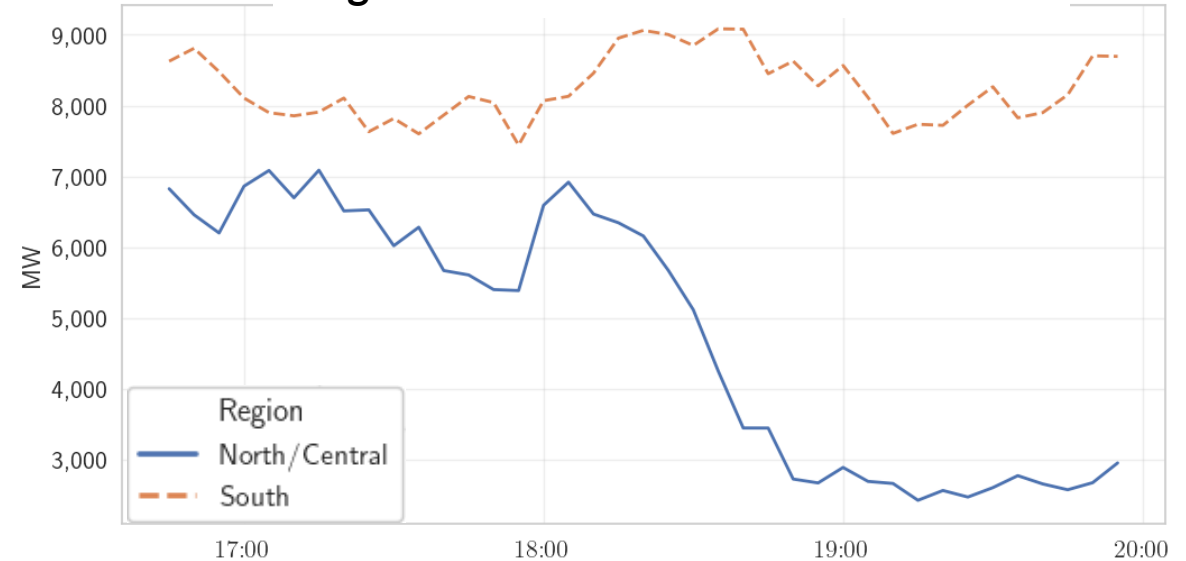
- LMR termination during planned deployment window exposed a software error impacting pricing during the emergency
- The MIE was confirmed on 7/22
 - A fix for the software error has been implemented in production and MISO is exploring ways to avoid future errors



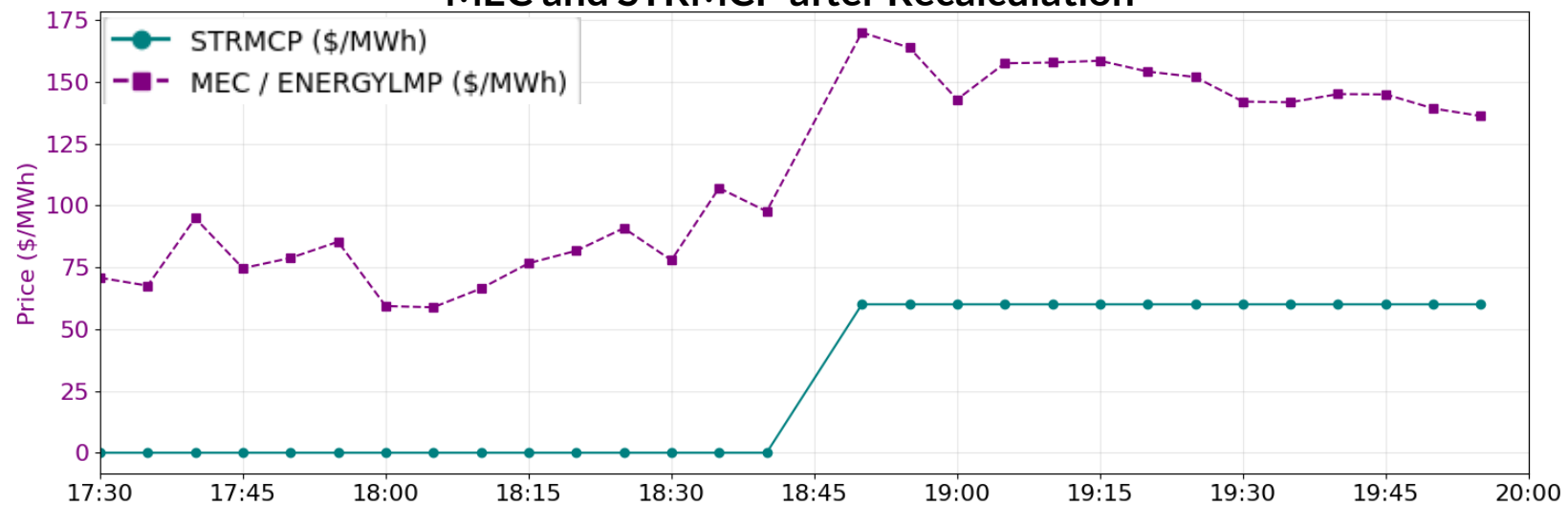
Prices were set by less expensive resources after MIE recalculation, but rose ~\$60 to reflect violation of STR deliverability when the Ramp product was re-enabled at 18:45

- Headroom in the N/C regions decreased as Ramp reserve resumed clearing when EEA 1 step was terminated
- STR reserve began violating at 18:45, increasing the STR MCP to \$60/MWh to incentivize reserve deliverability

Regional Headroom after Recalculation



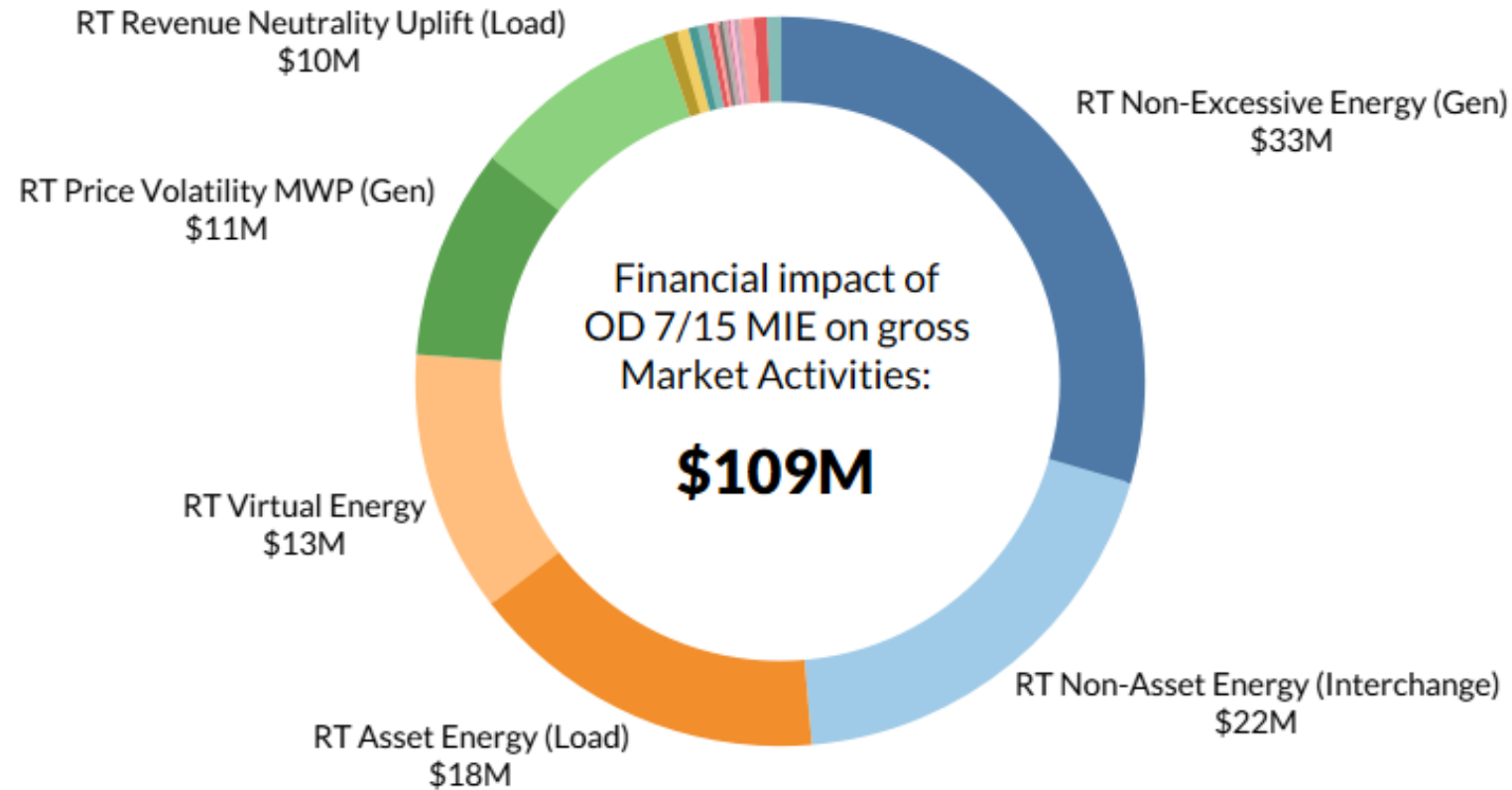
MEC and STRMCP after Recalculation



Higher prices driven by the MIE were recalculated with the biggest impacts to real-time deviation charges, related uplift and prices paid to imports

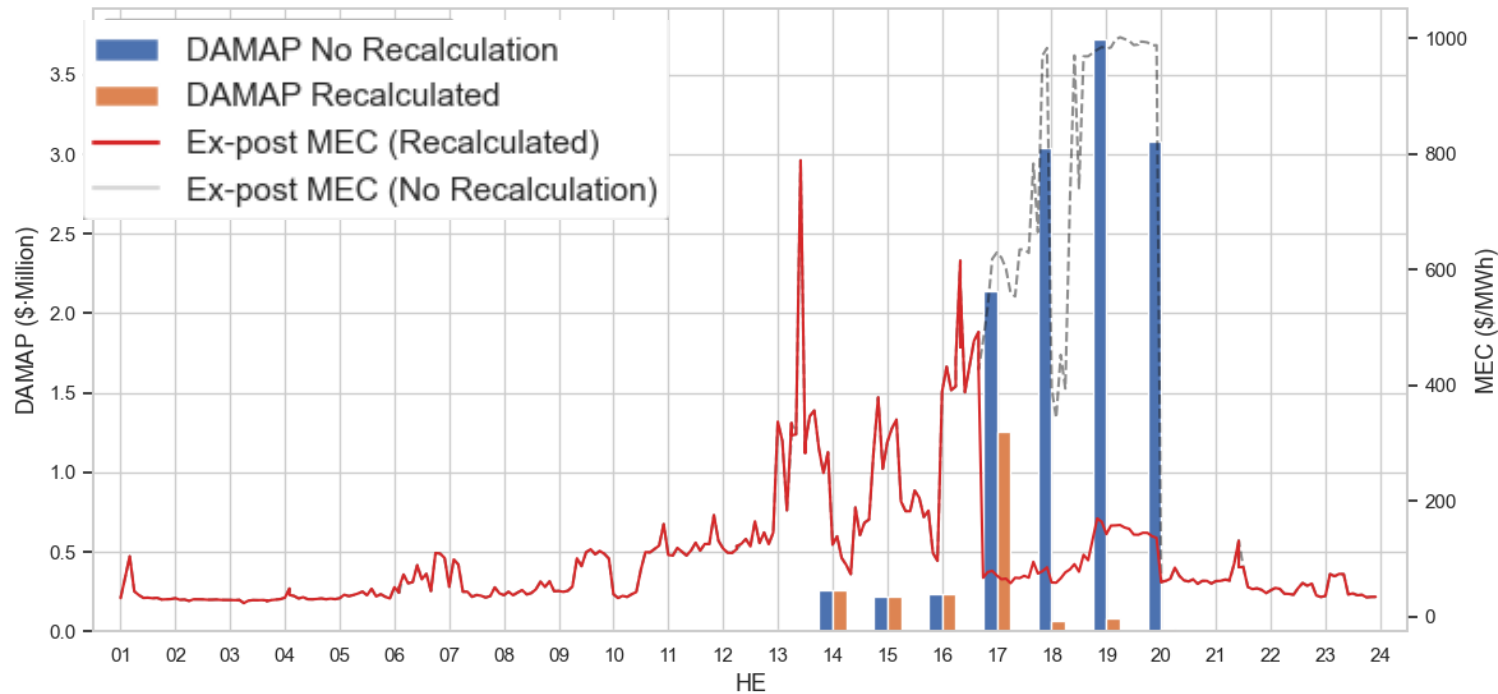
Notable changes

- \$20M reduction in seller credits for Imports into MISO
- \$30M reduction in charges for Generation dispatched down in RT
- \$10.5M reduction in Price Volatility Make-Whole Payments (PVMWP) to Generation
- \$15M reduction in credits to Load for under consuming in the RT but benefited from \$10.5M in PVMWP that was removed from Revenue Neutrality Uplift (RNU) charges
- Net \$3M reduction in Virtual Transaction charges



LMR curtailments and imports reduced use of day-ahead cleared resources leading to high uplift after HE17, which fell significantly after MIE recalculation

DAMAP and MEC before and after Recalculation for 7/15



- The \$10.5M reduction in PVMWP noted on the previous slide was specifically Day Ahead Margin Assurance Payment (DAMAP)
- After recalculating RT prices DAMAP fell by ~80% (\$10.5M)
- Actual payments to maintain margin are typically much smaller part of DAMAP than reimbursement of RT deviation charges

Takeaways and Next Steps

- MISO and its members met challenging summer peak conditions with sufficient capacity to ensure reliability
- MISO has identified opportunities related to pricing outcomes
 - Efforts are underway to implement processes to identify RT pricing issues faster
 - Implementation of processes for stakeholder notifications when RT pricing issues are identified
 - Working to test and validate market inputs and processes during emergency scenarios

Contact

MISO Help Center

<https://help.misoenergy.org/>

Appendix

A Market Implementation Error was declared on July 22, 2026. The recalculated LMPs and other prices served as the basis for Settlement on the S14 of Operating Day July 15, 2026.

- **Market Implementation Errors:** Flaws in the design or implementation of software resulting in changes in ex-post LMPs or other prices cleared through the Energy and Operating Reserve Market and the corresponding changes in Settlements not accurately reflecting the application of the Market Rules.
- **Module C Section 48.3** Revising LMPs and Prices for Market Implementation Errors
 - 48.3.a.ii. The Transmission Provider may change LMPs or other prices cleared through the Energy and Operating Reserve Markets... when... the corresponding changes in Settlements deviate from what would have been produced absent an identified Market Implementation Error or Emergency System Conditions.
 - 48.3.b. and c. In any Operating Day for which the Transmission Provider reasonably believes that a Market Implementation Error will require changes to LMPs or other prices... The Transmission Provider shall post on OASIS and its [website](#) as soon as is reasonably practicable, a notice...
 - 48.3.d. The Transmission Provider shall recalculate changes in LMPs or other prices cleared through the Energy and Operating Reserve Markets... and shall substitute the recalculated LMPs or other prices... in no event later than thirteen (13) Calendar Days... and shall serve as the basis for Settlement.