



WEIM Resource Sufficiency Evaluation Enhancements Phase 2 - Discussion

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Market Surveillance Committee Meeting

General Session

September 19, 2022

ISO PUBLIC

The ISO is proposing three modifications to the design of the WEIM Resource Sufficiency Evaluation (RSE)

- Adjusting ISO RSE obligations to account for low-priority (LPT) exports that clear against WEIM energy transfers
- Requiring that ISO LPT exports be e-tagged as “Firm Provisional”
 - Applies existing market scheduling priorities post hour-ahead scheduling process (HASP) within the hour
- Providing for a BAA that fails the RSE to receive assistance energy transfers
 - Introduces a hurdle rate cost on transfers into a BAA that has failed the RSE

The ISO is proposing to exclude LPT exports that clear the real-time market from its WEIM RSE obligations

- Analysis has demonstrated that the HASP optimization can clear LPT exports based on advisory WEIM transfers or intertie import bids
 - The exports add to the ISO BAA's WEIM RSE obligation while the advisory transfers do not count as supply
 - These exports can cause the ISO BAA to fail the RSE even though the ISO would otherwise have sufficient supply
- Day-ahead LPT exports are not influenced by WEIM transfers; import bids may still clear LPT exports

The ISO is not proposing any changes to how LPT exports from the ISO BAA are represented in WEIM entity base schedules

- Stakeholder comments indicate support for allowing firm provisional schedules to be included in base schedules
- WEIM BAA's do not possess sufficient time in the operational horizon to update base schedules should the ISO dynamically calculate the LPT exports that can be supported from its BAA

The ISO is proposing an e-tag rule for LPT exports

- All LPT exports will have to be tagged as firm-provisional (G-FP); per WECC definition
 - G-FP: This product may be interrupted only if the interruption is within the recall time and for conditions allowed by applicable provisions governing interruption of service, as mutually agreed to by the parties. A G-FP product cannot be interrupted for economic reasons
- Applies the existing HASP scheduling priorities post HASP within the hour (highest to lowest):
 1. ISO demand and priority exports
 2. Day-ahead LPT exports
 3. Real-time pricing taking LPT exports
 4. Real-time economic exports
- Curtailments would still be preformed manually by ISO system operators using the following priorities

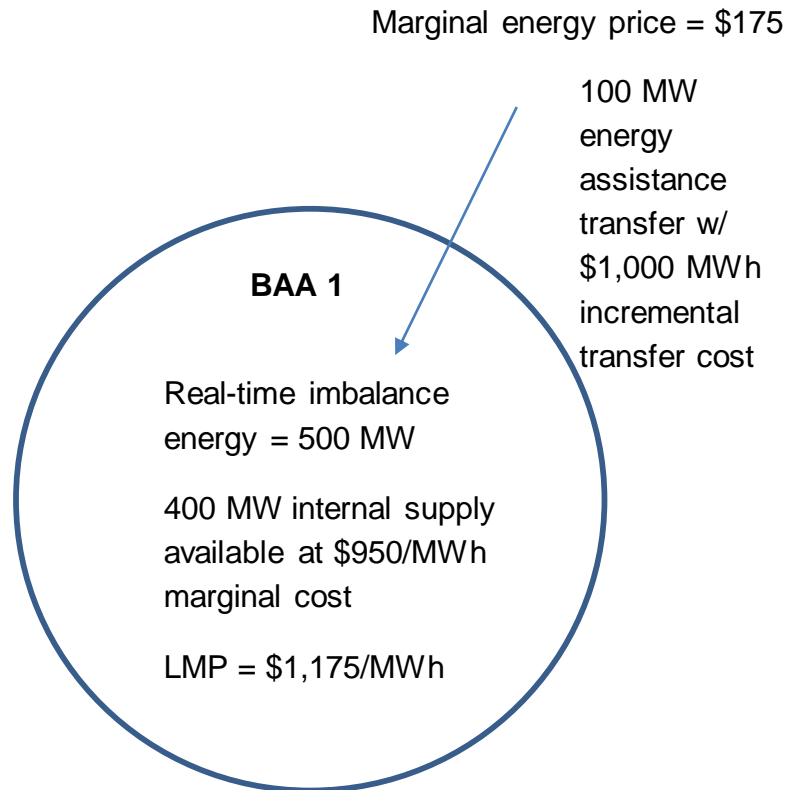
The ISO is proposing to provide for energy assistance through the WEIM to a BAA that fails the RSE because of insufficient supply

- Would allow transfers into deficient BAA once a hurdle rate, implemented through assigning an additional cost to the transfers, has been met
 - Each BAA would elect in the ISO Master File whether it wants to receive assistance energy transfers
- Ensures WEIM can be leveraged to increase reliability, additional cost preserves incentive to meet obligations outside of the WEIM
 - Functionality is intended to resolve undersupply conditions during tight operating conditions; through Master File, functionality can be disabled during more normal operating conditions

Energy assistance will include additional cost of the energy bid cap (\$1,000/MWh or \$2,000/MWh)

- Ensures all supply in deficient BAA is exhausted
 - Assistance energy transfer will only be the amount necessary to cure shortfall
- Additional cost in scheduling run will be set at a price that ensures a WEIM BAA's available balancing capacity is used before clearing assistance energy transfers
- Power balance constraint penalty price for a BAA electing energy assistance increased in the intervals in which it fails RSE
 - Penalty price needs to be twice the applicable bid cap to ensure the market clears energy assistance transfers prior to relaxing power balance constraint (PBC)
 - Example: Energy assistance that would cost \$1,175/MWh would not clear if power balance constraint penalty price is \$1,000/MWh

The proposed implementation is illustrated in the following example



- Rather than relaxing the PBC at penalty price, assistance energy transfers have an adder equal the prevalent price cap
- All imbalance energy in the receiving BAA is charged the resultant LMP (SMEC + adder)
 - External LMPs are not directly affected by the assistance energy transfer

The ISO proposes to allocate assistance energy transfers to BAAs pro-rata based on WEIM export transfers

- Revenue is collected from metered demand as the proposed formulation embeds the cost within the LMP
 - Settlement systems will identify the congestion cost associated with assistance energy transfer
- Allocation creates incentive for WEIM BAAs to make additional supply, bid in at cost, available to the WEIM