# Memorandum

**To:** ISO Board of Governors

**From:** Anna McKenna, Vice President Market Design and Analysis

**Date:** September 13, 2023

**Re:** **Decision on Extended Day-Ahead Market ISO Balancing Authority Area Participation Rules – Track A1**

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***This memorandum requires ISO Board of Governors action.***

## EXECUTIVE SUMMARY

On February 1, 2023, the ISO Board of Governors and WEIM Governing Body approved market design changes to accommodate regional participation in an extended day-ahead market (EDAM). The EDAM design described the overarching market rules, functions, and requirements of a day-ahead market in the West, but recognized that each participating balancing authority area (BAA) will set its own rules governing how it participates under the EDAM framework. This memorandum describes an initial set of rules governing how the ISO BAA will participate in the EDAM. Management's proposal addresses four requirements that arise out of the ISO BAA's participation in the EDAM upon its implementation:

1. Settlement of transfer system resources corresponding with load and supply in the ISO BAA and the distribution of transfer revenues for the ISO BAA.
2. A process for recovering historical wheeling access charge revenues.
3. The allocation of surcharges and revenues associated with failing or passing while others are failing the EDAM resource sufficiency evaluation (RSE).
4. Use of the EDAM net export transfer constraint.

In addition to these elements, collaboration with stakeholders yielded significant input on business practice manual (BPM) details related to the fourth element listed above. While these implementation details will be included in the BPM, and not the tariff, the collaboration that led to their development was a key part of the stakeholder process. As such, they are summarized in this memorandum.

***Moved, that the ISO Board of Governors approve the four recommended sets of rules to govern the ISO balancing authority area's participation in the extended day-ahead market as described in this memorandum dated September 13, 2023; and***

***Moved, that the ISO Board of Governors authorize Management to make all necessary and appropriate filings with the Federal Energy Regulatory Commission to implement the changes proposed in this memorandum, including any filings that implement the overarching initiative policy but contain discrete revisions to incorporate Commission guidance in any initial ruling on the proposed tariff amendment.***

## DISCUSSION AND ANALYSIS

Management proposes a set of rules to govern how the ISO BAA participates in the EDAM. The EDAM design defines the market structure and rules broadly, but recognizes that each balancing authority area participating as an EDAM entity will have further requirements to define in developing changes to its tariffs to support participation in EDAM. The rules proposed in this memorandum are necessary for the ISO BAA to participate in the EDAM upon its implementation. Management will continue to support future stakeholder efforts to explore additional components of EDAM participation that are not necessary for the start of EDAM but for which stakeholders have expressed an interest in pursuing. One such enhancement would be mechanisms for avoiding failing the EDAM resource sufficiency evaluation (RSE) and exploring feasible longer-term solutions for allocating EDAM RSE failure surcharges and revenues that more closely align with cost causation.

### Settlement for Transfer System Resources and Distribution of Additional Transfer Revenue

The market will use a security constrained cost minimizing dispatch across the market footprint. To the extent that supply in one EDAM BAA is used to meet the needs of another EDAM BAA, load in the sink BAA will be charged and supply in the source BAA will be paid based on the locational marginal prices. Schedules associated with transfer system resources represent the energy, imbalance reserves, and reliability capacity transactions between EDAM BAAs as a result of the optimal dispatch.

A portion of the EDAM transfer system resources will be associated with the ISO BAA and the ISO BAA's participation in the market area will generate payments and charges that need to be allocated and distributed to the scheduling coordinators in the ISO BAA. Management recommends the following ISO BAA rules apply to the allocation and distribution of payments and charges for transfer system resources. The proposed allocation ensures the ISO BAA is revenue neutral for charges and payments associated with transfers scheduled with the ISO BAA for energy, imbalance reserves, and reliability capacity.

- For transfer system resources associated with existing transmission contracts (ETC)/transmission ownership rights (TOR) that are scheduled in the market, the net transfer settlement amount associated with the use of those rights is allocated to scheduling coordinators of those rights.
- For transfer system resources associated with the ISO BAA, the net transfer settlement amount is allocated to scheduling coordinators in proration to their metered demand as compared to ISO BAA metered demand (excluding the metered demand for ETCs/TORs).

Under the EDAM design, when congestion occurs between neighboring BAAs, additional transfer revenue results and is reflected as a difference in the marginal energy component within the locational marginal price. This is charged to demand within each BAA. As this incremental transfer revenue is only generated following neighboring BAAs making transmission available to facilitate the transfer, the resulting revenue will be split between each BAA for allocation according to the rules of each BAA. For transfer revenue attributed to the ISO BAA, Management recommends the revenue first be apportioned to those that made their transmission available to facilitate the transfer. Specifically, Management proposes that the following ISO BAA rules apply to the allocation and distribution of transfer revenue or charges:

- Direct settlement with the scheduling coordinator for ETC/TOR rights scheduled in advance of the EDAM, in proration with the rights on the transmission path.
- Direct settlement with the scheduling coordinator for ETC/TOR rights released or made available to the market, in proration with the rights on the transmission path.
- Direct settlement to scheduling coordinators in the ISO based on measured demand, which includes metered demand and exports (excluding demand associated with ETC/TOR schedules).

This proposed allocation ensures ETC/TOR rights are honored with the balance of the allocation to measured demand whose market participation resulted in the accrual of transfer revenue or charges.

Process for Transmission Owners to Recover Historical Wheeling Access Charge Revenues

The EDAM design recognized that transmission owners within an EDAM BAA may potentially experience a reduction in recoverable transmission revenue. Transmission owners in the ISO BAA may experience a reduction in wheeling access charge (WAC) revenues on transmission associated with transfer locations when the ISO BAA joins the EDAM because these locations will incorporated into the EDAM and used to support EDAM and WEIM transfers. The EDAM design recognizes that each BAA's transmission recoverable revenue will be collected from the gross load of other EDAM BAAs. Transmission recoverable revenue collected from the ISO BAA and paid to other EDAM BAA's is directly collected from scheduling coordinators who represent gross load within the ISO BAA in proration to the ISO BAA's total gross load.

Management proposes a means to calculate a transmission owner's historical recoverable amount consistent with the EDAM design's methodology for projected changes in EDAM recoverable revenue. Accordingly, the recoverable amount will be calculated as the sum of three component parts: (1) the historical PTO WAC recoverable revenue, (2) new transmission project recoverable PTO WAC revenue, and (3) PTO excess wheel-through recoverable amount.

- The historical WAC recoverable revenue is a fixed calculation of the three-year average estimated reduction of wheeling transaction at transfer interface and current year wheeling access rate.
- The new transmission project recoverable WAC revenue estimates the foregone wheeling transaction at the new transfer interface and current year wheeling access rate.
- The excess wheel-through recoverable amount captures any additional excess wheel through quantity at the current year wheeling access rate.

Management proposes to distribute the WAC recoverable amounts to PTOs in proportion to the PTO's transmission recoverable amount in relationship to the total ISO transmission recoverable amount. The proposal balances the historic and future WAC recoverable amounts and provides a process to ensure each PTO remains neutral. Lacking this process, the PTO could be subject to loss of WAC revenues that would otherwise be recoverable on their transmission grid ownership rights.

Allocating EDAM RSE Failure Surcharges and Revenues within the ISO BAA

The EDAM RSE is an hourly evaluation to assess the sufficiency of the resources within a BAA against the BAA's expected demand, imbalance reserves requirements and ancillary services requirements. BAAs with resources sufficient to satisfy the projected obligations "pass" the EDAM RSE and BAAs with identified deficiencies "fail" the EDAM RSE.

The EDAM design imposes surcharges on BAAs that fail the EDAM RSE with the revenue allocated to the BAAs that pass the EDAM RSE. Each BAA participating in EDAM is responsible for developing its own methodologies for allocating RSE failure surcharges and revenues within its own BAA. For EDAM RSE revenue and surcharge allocated to the ISO BAA, Management proposes to allocate revenues and surcharges on an hourly basis pro-rata to all scheduling coordinators within the ISO BAA based on metered demand. Through significant work by stakeholders in collaboration with ISO staff, it became apparent that a granular cost causation-driven approach was not feasible for the launch of EDAM. Absent this more granular methodology, Management determined allocating these costs to metered demand is consistent with the manner in which the ISO socializes other costs where there is no clear and traceable demarcation of cost causation.

Utilizing the EDAM Net Export Transfer Constraint in the ISO Balancing Authority Area

The EDAM design sets forth a framework for the net export transfer constraint that can be utilized by any BAA to limit transfers from its balancing authority under certain identified circumstances. The EDAM net export transfer constraint includes two tunable parameters: (1) the confidence factor, applied to the portion of the BAA's non-RSE eligible supply, and (2) the reliability margin, applied to provide additional margin to the source BAA relative to supply available for EDAM export transfers. Consistent with the EDAM design, Management proposes to utilize both parameters when setting the constraint for the ISO BAA, with such parameters configurable by hour as further described in the ISO's BPM.

The net EDAM export transfer constraint will always be enabled for the ISO BAA, with inputs that will vary depending on expected operating conditions in the manner specified in the BPM. Management proposes that these parameters will be set to ensure that only the capacity the ISO BAA has determined is not needed to meet its expected demand, ancillary service requirements, uncertainty requirements, or intra-day reliability needs is available for use by the broader EDAM market. These operating conditions will distinguish between "stressed hours" and "non-stressed hours," with unique reliability margins and confidence factors for both sets of conditions. Stakeholders were supportive of utilizing the BPM to specify these conditions and Management agrees it is appropriate to define the implementation details in the BPM consistent with these expectations.

## POSITIONS OF THE PARTIES

Stakeholders are generally supportive of Management's proposals for transfer resource settlement and transfer revenue distribution. One stakeholder proposed that a portion of the transfer revenue be used to offset some of the foregone wheeling access charge revenue described above. This proposal is outside of the scope of the three components of EDAM recoverable revenue set forth in the framework and is inconsistent with the allocation of energy and transmission costs in the day-ahead and real-time markets. Ultimately transfer revenue is a unique form of congestion and the ISO understands it is most accurately directly allocated to the demand who funded the transmission that enabled the transfer, as compared to a revenue offset of forgone sales under the EDAM.

Stakeholders are supportive of Management's proposal for recovering historical wheeling access charge revenues. However, two stakeholder concerns were raised: (1) the perpetuity of the recovery mechanism; and (2) disagreement over whether subscriber PTOs should share in the distribution of the recoverable amount.

With respect to the first concern, the recoverable mechanism was established to mitigate an EDAM/ISO BAA exposure risk of reduced transmission revenues when joining the EDAM. Management will review this mechanism with stakeholders as the ISO and market participants gain experience with EDAM, and will address any concerns regarding the under- or over-recovery of costs for transmission use through transfers. With respect to the second concern, Management disagrees with the assertion that subscriber PTO should not be eligible to receive WAC recoverable amounts. A separate subscriber wheeling charge is appropriate for non-subscriber encumbered bi-directional

usage of the subscriber-PTO (S-PTO) transmission facilities because under the S-PTO model this transmission which previously was available to support exports has been converted to support transfers.

Stakeholders are generally supportive of Management's proposal for recovering surcharges and revenue associated with EDAM RSE failure. Some stakeholders tentatively support the approach because they strongly prefer an allocation driven by more granular cost causation. Management agrees that where granular cost causations are identifiable, cost allocation mechanisms should follow this principle. However, after detailed discussions with stakeholders, it became apparent that at this time a granular cost causation approach that directly links the surcharge and revenue to the entities that caused the ISO BAA to pass/fail the EDAM RSE could not be identified. For example, stakeholders put forth a two-tiered approach where the first tier allocates the surcharges to load serving entities whose day-ahead supply offers fall short of their share of the BAA's RSE requirements. This approach is premised on the principle that load serving entities are required to meet their resource adequacy requirements through must offer obligations. However, there is no clear cost causation between deficiencies in bids submitted under the current must offer requirement and a load serving entity's load and uncertainty obligation. In the first instance, day-ahead supply offers are not specifically tied to load-serving entities, thus making it impossible to know whether the load serving entity is actually responsible for the deficiency. Also, the current must offer rules under the ISO tariff contain a series of exemptions, which means that the lack of a bid could not be attributed to the load serving entity. Consequently, it is appropriate to allocate RSE failure surcharges and revenues, pro-rata to scheduling coordinators based on metered demand, just as the ISO allocates the costs where the cost causation is not traceable. Management will continue to work with stakeholders to explore the reasonableness and feasibility of alternative solutions in an upcoming stakeholder process.

Stakeholders are largely supportive of Management's proposal on how to set the EDAM net export transfer constraint for the ISO BAA. Stakeholders highlighted in their comments a desire for the ISO BAA to retain a conservative approach as it further refines how ISO resource adequacy supply is utilized through the business practice manuals. Some stakeholders expressed concern with the proposed approach for the constraint's usage but recognize that the BPM process allows for future refinement and potential development of a less conservative approach after stakeholders gain confidence in the EDAM. Management agrees.

## CONCLUSION

Management requests the ISO Board of Governors approve Management's extended day-ahead market ISO balancing authority area participation rules track A1 proposal as described in this memorandum. These rules will govern how the ISO BAA will participate in the in the EDAM upon its implementation, including how the ISO BAA will settle revenues and charges accrued through its participation in the EDAM.