

Extended Day-Ahead Market ISO Balancing Authority Area Participation Rules

Stakeholder Workshop on Track A1 June 14, 2023

Reminders

- This call is being recorded for informational and convenience purposes only. Any related transcriptions should not be reprinted without ISO's permission.
- If you need technical assistance during the meeting, please send a chat to the event producer.



Instructions for raising your hand to ask a question

• If you are connected to audio through your computer or used the "call me" option, select the raise hand icon blocated on the bottom of your screen.

Note: #2 only works if you dialed into the meeting.

- Please remember to state your name and affiliation before making your comment.
- You may also send your question via chat to either Isabella Nicosia or to all panelists.

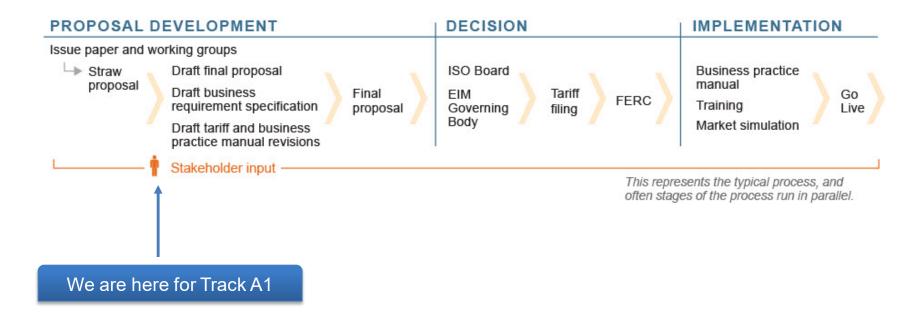


Today's Agenda

Time	Topic	Presenter
9:00am – 9:05am	Welcome + today's agenda	Isabella Nicosia, CAISO
9:05am – 9:20am	Schedule and interaction with other initiatives	CB Hall, CAISO
9:20am – 10:40am	 Net EDAM Export Transfer Constraint Background: CB Hall, CAISO Confidence factor proposal: Kyle Navis, Cal Advocates Confidence factor proposal: Alan Meck, SDG&E 	
10:40am – 10:50am	Break	
10:50am – 12:00pm	 Net EDAM Export Transfer Constraint Confidence factor proposal: Steve Keehn, SCE Discussion led by CAISO staff: CB Hall and Michael Martin, CAISO 	
12:00pm – 12:40pm	Lunch Break	
12:40pm – 2:00pm	 Allocating RSE failure surcharges and revenues – interim solutions Background and guiding principles for cost allocation: CB Hall, CAISO Potential interim solution: John Diep, SCE Potential interim solution: Alan Meck, SDG&E 	
2:00pm – 2:10pm	Break	
2:10pm – 2:50pm	 Allocating RSE failure surcharges and revenues – long term ideas Long-term ideas: Meg McNaul and Bonnie Blair, Six Cities Open discussion 	
2:50pm – 3:00pm	Next steps	Isabella Nicosia, CAISO



CAISO Policy Initiative Stakeholder Process

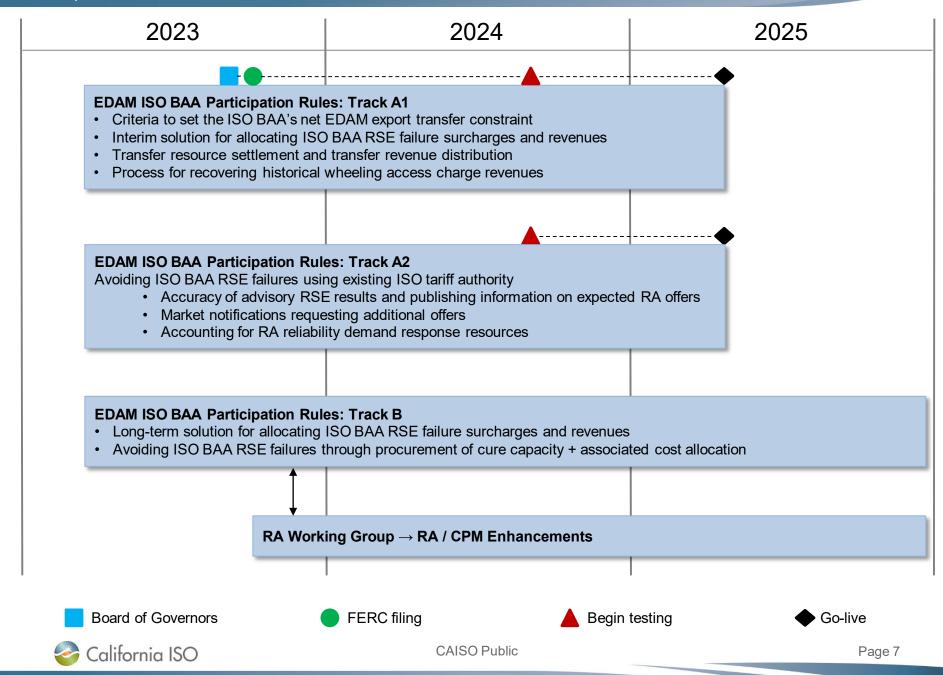




Tracks, Schedule and Interaction with other Initiatives



Tracks, schedule and interaction with other initiatives



Track A1 Schedule Details

Date*	Milestone	
6/14	Track A1 stakeholder workshop	
6/28	Due date for stakeholder comments on track A1 workshop	
7/6	ISO publishes track A1 draft final proposal	
7/13	Stakeholder meeting to discuss track A1 draft final proposal (part 1)	
7/14	Stakeholder meeting to discuss track A1 draft final proposal (part 2)	
7/28	Due date for stakeholder comments on track A1 draft final proposal	
Aug TBD	ISO publishes track A1 final proposal and draft tariff language	
Aug TBD	Stakeholder meeting to review track A1 draft tariff language	
Aug TBD	Due date for stakeholder comments on track A1 draft tariff language	
9/20	ISO Board of Governors decision on track A1	

^{*}All dates are tentative until confirmed through a notice in the ISO's Daily Briefing.



Page 8

Net EDAM Export Transfer Constraint



Net EDAM Export Transfer Constraint – Background

Net EDAM Export Transfer Constraint =

RSE Eligible Supply + (Non RSE Eligible Supply x Confidence Factor) - RSE Obligation - Reliability Margin

Today's stakeholder proposals

Where the net EDAM export transfer constraint:

- Must be ≥ shown bucket 1 transfers out of the BAA
- Cannot be a negative number

And where:

- RSE eligible supply = supply that counts toward the EDAM entity RSE.
- **Non RSE eligible supply** = supply that is ineligible to count toward the EDAM entity's RSE. For the ISO, intertie bids from supply not under contract are ineligible RSE supply.
- Confidence Factor = an optional scaler that accounts for confidence in delivery associated with a
 portion of the non-RSE eligible supply. For example, in the ISO BAA the confidence factor could
 be used to adjust for the risk of untagged intertie day-ahead schedules.
- **RSE Obligation** = the day ahead RSE obligation for the EDAM entity based upon forecasted load, positive uncertainty requirement, and upward ancillary services requirements. It includes high priority exports (PT exports to non-EDAM BAAs) since they are considered in the RSE.
- Reliability Margin = represents an additional amount of capacity established by the EDAM BAA
 to reduce the limit on the BAA net export transfer, if necessary, to account for reliability risk and
 the ability to replace reserves particularly during tight supply system conditions.



Net EDAM Export Transfer Constraint Confidence Factor Proposal

CPUC Public Advocates Office

To access this presentation, please refer to EDAM ISO BAA Participation Rules initiative page on ISO website:

<u>https://stakeholdercenter.caiso.com/StakeholderInitiatives/Extended-day-ahead-market-ISO-balancing-authority-area-participation-rules</u>



Net EDAM Export Transfer Constraint Confidence Factor Proposal

San Diego Gas & Electric

To access this presentation, please refer to EDAM ISO BAA Participation Rules initiative page on ISO website:

<u>https://stakeholdercenter.caiso.com/StakeholderInitiatives/Extended-day-ahead-market-ISO-balancing-authority-area-participation-rules</u>



Net EDAM Export Transfer Constraint Confidence Factor Proposal

Southern California Edison

To access this presentation, please refer to EDAM ISO BAA Participation Rules initiative page on ISO website:

<u>https://stakeholdercenter.caiso.com/StakeholderInitiatives/Extended-day-ahead-market-ISO-balancing-authority-area-participation-rules</u>



Three key topics:

- 1. Stressed vs. Non-Stressed Hours
- 2. Confidence Factor
- 3. Reliability Margin



Application of "Stressed Hours"

- Applied to overall constraint (i.e., turn constraint on and off)?
- Applied specifically to <u>Confidence Factor</u> and/or <u>Reliability Margin</u> (i.e., different criteria for different conditions)?

Potential Definition of "Stressed Hours"

Any hour that meets one of the following conditions as of approximately 8am day-ahead ISO BAA operations meeting:

- Operational RA capacity + RA credits < demand forecast + contingency reserve requirement + regulation reserve
- Operational net RA capacity + RA credits < net demand forecast + contingency reserve requirement + regulation reserve
- Advisory RSE upward failure quantity expected day-ahead offers not yet submitted by available RA resources with day-ahead must offer obligations > 0
- Restricted Maintenance Operations
- Wide-area Transmission Emergency
- D+2 RUC infeasibility



Confidence Factor: CAISO BAA reliability is paramount

- What confidence factor results in the desired level of reliability for the CAISO BAA?
- Are varying confidence factors during "Stressed" and "Non-Stressed" hours appropriate?
- Is analysis needed to assess deliverability of non-forward contracted inter-tie bids?



Reliability Margin

Stressed Hours¹

 Based on 8am BAA operations meeting, calculate default value for each hour by taking the max of (1) replacement reserves based on forecasted most severe single contingency; (2) protection for a non-credible contingency based on weather conditions (fires); (3) gas OFO/curtailments; (4) Imbalance Reserve Up requirement²

Non-Stressed Hours¹

 Based on 8am BAA operations meeting, calculate default value for each hour by taking the max of (1) replacement reserves based on forecasted most severe single contingency; (2) protection for a non-credible contingency based on weather conditions (fires); (3) gas OFO/curtailments

Notes

- 1: BAA operations will apply values consistent with good utility practice, taking into account that the sub-variables above are not mutually exclusive
- 2: Imbalance reserve up (IRU) requirement has been added to account for a potential shortfall in IRU procurement during stressed hours, when prices may exceed the \$55/MW price limit embedded in the IRU demand curve



Lunch Break



Allocating RSE Failure Surcharges and Revenues



Allocating RSE Failure Surcharges and Revenues: Background

- The EDAM design provides a financial consequence framework for failure to pass the day-ahead RSE, which incentivizes procurement to ensure daily sufficiency
- Three types of RSE failure surcharges (and corresponding revenues)
 - On-peak upward failure surcharge
 - Off-peak upward failure surcharge
 - Downward failure surcharge
- Upward failure surcharge calculations include a failure multiplier that is dependent on the magnitude of the failure quantity, relative to the deficient BAA's upward imbalance reserve requirement:
 - Tier 1 failure multiplier = 0
 - Tier 2 failure multiplier = 1.25
 - Tier 3 failure multiplier = 2.00



Allocating RSE Failure Surcharges and Revenues: Guiding Principles for Cost Allocation¹

- Causation: costs will be charged to resources and/or market participants that benefit from and/or drive the costs
- Comparable Treatment: similarly situated resources and/or market participants should receive similar allocation of costs and not be unduly discriminated against
- Accurate Price Signals: the cost allocation design supports the economically efficient achievement of state and federal policy goals by providing accurate price signals from the ISO market.
- Incentivize Behavior: providing appropriate incentives is key to an economically efficient market.
- Manageable: market participants should have the ability to manage exposure to the allocation
- Synchronized: the cost drivers of the allocation should align as closely as possible to the selected billing determinant
- Rational: Implementation costs/complexity should not exceed the benefits that are intended to be achieved by allocating costs

^{1:} Cost Allocation Guiding Principles, March 2012: http://www.caiso.com/Documents/DraftFinalProposal-CostAllocationGuidingPrinciples.pdf



Allocating RSE Failure Surcharges and Revenues: ISO Straw Proposal for interim solution

RSE failure surcharges

Allocate RSE failure surcharges on an hourly basis as follows: based on MW of metered demand for each SC as a portion of total ISO BAA metered demand, for each hour the ISO BAA was assessed RSE failure surcharges

RSE failure revenues

Allocate RSE failure revenues on an hourly basis as follows: based on MW of metered demand for each SC as a portion of total ISO BAA metered demand, for each hour the ISO BAA received RSE failure revenues

Justifications

- A significant portion of EDAM benefits will likely accrue to load, so it is reasonable for metered demand to take on the initial exposure to surcharges and revenues until a long-term solution can be designed and implemented
- A long-term solution will require further stakeholder discussions and careful consideration of interactions with RA processes



Allocating RSE Failure Surcharges and Revenues: Potential Interim Solution

Southern California Edison

To access this presentation, please refer to EDAM ISO BAA Participation Rules initiative page on ISO website:

<u>https://stakeholdercenter.caiso.com/StakeholderInitiatives/Extended-day-ahead-market-ISO-balancing-authority-area-participation-rules</u>



Allocating RSE Failure Surcharges and Revenues: Potential Interim Solution

San Diego Gas & Electric

To access this presentation, please refer to EDAM ISO BAA Participation Rules initiative page on ISO website:

<u>https://stakeholdercenter.caiso.com/StakeholderInitiatives/Extended-day-ahead-market-ISO-balancing-authority-area-participation-rules</u>



Allocating RSE Failure Surcharges and Revenues: Long-term ideas

Six Cities

(Cities of Anaheim, Azusa, Banning, Colton, Pasadena and Riverside)

To access this presentation, please refer to EDAM ISO BAA Participation Rules initiative page on ISO website:

<u>https://stakeholdercenter.caiso.com/StakeholderInitiatives/Extended-day-ahead-market-ISO-balancing-authority-area-participation-rules</u>



Allocating RSE Failure Surcharges and Revenues: Long-term ideas

Open Discussion



Next Steps



Next steps

Comments on this workshop are due by end of day June 28, 2023.
 Please submit your comments using the comment template available on the initiative webpage:

https://stakeholdercenter.caiso.com/StakeholderInitiatives/Extended-Day-Ahead-Market-ISO-Balancing-Authority-Area-Participation-Rules

- Upcoming milestones*:
 - 7/6: ISO publishes A1 draft final proposal
 - 7/13-7/14: stakeholder meeting on A1 draft final proposal
 - 7/28: due date for stakeholder comments on A1 draft final proposal



^{*}All dates are tentative until confirmed through a notice in the ISO's Daily Briefing.

For reference

- Visit initiative webpage for more information:
 https://stakeholdercenter.caiso.com/StakeholderInitiatives/
 https://stakeholdercenter.caiso.com/StakeholderInitiatives/
 https://stakeholderlnitiatives/
 <a href="mailto:Extended-Day-Ahead-Market-ISO-Balancing-Authority-Ahead-Market-ISO-Balancing-Authority-Ahead-Market-ISO-Balancing-Authority-Ahead-Market-ISO-Balancing-Authority-Ahead-Market-ISO-Balancing-Authority-Ahead-Market-ISO-Balancing-Authority-Ahead-Market-ISO-Balancing-Authority-Ahead-Market-ISO-Balancing-Ahead-Ahe
- If you have any questions, please contact isostakeholderaffairs@caiso.com

