Settlements Refresher Training: DAME, EDAM, and EDAM CAISO Balancing Authority Participation Rules

April 21, 2026

Today's Trainer:
Heidi Carder, Lead Customer Education Trainer

Rev.4/21/26

Housekeeping

REMAIN MUTED

Keep yourself muted to minimize background noise

ASKING QUESTIONS

Unmute to ask verbal questions or write in the chat pod

RAISING HAND

Raise your hand using WebEx interactivity tools

Defining Roles & Responsibilities

Role	Definition
EDAM Entity	A Balancing Authority (BA) that participates in the EDAM market (this includes the CAISO BA). EDAM entities provide inputs such as market limits, outages and transmission constraints specifically for their Balancing Authority Area (BAA). EDAM entities can also be an SC representing loads and resources within their BA should they hold such responsibilities.
Market Operator/ Real Time Market Operator	The Market Operator is a separate role within the CAISO that is staffed by personnel dedicated to the equal and independent operation of both regional markets – EDAM and WEIM.
Scheduling Coordinator (SC)	The SC is a certified entity that participates in the market by submitting bids and outages and managing the coordinated operations of its facilities.
Transmission Customer SC	A Scheduling Coordinator that submits and manages transmission service schedules on behalf of a Transmission Customer for transactions associated with Extended Day-Ahead Market participation.

The output from the day-ahead timeframe (EDAM) is reviewed and implemented in real-time (WEIM) with any necessary real time adjustments

Who is the primary audience for this training session?

Settlements staff for:

- Scheduling Coordinators within the ISO Balancing Authority Area (BAA)
- Extended Day-Ahead Market (EDAM) Scheduling Coordinators
- Stakeholders engaged in Western energy markets who want to stay informed

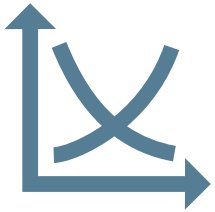
What you will learn

By completing this training, you will gain essential knowledge to prepare for participation in market simulation activities for DAME/EDAM/EDAM ISO BAA Participation Rules settlements.

You will be able to:

- Identify and navigate key informational resources used to support the interpretation of updated and newly introduced settlement charge codes.
- Interpret a settlement charge code by analyzing the details provided in a configuration guide, including its purpose, inputs, and settlement application.
- Explain settlements related to:
  - Imbalance Reserve Tier 1 and Tier 2 Settlement and Reliability Capacity
  - Imbalance Reserve (IR) Portion of the Flexible Ramp Product (FRP)
  - Resource Sufficiency Evaluation (RSE)
- Describe key settlements timelines

How are the **DAME**, **EDAM**, and **EDAM ISO BAA Participation Rules** initiatives related?



Day-Ahead Market Enhancements

Enhances Day-Ahead Market with new market products

- Imbalance Reserves
- Reliability Capacity

Extended Day-Ahead Market

Extends Day-Ahead capabilities to a wider market footprint

EDAM ISO BAA Participation Rules

Addresses unique aspects of how the CAISO BAA will participate in EDAM

Market Settlements

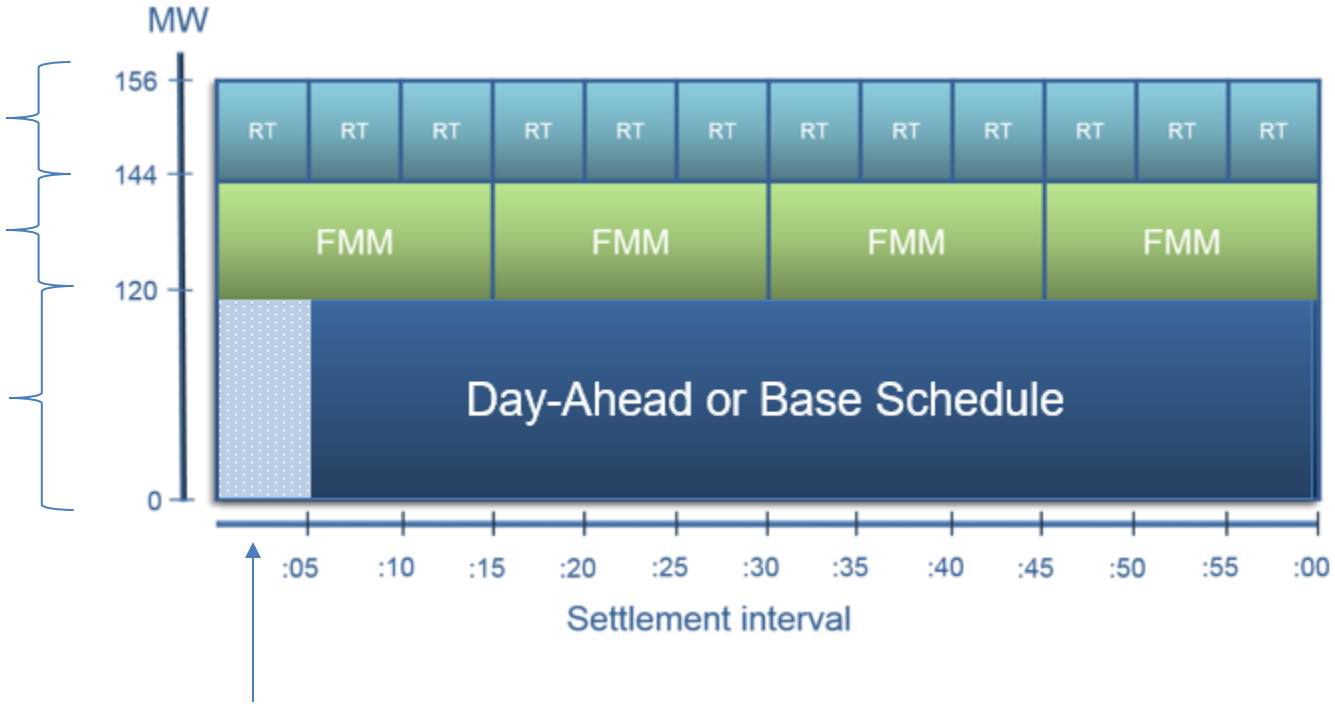
- ISO provides settlement services for both Day-Ahead and Real-Time energy markets
- Settlements are conducted with Scheduling Coordinators (SCs) representing market participants
- Applies to resources and loads that bid into and are awarded by the market
- Covers settlements for energy produced/consumed and associated charges
- ISO settles directly with EDAM entity SCs for certain transactions
- EDAM entities can allocate settlements within their own balancing area
- More details available in the EDAM entity's Tariff

Energy settlements occur in day-ahead, the fifteen-minute market and real-time

Real-Time Dispatch awards for each 5-minute interval within an operating hour

Fifteen Minute Market awards for each 15-minute interval within an operating hour

Day-Ahead awards looking over 24-hour horizon



Energy settlements are calculated in 5-minute intervals

User group forums provide additional engagement opportunities

Release User Group (RUG)	Technical User Group (TUG)	Settlement User Group (SUG)	Market Simulation	Business Practice Manual (BPM)
Bi-weekly meeting to assesses market initiative implementation impacts to determine target timeframes, project milestones and other resource considerations.	**Bi-weekly** meeting to assesses process and technology design, implementation and evolution, and identifies and evaluates resolutions for technical issues.	**Bi-weekly** discussion forum for Market Participants and RC West customers to obtain information, provide input and ask questions on current ISO initiatives and activities affecting the settlement and invoicing processes.	**Weekly *(as needed)*** discussion forum for Market Participants to review market initiative implementation impacts, timeframes, millstones, and other relevant information.	**Monthly** meeting to discuss proposed revision requests on Business Practice Manuals (BPMs) that are in the initial and recommendation stages of the BPM change management stakeholder process.
Release User Group	ISO Developer Site	Settlement User Group	Release Planning Meetings	Business Practice Manual Meetings

Find recurring meeting dates on the ISO Calendar:
https://www.caiso.com/meetings-events/calendar

NEW & IMPACTED CHARGE CODES

Draft of DAME and EDAM Charge Code Change Summary with Tariff Mapping – shows all new and impacted charge codes

A	B	C	D	E	F	G
Release Planning	https://www.caiso.com/systems-applications/release-planning					
Tech Doc	https://www.caiso.com/systems-applications/release-planning					
Charge Code Number	**Tech Doc**	**Charge Code Name**	**Charge Code Description**	**Tier**	**New CC**	**Tariff**
491	CG CC 491 Green House Gas Emission Cost Revenue	Greenhouse Gas Emission Cost Revenue	* Imbalance Settlement of supply resources who receive a real time GHG Obligation Award for given GHG Region(s) from Day Ahead GHG Obligation for given GHG Region(s), CC 8310 - Day Ahead GHG	Tier 2	NO	§11.5.10 §§29.32 (d)
495	CG CC 495 Real Time GHG Offset	Real Time Market GHG Offset	* Applies to each GHG Region and allocated to Metered Demand of GHG Region * This is a neutrality settlement of RTM GHG costs	Tier 2	YES	§11.5.10 §§29.32 (d) §11.5.4.1.1 (d) §29.11 (e) §11.5.4.1.1 §11.5.4.1.2 §11.5.4.1.3 §11.5.4.1.4
4512	CG CC 4512 GMC - Inter-Scheduling Coordinator Trade Transaction Fee	GMC - Inter-Scheduling Coordinator Trade Transaction Fee	*GMC Inter-Scheduling Coordinator Trade (IST) Transaction Fee contains the activities associated with accepting, processing, and validating Day-Ahead and Fifteen Minute Market (FMM) IST schedules	Tier 3	NO	§28.1.2
4515	CG CC 4515 GMC Bid Transaction Fee	GMC Bid Transaction Fee	* Bid Segment Fee per bid segment for resource Economic Energy Bids, Self Schedule, IRU, IRD, RCU and RCD	Tier 3	NO	§11.22.2.5.1, §11.22.5, §11.29.5.3, §31.5.6 §11.22.2.5 §33.11.6 §29.11 (i) (7) §Appendix A §Appendix A (Bid), §Appendix F
4560	CG CC 4560 GMC Market Services Charge	GMC Market Services Charge	* Applies to the sum of SC Day Ahead Energy Schedules (Generation, Intertie, and Load, with a Transitional Load Ramp-In applying to Load), Ancillary Service Awards and Self-provisions, Imbalance Reserve Awards, Reliability Capacity Awards, and specific Real Time Instructed Imbalance Energy dispatches. * In the first 5 Trade years of EDAM activation(2026-2031), a Transitional Load Ramp-in mechanism will apply to EDAM Load Schedules.	Tier 3	NO	§11.22.2.5 §33.11.6 §29.11 (i) (7) §Appendix A §Appendix F
4561	CG CC 4561 GMC System Operations Charge	GMC System Operations Charge All BAA	* Termination Date will be 12/31/25 per Cost of Service Study Initiative	Tier 3	NO	§11.22.2.5 §33.11.6 §29.11 (i) (7) §Appendix A §Appendix F
4563	CG CC 4563 GMC Transmission Ownership Rights Charge	GMC Transmission Ownership Rights Charge	* Applies to CISO BAA Only	Tier 3	NO	§11.22.2.5 §33.11.6 §29.11 (i) (7) §Appendix A §Appendix F
4564	CG CC 4564 GMC EIM Transaction Charge	GMC EIM Transaction Charge	* Applies to WEIM Only BAAs * EIM Administrative Charge rate represents the amount all users of these real-time services pay	Tier 3	NO	§11.22.2.5 §33.11.6 §29.11 (i) (7) §Appendix A §Appendix F

Draft of DAME and EDAM Charge Code Change Summary with Tariff Mapping – shows all new and impacted charge codes - Example

	A	B	C	D	E	F	G
	Release Planning	https://www.caiso.com/systems-applications/release-planning					
	Tech Doc	https://www.caiso.com/systems-applications/release-planning					
	Charge Code Number	**Tech Doc**	**Charge Code Name**	**Charge Code Description**	**Tier**	**New CC**	**Tariff**
	491	CG CC 491 Green House Gas Emission Cost Revenue	Greenhouse Gas Emission Cost Revenue	* Imbalance Settlement of supply resources who receive a real time GHG	Tier 2	NO	§11.5.10
	Release Planning	https://www.caiso.com/systems-applications/release-planning					
	Tech Doc	https://www.caiso.com/systems-applications/release-planning					
	Charge Code Number	**Tech Doc**	**Charge Code Name**	**Charge Code Description**	**Tier**	**New CC**	**Tariff**
	8071	CG CC 8071 Day Ahead Imbalance Reserve Up Settlement	Day Ahead Imbalance Reserve Up Settlement	* Applies to CISO and EDAM BAAs * Resource-specific settlement of IRU awards at IRUMP. * Settle with LSE which opted true-up of overlap RA usage * Financial Advisory settlement of Transfer System Resource (TSR) IRU Awards	Tier 1	YES	§11.2, §11.2.1.1, §11.2.1.8, §11.2.2.1, §11.2.2.2.1, §11.2.2.2.3, §11.2.3.1.3, §11.2.6, §11.10.6 §11.29.5 §31.5.6, §31.5.7, §33.11.3.1 §33.11.3.2 §33.11.3.3 §33.11.3.4 §40.6.1, §40.10.6.1
	4560	CG CC 4560 GMC Market Services Charge	GMC Market Services Charge	* Applies to the sum of SC Day Ahead Energy Schedules (Generation, Intertie, and Load, with a Transitional Load Ramp-In applying to Load), Ancillary Service Awards and Self-provisions, Imbalance Reserve Awards, Reliability Capacity Awards, and specific Real Time Instructed Imbalance Energy dispatches * In the first 5 Trade years of EDAM activation(2026-2031), a Transitional Load Ramp-in mechanism will apply to EDAM Load Schedules	Tier 3	NO	§11.22.2.5 §33.11.6 §29.11 (i) (7) §Appendix A §Appendix F
	4561	CG CC 4561 GMC System Operations Charge	GMC System Operations Charge for EDA	* Termination Date will be 12/31/25 per Cost of Service Study Initiative	Tier 3	NO	§11.22.2.5 §33.11.6 §29.11 (i) (7) §Appendix A §Appendix F
	4563	CG CC 4563 GMC Transmission Ownership Rights Charge	GMC Transmission Ownership Rights Charge	* Applies to CISO BAA Only	Tier 3	NO	§11.22.2.5 §33.11.6 §29.11 (i) (7) §Appendix A §Appendix F
	4564	CG CC 4564 GMC EIM Transaction Charge	GMC EIM Transaction Charge	* Applies to WEIM Only BAAs * EIM Administrative Charge rate represents the amount all users of these real-time services pay	Tier 3	NO	§11.22.2.5 §33.11.6 §29.11 (i) (7) §Appendix A §Appendix F

1. Charge Code Number
2. Configuration Guide Tech Doc Title
3. Charge Code Name
4. Description and Applicability
5. Completion Priority Tier
6. New or Updated Indicator
7. Tariff Reference

Draft Design Bill Determinant Standard and Convention Document

Purpose:

- provide design standard and naming convention for settlement system configuration design.
- provide direction in design standard and naming convention for settlement system configuration design to implement required charge codes.

DAME/EDAM related BPMs are going through the change management process

Business Practice Manuals

Business Practice Manuals (BPMs) provide detailed rules, procedures and examples for the administration, operation, planning and accounting requirements of the California ISO and the market that are consistent with the ISO tariff.

Adherence to the manuals is important for orderly operation of the ISO market. And our systematic and publicly transparent change management process ensures the consideration of all relevant information when modifying these manuals.

On this page

References

BPM change management process

BPM document library

View all Business Practice Manuals.

BPM change management application

Access the ISO's change management application. The application contains a built-in user guide, for help, click the question mark icon on any page.

Proposed Revision Request 1662

California ISO | Business Practice Manual Change Management

LOGIN / REGISTER HOME STAKEHOLDER MEETINGS CONTACT BPM CHANGE MANAGER FAQ BPM DOCUMENT LIBRARY

The California ISO's change management process facilitates the transparent exchange of ideas and information when the ISO considers modifications to its Business Practice Manuals (BPMs). Use this site to submit and view Proposed Revision Requests (PRRs) and their statuses and to access BPM library.

- The purpose of BPMs is to set forth business practices that implement the ISO tariff. The ISO conducts a yearly policy initiative roadmap process to consider and rank initiatives.
- Policy changes submitted though the PRR process will be referred to the policy initiative road map process. Each subject area in a BPM is based on enabling language in the ISO tariff.
- The PRR process cannot be used to introduce changes that are not supported by existing tariff authority.

PRR Filter

Search Clear Filters User Guide

- All the columns can be Sorted/Filtered except for the 'Comments' column.
- Click on the PRR Number to view the complete details of the PRR.
- To view the complete title mouse hover on the PRR Title field.
- IC - Initial Comment, RC - Recommendation Comment

50 entries per page

Showing 1 to 50 of 1,660 entries

« ‹ 1 2 3 4 5 … 34 › »

PRR	PRR Title	BPM	Status	Category	Submitted By	Priority	Last Action	Comment
1669	New day-ahead market enhancements configurable parameters	Market Operations	Initial Comment	B	Martin, Michael	Emergency	04/20/2026	IC:0 RC:0
1668	Initial version of the market operations BPM changes for the day-ahead market enhancements and extended day-ahead market initiatives	Market Operations	Initial Stakeholder Meeting	C	Martin, Michael	Emergency	04/16/2026	IC:4 RC:0
1667	Updates for day-ahead market enhancements and extended day-ahead market initiatives	Market Instruments	Stakeholder Meeting on Recommendation	C	Martin, Michael	Normal	04/16/2026	IC:3 RC:2
1666	Various updates related to aggregate capability constraints	Market Operations	Stakeholder Meeting on Recommendation	A	Martin, Michael	Normal	04/16/2026	IC:0 RC:0
1665	Initial version of extended day-ahead market BPM	Extended Day-Ahead Market	Stakeholder Meeting on Recommendation	C	Martin, Michael	Normal	04/16/2026	IC:1 RC:2
1664	New attachment A - California ISO's balancing authority area supplement to the extended day-ahead market BPM	Extended Day-Ahead Market	Stakeholder Meeting on Recommendation	C	Martin, Michael	Normal	04/16/2026	IC:1 RC:0
1663	Changes due to the day-ahead market enhancements and extended day-ahead market policy initiatives	Reliability Requirements	Stakeholder Meeting on Recommendation	C	Mohammed Ali, Abdulrahman	Normal	04/16/2026	IC:3 RC:2
1662	Updating settlement configuration guides for day-ahead market enhancements, extended day-ahead market, and California ISO's balancing authority area participation in the extended day-ahead market	Settlements and Billing	Stakeholder Meeting on Recommendation	C	Ahmadi, Massih	Normal	04/16/2026	IC:2 RC:2
1661	New long start resource min down time awareness enhancement	Market Operations	Stakeholder Meeting on Recommendation	B	Martin, Michael	Normal	04/16/2026	IC:2 RC:0
1660	Clarification of variable energy resource persistence forecasting	Energy Imbalance Market	Closed	B	Martin, Michael	Normal	04/15/2026	IC:0 RC:0

Proposed Revision Request Detail Page

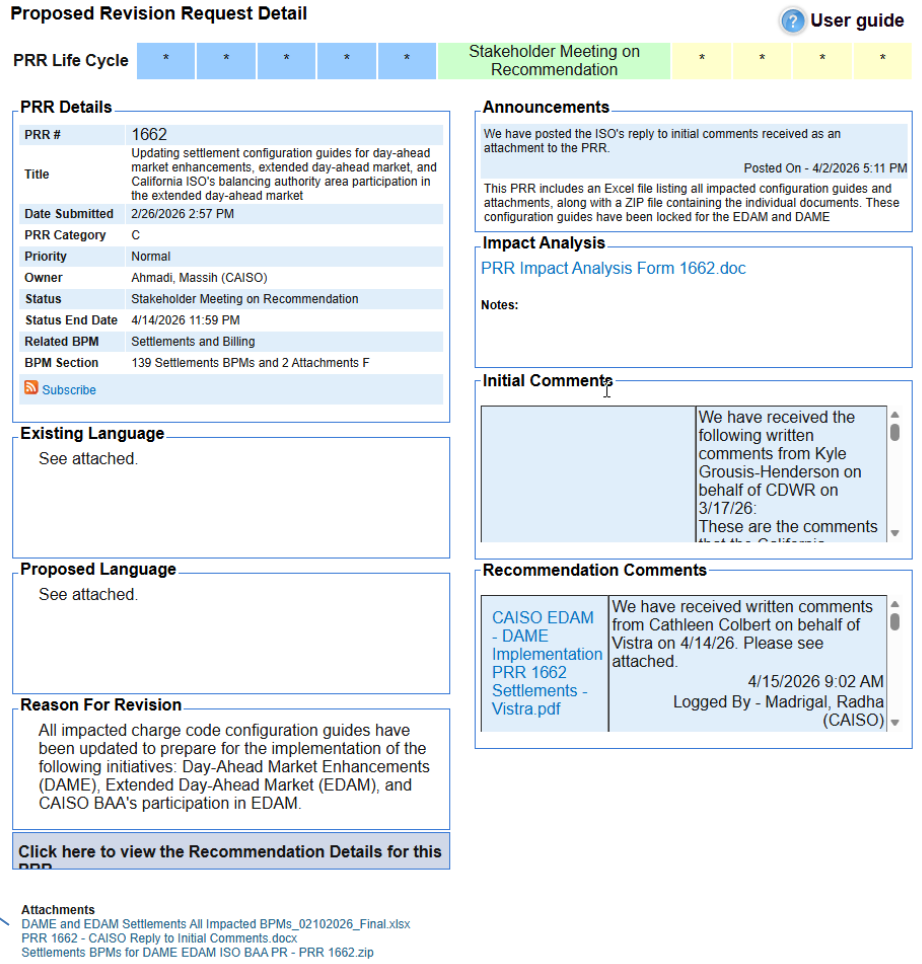
Folder name: 01282026 - Draft ICG Lockdown/Converted

DAME and EDAM Settlements BPMs

Charge Code	NAME	New Charge Code
491	Green House Gas Emission Cost Revenue	
495	Real Time GHG Offset	*NEW*
701	Forecasting Service Fee	
4512	GMC Inter-Scheduling Coordinator Trade Transaction Fee	
4515	GMC Bid Transaction Fee	
4560	GMC Market Services Charge	
4561	GMC System Operations Charge	
4563	GMC Transmission Ownership Rights Charge	
4564	GMC EIM Transaction Charge	
4566	GMC System Operations Balancing Authority Area Service Charge	*NEW*
4567	GMC System Operation Real Time Dispatch Charge	*NEW*
4989	Daily Rounding Adjustment Allocation	
4999	Monthly Rounding Adjustment Allocation_5.9	
4999	Monthly Rounding Adjustment Allocation	
6011	Day Ahead Energy Congestion Loss Settlement	
6013	Convergence Bidding DA Energy Cong Loss Settlement	
6045	Over and Under Scheduling EIM Settlement	
6046	Over and Under Scheduling EIM Allocation	
6090	Upward Ancillary Services Neutrality Allocation	
6100	Day Ahead Spinning Reserve Capacity Settlement	
6124	No Pay Spinning Reserve Settlement	
6170	Real Time Spinning Reserve Capacity Settlement	
6194	Spinning Reserve Obligation Settlement	
6196	Spinning Reserve Neutrality Allocation	

New

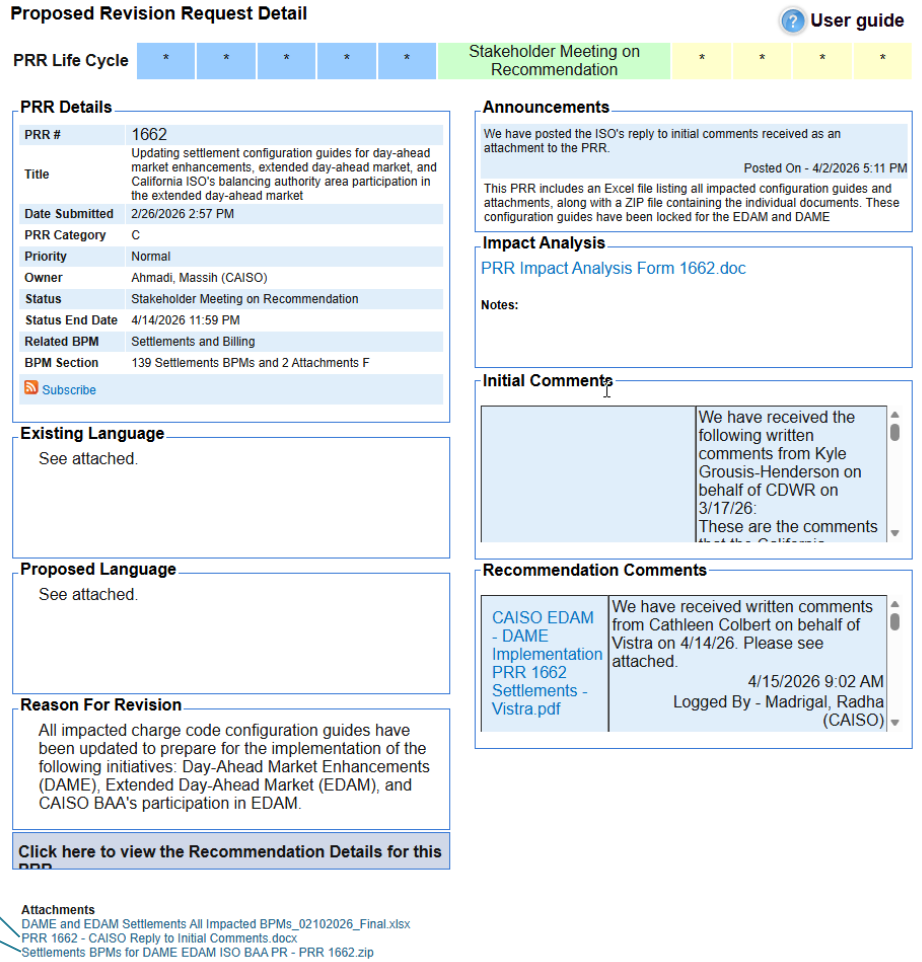
Q’ Change to multiple calculations to represent applicable Balancing Authority Areas (BAAs)



Proposed Revision Request Detail Page

Comments

Configuration Guides



Charge Code Matrix Draft

Provides context and applicability of all charge codes based on role

Not shown: additional columns including Demand, Metered Substations, Convergence Bidding, etc.

California ISO

Disclaimer: While every effort is made to make this matrix accurate, Settlements applicability is still governed by the Tariff and BPM for the

Legend
CAISO = C
WEIM = W
EDAM = E

Update 4/29/2026

			Status			Supply								WEIM & EDAM				
* ISO Market Charge Code Number	ISO Market Charge Code Name	Group	Effective Date	Termination Date	Billable Quantity *(1)*	Generating Unit	Pump Storage Generation	Participating Load (Pseudo Gen)	Resource-Specific System Resource (Import)	Non-Resource Specific System Resource (Import)	Proxy Demand Resources	Dispatchable Demand Response	Dispatchable Demand Response (NGR Rem Only)	Demand	Generating Resource	Intertie Resources	SC	Entity
8071	Day Ahead Imbalance Reserve Up Settlement	Imbalance Reserve	5/1/2026	Open	Imbalance Reserve Up Award	C	C	C	C	C					E	E	E	
8076	Day Ahead Imbalance Reserve Up Tier 1 Allocation	Imbalance Reserve	5/1/2026	Open	Positive (negative) deviation for supply (demand) between DAScheduleEnergy and (FMMExpostCapacity or FMM Schedule)	C	C	C	C		C	C	C	E	E	E		E
8077	Day Ahead Imbalance Reserve Up Tier 2 Allocation	Imbalance Reserve	5/1/2026	Open	Metered Demand									E				
8080	Resource Sufficiency Evaluation Settlement	Resource Sufficiency Evaluation	5/1/2026	Open	Deficiency MW													E
8081	Day Ahead Imbalance Reserve Down Settlement	Imbalance Reserve	5/1/2026	Open	Imbalance Reserve Down Award	C	C	C	C	C					E	E	E	
8086	Day Ahead Imbalance Reserve Down Tier 1 Allocation	Imbalance Reserve	5/1/2026	Open	Negative (positive) deviation for supply (demand) between DAScheduleEnergy and (FMMExpostCapacity or FMM Schedule)	C	C	C	C		C	C	C	E	E	E		E
8087	Day Ahead Imbalance Reserve Down Tier 2 Allocation	Imbalance Reserve	5/1/2026	Open	Metered Demand									E				
8088	Resource Sufficiency Evaluation Allocation	Resource Sufficiency Evaluation	5/1/2026	Open	Net Export MW that pass DA RSE													E
8310	Day Ahead Green House Gas Emission Cost Revenue	DA Energy	5/1/2026	Open	DA GHG Payment Amount	C	C	C	C		C	C	C		E	E		
8315	Day Ahead Green House Gas Offset	DA Energy	5/1/2026	Open	DA Offset amount for Energy, CB associated to MGC									E				
8322	EDAM Access Charge Collection	Transmission Revenue Recover	5/1/2026	Open	Annual Recoverable Revenue													E
8326	EDAM Access Charge Payment	Transmission Revenue Recover	5/1/2026	Open	Annual Recoverable Revenue													E
8404	Day Ahead Energy and Marginal Losses Offset	DA Energy	5/1/2026	Open	DA Energy Neutrality Amount associated to MEC & MLC									E		E		E
8411	Day Ahead Energy Transfer Revenue Settlement	DA Energy	5/1/2026	Open	DA Energy Awards												E	E
8470	Real Time Energy Transfer Revenue Settlement	Imbalance Energy	5/1/2026	Open	RT Energy Awards												W,E	W,E
8526	Generator Interconnection Process GIP Forfeited Deposit Allocation	PTB	1/1/2012	Open	PTB paid to each SC that paid GMC during the period	C	C	C	C	C	C	C	C		W,E	W,E	W,E	W,E
8704	Day Ahead Congestion Offset	DA Energy	5/1/2026	Open	Net Congestion amounts within the BAA, excluding CISO													E

CAISO

EDAM

WEIM & EDAM

IMBALANCE RESERVES AND RELIABILITY CAPACITY

Purpose and Function of Imbalance Reserves and Reliability Capacity in DAME/EDAM

Introduced in DAME/EDAM to manage uncertainty between Day-Ahead forecasts and Real-Time conditions.

- Imbalance Reserves = Safety net for upward/downward ramping when net load changes.
- Reliability Capacity = Ensures each BAA provides enough physical capability for system reliability.

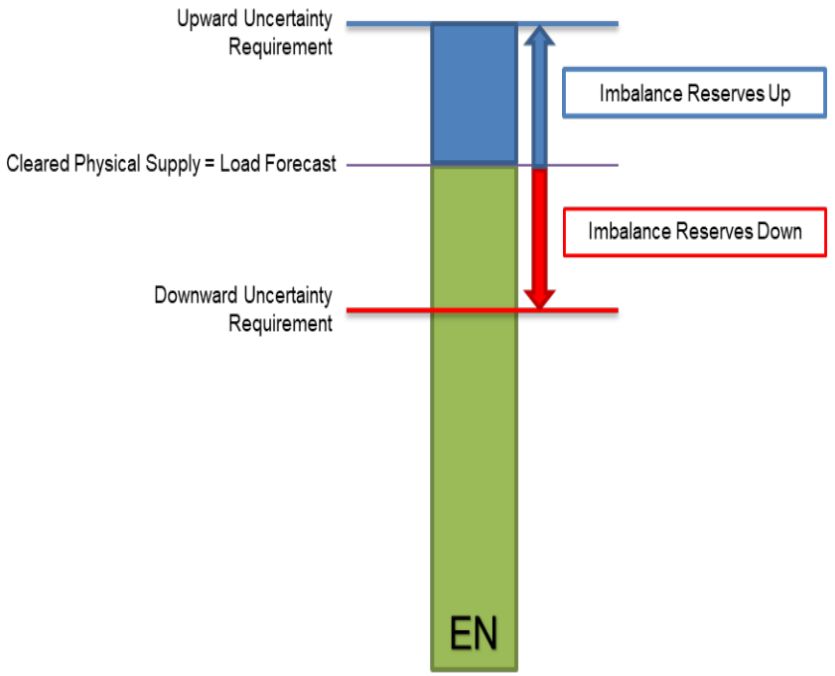
Imbalance Reserves

Imbalance Reserve Up

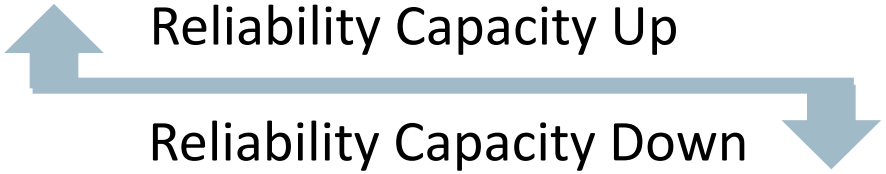
- Hourly evaluation determining that energy is needed in the trade hour.
- Commodities reserve capacity above the Day-Ahead Schedule (DAS) that must be available for dispatch in the Real-Time Market (RTM) to meet the demand forecast plus upward uncertainty.

Imbalance Reserve Down

- Commodities reserve capacity below the Day-Ahead Schedule (DAS) that must be available for dispatch in the Real-Time Market (RTM) to meet the demand forecast plus downward uncertainty.



Residual Unit Commitment (RUC) process procures reliability capacity products to ensure sufficient physical supply scheduled in day-ahead



- Today's RUC process procures additional capacity to meet forecasted demand.
- With EDAM, reliability capacity provides BAs with upward **or** downward dispatch capability, ensuring sufficient physical supply scheduled in day-ahead.
- Procurement of reliability capacity will be done on an hourly basis for each BA from the bids that are submitted by SCs across the EDAM footprint.
- SCs submit bids for **reliability capacity up** and **reliability capacity down** and may receive hourly awards for **only one** of the products.

Key Differences Between **Imbalance Reserves** and **Reliability Capacity**

Element	Imbalance Reserves	Reliability Capacity
Basis	Historical data	Specific to a unique trade date
Purpose	Manage uncertainty in load, wind, and solar forecasts	Ensure sufficient supply is purchased in day-ahead market
Requirement Type (at BAA level)	Up **and** down reserve requirement per hour	Up **or** down capacity requirement per hour
Market Awards to SCs	May receive hourly awards for **one or both** reserve types	May receive hourly award for **only one** capacity type

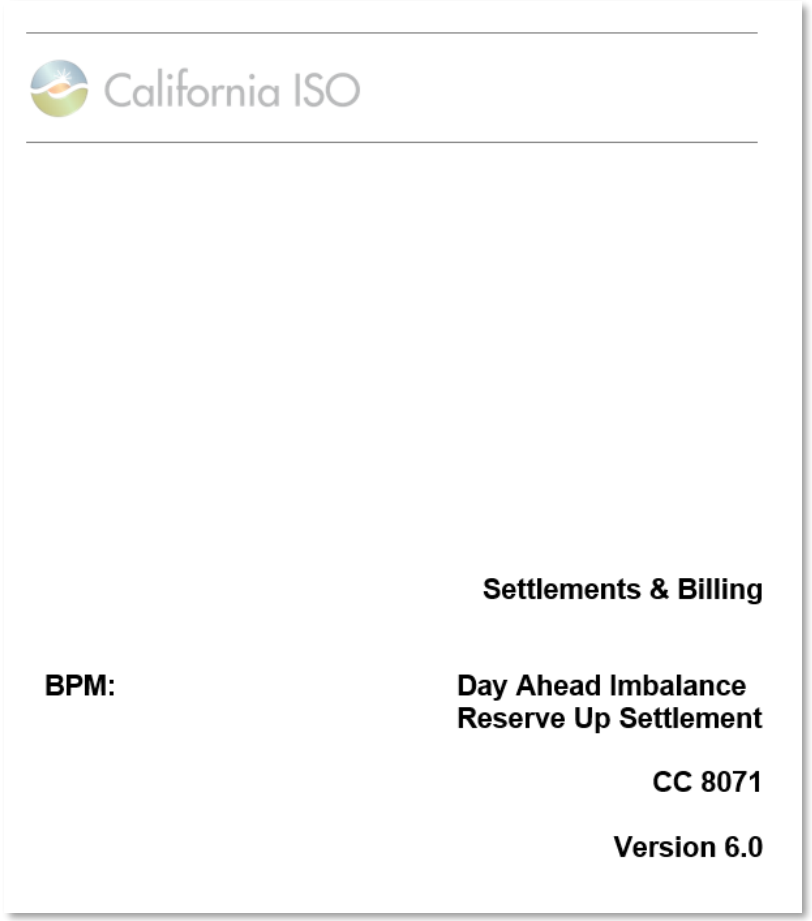
Charge Code Overview: Imbalance Reserve Up & Down

8071	Day Ahead Imbalance Reserve Up Settlement	8081	Day Ahead Imbalance Reserve Down Settlement
8076	Day Ahead Imbalance Reserve Up Tier 1 Allocation	8086	Day Ahead Imbalance Reserve Down Tier 1 Allocation
8077	Day Ahead Imbalance Reserve Up Tier 2 Allocation	8087	Day Ahead Imbalance Reserve Down Tier 2 Allocation

Charge Code Overview: Reliability Capacity Up & Down

8800	RUC Reliability Capacity Up Settlement
8806	RUC Reliability Capacity Up Tier 1 Allocation
8807	RUC Reliability Capacity Up Tier 2 Allocation
8810	RUC Reliability Capacity Down Settlement
8816	RUC Reliability Capacity Down Tier 1 Allocation
8817	RUC Reliability Capacity Down Tier 2 Allocation

Example: Let’s walk through a Charge Code Configuration Guide


California ISO

Settlements & Billing

BPM:

Day Ahead Imbalance Reserve Up Settlement

CC 8071

Version 6.0

Purpose

Introduction

Charge Code Requirements

- Business Rules
- Predecessor Charge Codes
- Successor Charge Codes
- Inputs – External Systems
- Inputs – Predecessor Charge Codes or Pre-Calculations
- CAISO Formula
- Outputs

Charge Code Effective Dates

IMBALANCE RESERVE AND RELIABILITY CAPACITY TIER 1 AND TIER 2 SETTLEMENT

Similarities and Differences for Imbalance Reserve (IR) and Reliability (RC) Tier 1&2 Allocations

- Two tier allocation for both IR and RC
  - Imbalance Reserve Up/Down (IRU/IRD) and Reliability Capacity Up/Down (RCU/RCD) costs are allocated first to main contributors for the need to procure respective products.
  - Tier 1 is capped by the lower price between average or derived price per Balancing Authority Area (BAA).
    - Divides the total costs to procure the product by the total product award, or total Tier 1 allocation quantities, per BAA.

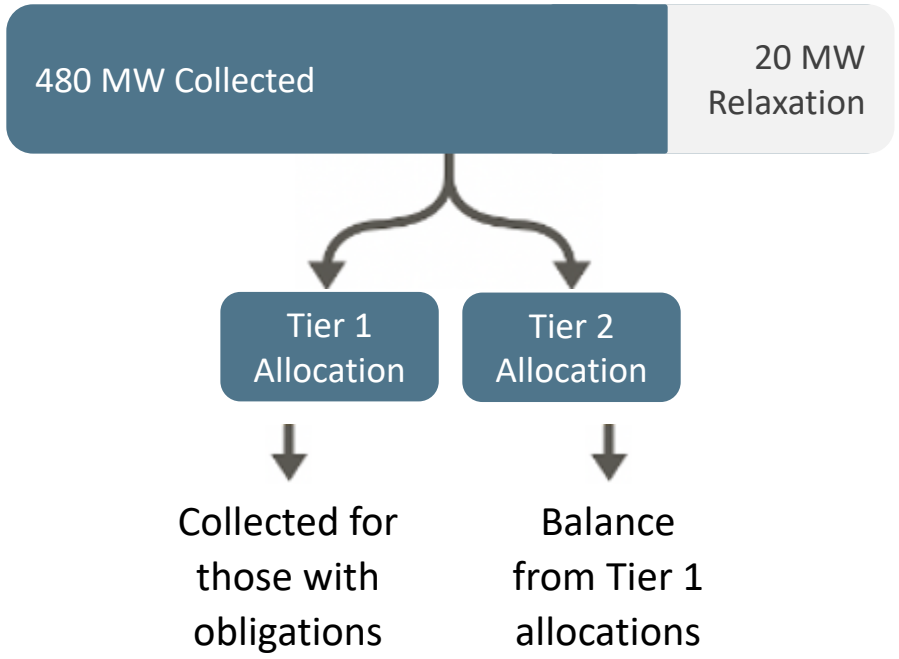
- The main contributors that would receive **Tier 1 allocations** include:
  - **Imbalance Reserve**: Generation, Imports, Exports & Load
  - **Reliability Capacity:** Net Virtual Awards and Uninstructed Imbalance Energy (UIE)

Similarities and Differences for Imbalance Reserve (IR) and Reliability (RC) Tier 1&2 Allocations (continued)

- Both IR and RC costs are reduced by No Pay for awards
  - The latter is the responsibility of resource owners who received the product awards

- Per BAA, after allocating to Tier 1, any remaining costs are allocated in Tier 2 which is spread to metered demand in the corresponding BAA.

Example of Imbalance Reserve Tier 2 and Tier 2 Allocation



System need: 500 MW Imbalance Reserve Up

- 480 MW Procured
- 20 MW Relaxed
- 480 MW Allocated through Tier 1 & Tier 2

Formulas: Imbalance Reserve Up Tier 1 and Tier 2 Allocation

- IRU tier 1 allocation
  - $IRUTier1Allocation_{j,t} = IRUTier1Qty_{j,t} \times \min\left(IRUReqPrice_{j,t}, IRUDerivedPrice_{j,t}\right)$
    - $IRUReqPrice_{j,t} = IRURCost_{j,t} / \left(IRUR_{j,t} - IRUS_{j,t}\right)$
    - $IRUDerivedPrice_{j,t} = IRURCost_{j,t} / IRUTier1Qty_{j,t}$
    - $IRUTier1Qty_{j,t} = \sum_{i \in BAA_j}\left(IRUGTier1Qty_{i,t} + IRUITier1Qty_{i,t} + IRUETier1Qty_{i,t} + IRULTier1Qty_{i,t}\right)$
      - » $IRUGTier1Qty_{i,t} = \max\left(0, DAEN_{i,t} - FMMMaxExCap_{i,t}\right)$
      - » $IRUITier1Qty_{i,t} = \max\left(0, FMMMaxExCap_{i,t} - DAEN_{i,t}\right)$
      - » $IRUETier1Qty_{i,t} = \max\left(0, FMMSS_{i,t} - DAEN_{i,t}\right)$
      - » $IRULTier1Qty_{i,t} = \max\left(0, -UIE_{i,t}\right)$
- IRU tier 2 allocation
  - $IRUTier2Allocation_{j,t} = \max\left(0, IRURCost_{j,t} - IRUTier1Allocation_{j,t}\right) \times \left(ML_{i,t} / ML_{j,t}\right)$
    - Generation-only BAA will be allocated to EDAM Entity

Formulas: Imbalance Reserve Down Tier 1 and Tier 2 Allocation

- IRD tier 1 allocation
  - $IRDTier1Allocation_{j,t} = IRDTier1Qty_{j,t} \times \min\left(IRDReqPrice_{j,t}, IRDDerivedPrice_{j,t}\right)$
    - $IRDReqPrice_{j,t} = IRDRCost_{j,t} / \left(IRDR_{j,t} - IRDS_{j,t}\right)$
    - $IRDDerivedPrice_{j,t} = IRDRCost_{j,t} / IRDTier1Qty_{j,t}$
    - $IRDTier1Qty_{j,t} = \sum_{i \in BAA_j} \left(IRDGTier1Qty_{i,t} + IRDITier1Qty_{i,t} + IRDETier1Qty_{i,t} + IRDLTier1Qty_{i,t}\right)$
      - » $IRDGTier1Qty_{i,t} = \max\left(0, FMMMaxExCap_{i,t} - DAEN_{i,t}\right)$
      - » $IRDITier1Qty_{i,t} = \max\left(0, FMMSS_{i,t} - DAEN_{i,t}\right)$
      - » $IRDETier1Qty_{i,t} = \max\left(0, DAEN_{i,t} - ETag_{i,t}\right)$
      - » $IRDLTier1Qty_{i,t} = \max\left(0, UIE_{i,t}\right)$
- IRD tier 2 allocation
  - $IRDTier2Allocation_{j,t} = \max\left(0, IRDRCost_{j,t} - IRDTier1Allocation_{j,t}\right) \times \left(ML_{i,t} / ML_{j,t}\right)$
    - Generation-only BAA will be allocated to EDAM Entity

Formulas: Reliability Capacity Settlement (Part Two)

- Reliability Capacity Up Allocation
  - RCU tier 1 allocation
    - $RCUTier1Allocation_{j,t} = RCUTier1Qty_{j,t} \times \min\left(RCUAvgPrice_{j,t}, RCUDerivedPrice_{j,t}\right)$
      - $RCURAvgPrice_{j,t} = RCUAwardPayment_{i,t} / \sum_{i \in BAA_j} RCU_{i,t}$
      - $RCUDerivedPrice_{j,t} = RCUAwardPayment_{i,t} / RCUTier1Qty_{j,t}$
      - $RCUTier1Qty_{\text{SC},j,t} = \sum_{i \in SC \cap BAA_j} \left(\max\left(0, VS_{i,t} - VD_{i,t}\right) + \max\left(0, -UIE_{i,t}\right)\right)$
  - RCU tier 2 allocation
    - $RCUTier2Allocation_{j,t} = \max\left(0, RCUAwardPayment_{i,t} - RCUTier1Allocation_{j,t}\right) \times \left(ML_{i,t} / ML_{j,t}\right)$
      - Generation-only BAA will be allocated to EDAM Entity

Formulas: Reliability Capacity Settlement (Part Four)

- Reliability Capacity Down Allocation
  - RCD tier 1 allocation
    - $RCDTier1Allocation_{j,t} = RCDTier1Qty_{j,t} \times \min\left(RCDAvgPrice_{j,t}, RCDDerivedPrice_{j,t}\right)$
      - $RCDAvgPrice_{j,t} = RCDAwardPayment_{i,t} / \sum_{i \in BAA_j} RCD_{i,t}$
      - $RCDDerivedPrice_{j,t} = RCDAwardPayment_{i,t} / RCDTier1Qty_{j,t}$
      - $RCDTier1Qty_{\mathrm{SC},j,t} = \sum_{i \in SC \cap BAA_j} \left(\max\left(0, VD_{i,t} - VS_{i,t}\right) + \max\left(0, UIE_{i,t}\right)\right)$
  - RCD tier 2 allocation
    - $RCDTier2Allocation_{j,t} = \max\left(0, RCDAwardPayment_{i,t} - RCDTier1Allocation_{j,t}\right) \times \left(ML_{i,t} / ML_{j,t}\right)$
      - Generation-only BAA will be allocated to EDAM Entity

Sample Tier 1 and Tier 2 Allocation for IR & RC

Note: the resources with awards are likely different entities to those having Tier 1 or Tier 2 allocation quantity obligations

RCU Costs (C) , in $	1000
Total RCU Award (D), in MW	500
Total Tier 1 allocation quantities (E)	200
Avg Price (A = C/D)	2
Derived Price (B = C/E)	5
Tier 1 Price = Min (A, B) = (F)	2
Tier 1 allocation quantity by SC at each BAA (MWh):	
SC1 alloc qty	100
SC2 alloc qty	75
SC3 alloc qty	25
Total qty for all SC at each BAA	**200**
Tier 1 allocation COSTS by SC at each BAA ($):	
SC1 alloc cost	200
SC2 alloc cost	150
SC3 alloc cost	50
Total Tier 1 costs	**400**
Tier 2 Costs to be allocated to Metered Load	600
SC costs for Tier 2 is pro-rata of their ML to total ML for the BAA	

X

=

Imbalance Reserve & Reliability Capacity Summary

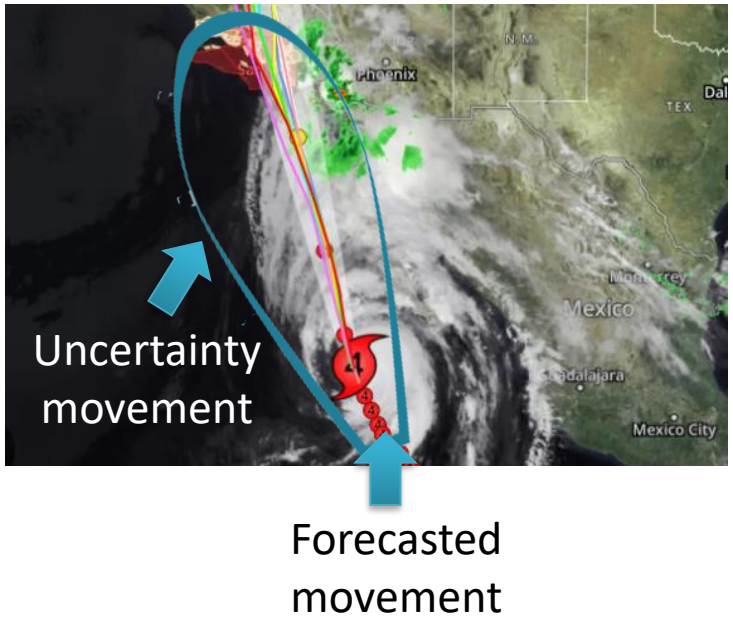
- Imbalance Reserves Up/Down are procured to meet uncertainty needs between the Day-Ahead and Real-Time Markets.
  - Costs are allocated through two-tiered settlements based on what is procured.

- Reliability Capacity Up/Down is procured to ensure there are enough resources committed to meet each BAA's demand forecast.
  - Costs are allocated through two-tiered settlements.

IMBALANCE RESERVE (IR) PORTION OF THE FLEXIBLE RAMP PRODUCT (FRP)

Relationship Between Imbalance Reserves and Flexible Ramping Product

The Flexible Ramping Product in real-time works like a hurricane path projection: there's a forecasted trajectory, but uncertainty remains because the actual path can still change. Imbalance Reserves do the same thing in the day-ahead.



- When we buy Imbalance Reserves (IR), we are procuring uncertainty.
  - Paying to keep extra capacity available in case things change unexpectedly.
- IR initially covers flex ramp uncertainty requirements.
  - In real-time uncertainty requirements are re-procured through the Flexible Ramping Product.

IR and FRP Interaction: Payment Logic and Settlement Rules

- Capacity procured day-ahead for IR should not be paid again when evaluated for FRP in real-time.
- A resource's 5-minute ramp capability can serve both IR (30-min product) and FRP (5-min product).
- If MWs remain unchanged between DA and RT, no additional payment occurs.
- If reserved MWs are released as energy, the resource is charged at the FRP price for deviation.
- Deviation settlement = MW released × higher of FRP or IR price due to replacement procurement.
- Same capacity used for IR and FRP results in a single payment; extra charges only occur when capacity is released and replaced.

Forecasting and Settlement: What Gets Paid

- Calculations used to determine what portion is due to Day-Ahead (DA) or Base Schedule.
  - Any DA forecasted movement is already incorporated into the DA LMP.
  - Base schedule forecasted movement is incorporated in the bilateral pricing.

- Fifteen-minute forecasting movement in Real-Time is based on total scheduled movement and subtracted off of the DA or Base portion.
  - Provides the FMM incremental forecasting movement which is what gets paid.

Calculations

- FRU and IRU Awards: Flexible Ramp Up (FRU) and Imbalance Reserve Up (IRU) awards are settled below.
  - Flexible Ramp Up (FRU) Uncertainty Settlement to avoid double payment:
    $= (\textit{FRU Uncertainty qty} - \textit{FiveMinRampCapable IRU qty}) \; x \; FRU \; Price$
  - IRU Award Settlement (Imbalance Reserve Up) :
    $= (IRU \; Award \; Qty \times IRU \; Price)$
  - IRU Settlement for Non-compliance qty portion:
    $= IRU \; Noncomp\text{liance} \; Qty \times Max(IRU \; Price, FRUPrice)$

Charge Code Overview: Imbalance Reserve and Flexible Ramping Product

Imbalance Reserves

- 8071 — Day Ahead Imbalance Reserve Up Settlement
- 8076 — Day Ahead Imbalance Reserve Up Tier 1 Allocation
- 8077 — Day Ahead Imbalance Reserve Up Tier 2 Allocation
- 8081 — Day Ahead Imbalance Reserve Down Settlement
- 8086 — Day Ahead Imbalance Reserve Down Tier 1 Allocation
- 8087 — Day Ahead Imbalance Reserve Down Tier 2 Allocation

Flexible Ramp

- 7071 — Flexible Ramp Up Uncertainty Award Settlement
- 7081 — Flexible Ramp Down Uncertainty Award Settlement

DAY-AHEAD RESOURCE SUFFICIENCY EVALUATION

EDAM Day-Ahead Resource Sufficiency Evaluation (DA-RSE)

Purpose

- *Prevent Over-Reliance on Market Transfers*
- *Promote Fairness and Reliability*
- *Support Market Efficiency*

EDAM's DA RSE tests to ensure that each EDAM BAA has sufficient supply to meet its next-day expected obligations, including demand, uncertainty, and ancillary services

The DA-RSE pass/fail sets expectations for WEIM flexible ramp tests in the WEIM Resource Sufficiency Evaluation (WEIM-RSE).

DA-RSE Assesses:

- CAISO Balancing Authority Area (BAA)
- Each Extended Day-Ahead Market (EDAM) BAA

RT-RSE Assesses:

- Each Western Energy Imbalance Market (WEIM) BAA

Resource Sufficiency Evaluation: EDAM

The binding day-ahead RSE test occurs each day at 10:00am, prior to running the Day-Ahead Market. The Day-Ahead Market RSE evaluates three different aspects:

1

Bids: assesses whether there are sufficient energy bids or self-schedules to meet an EDAM entity's forecasted load needs.

2

Ancillary Services: ensures that a BA has sufficient contingency reserve capacity available per AS requirements.

3

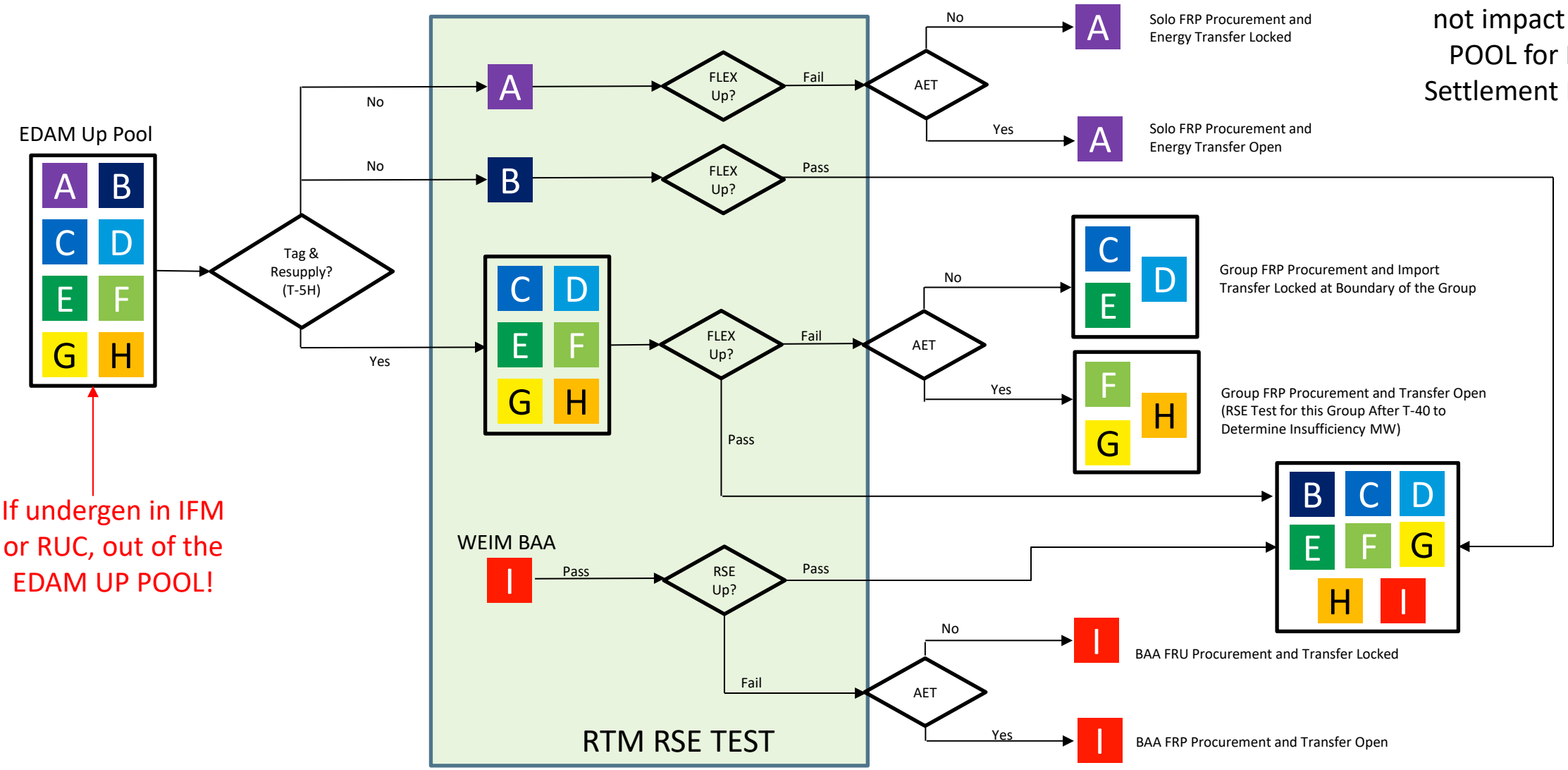
Imbalance Reserves: ensures the EDAM entity has sufficient bid-in capacity to meet uncertainty between day-ahead and real-time. Like real-time Flex Ramp Sufficiency test, with key differences

- **EDAM Entity:** bids in specific values for both Imbalance Reserve Up and Imbalance Reserve Down.
- **WEIM Entity:** value is determined by the market based on energy bids.

Evaluations covering 24-hour period

Tag, Resupply and Real-Time RSE Up Test

DA RSE test does not impact EDAM POOL for RTM! Settlement Penalty



Resource Sufficiency Evaluation Surcharge

What is the RSE Surcharge?

The Resource Sufficiency Evaluation Surcharge applies when a Balancing Authority Area (BAA) fails the Day-Ahead RSE test. This test checks if the BAA has enough resources to meet its obligations before the market runs. If they don’t, they pay a surcharge.

Who does it apply to?

It applies to both the ISO BAA and EDAM BAAs. So, if any of these areas fail the sufficiency test, they’re subject to penalties.

How Are Penalties Calculated?

- Three tiers of surcharges, based on two things:
  - The size of the failure (how many MW short).
  - The relevant price—either the Locational Marginal Price (LMP) or Trading Hub price.

How does the RSE settlement work?

- RSE Charge based on failed tests
  - Suballocated to metered demand; once you get to the BAA on surcharge and allocation based on ratio
- ISO Suballocation of the revenue
  - The ISO BAA sub-allocates the surcharge to its participants based on metered demand
- EDAM BAAs allocate their share to their entities

How does the RSE settlement work? (continued)

- RSE Revenue Distribution is where the net transfer comes in for BAAs, including ISO
  - For EDAM BAAs the surcharge revenue is distributed to those BAAs that passed the DA-RSE test, based on their Net Transfer System Resource (TSR) Export Ratio.
    - Allocated to those who pass the test, in the correct direction (up vs down failure)
  - The ISO BAA sub-allocates the surcharge revenue to its participants based on Metered Demand minus balanced ETC/TOR (Existing Transmission Contracts / Transmission Ownership Rights).
  - Then, EDAM BAAs allocate their share to their entities.

Charge Code Overview: Day-Ahead Resource Sufficiency Evaluation (DA-RSE)

8080

Resource Sufficiency Evaluation Surcharge Settlement applies to ISO BAA and EDAM BAA(s).

- This is the RSE surcharge, which is the penalty for failing.

8088

Resource Sufficiency Evaluation Surcharge Allocation applies to ISO BAA and EDAM BAA(s).

- This is the RSE surcharge allocation, which is the credit distributed to BAAs that passed the test, based on their export or import ratio depending on the direction.

Example – 3-tiered settlement

- BAA1 has an IR Requirement of 100 MW but only procures 50 MW in the DA RSE upward test for an hour. We have a deficiency quantity of 50 MW:
  - For a tier 1 failure in which the BAA failure is de minimis, defined as the higher of 10 MW or an amount less than or equal to one percent of the BAA's upward IR Requirement for that hour, the EDAM RSE On-Peak Upward Failure Insufficiency Surcharge will not be calculated.
  - In this example, we apply Tier 2 calculation, since the deficiency quantity is 50 MW and is 50% short. If greater than a de minimis threshold, but less than deficiency quantity Tier 2 applies at (50MW*$50/MW)* 1.25, that's $3,125.
  - If the deficiency quantity is more than 50% of the requirement quantity (e.g. 60 MW instead of 50 MW), Tier 3 applies at (60MW*$50/MW)*2.0, that's $6,000.

- Total collected surcharge revenue from CC 8080 goes into a pool to be allocated in CC 8088
  - EDAM BAAs that passed get a share of that pool through CC 8088 based on their net TSR export ratio for the upward test and net TSR import ratio for the downward test
  - If the CISO BAA passes, ISO suballocates their share of the revenue to participants based on metered demand

ASSISTANCE ENERGY TRANSFER

Tag and Resupply Test

System Checks

Are each EDAM BAA's gross imports sufficiently tagged?

If under-tagged, a bid resupply test is triggered at T-5H to ensure the BAA has:

- Incremental energy bids above DAM schedule
- Sufficient Imbalance Reserve (IR) and Reliability Capacity (RC) awards to cover the tag shortfall

Assistance Energy Transfer (AET)

WEIM

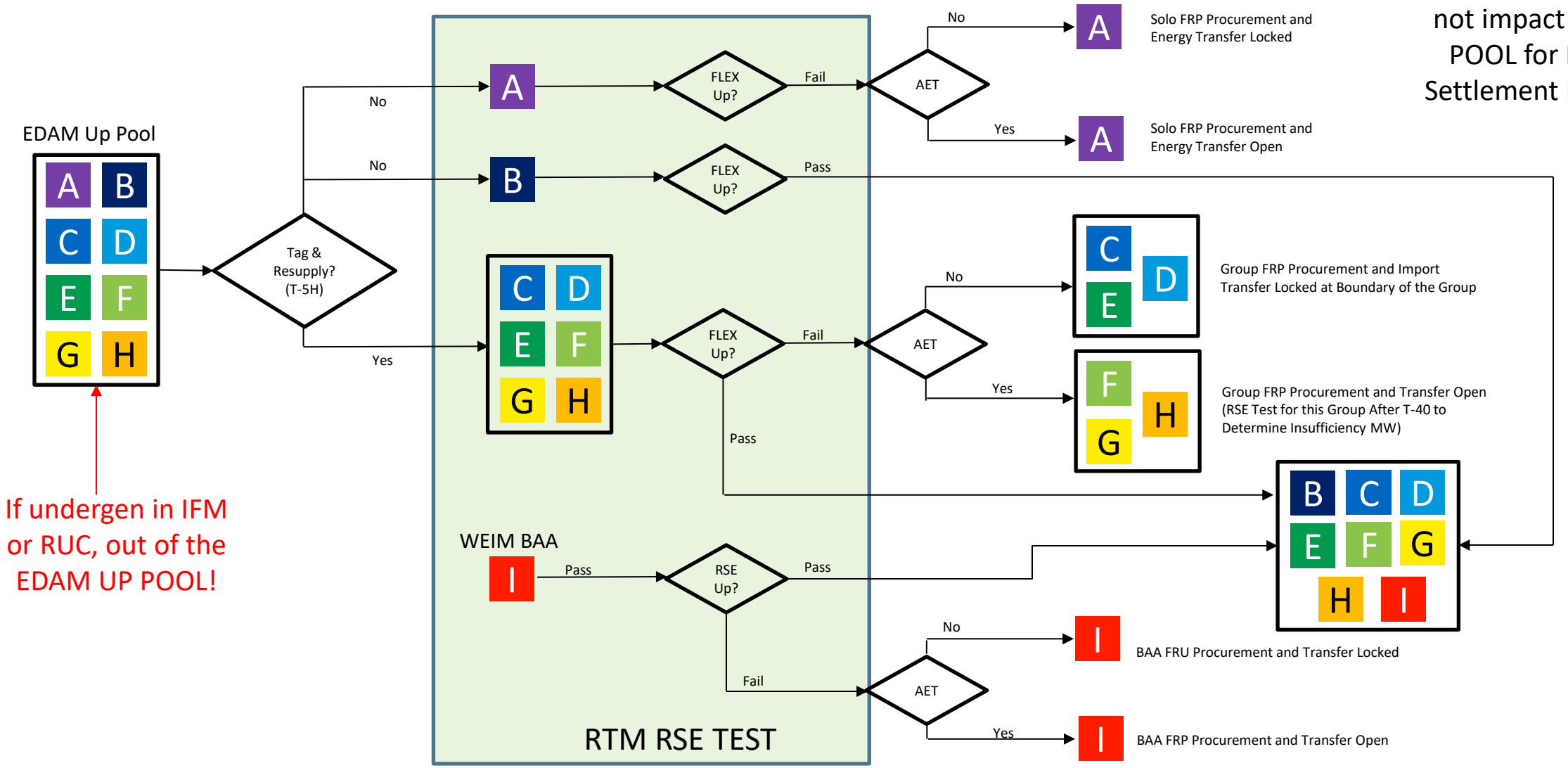
A reliability tool in the Western Energy Imbalance Market that allows a balancing authority that fails a resource sufficiency test to receive emergency energy transfers through the market, typically with a surcharge.

EDAM

- Based on day-ahead schedules, as opposed to WEIM base schedules.
- Allows BAAs to share ramping capability across BAA boundaries.
- BAAs that elect AET can be grouped together and exchange energy with other AET BAAs.
- BAAs that do not elect AET can only exchange energy within their own group—they cannot interact with AET BAAs.
- A BAA that fails tagging and resupply and fails the flex test must operate independently.

Tag, Resupply and Real-Time RSE Up Test

DA RSE test does not impact EDAM POOL for RTM! Settlement Penalty



If undergen in IFM or RUC, out of the EDAM UP POOL!

Charge Code Overview: Assistance Energy Transfer

6476

Real Time Assistance Energy Transfer (AET) Surcharge applies to all BAAs that elect to opt into AET.

- Assessed to BAAs that opt in to AET and fail RTM RSE Capacity and/or Flex Test.
- EDAM BAAs and WEIM BAAs surcharges are allocated to Entity.
- CISO BAA surcharges are suballocated to Measured Demand less valid balanced ETC/TOR schedules.

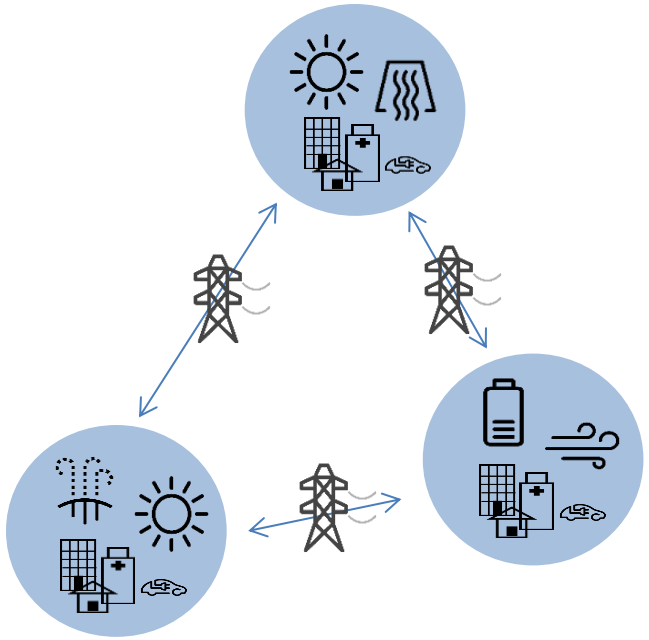
6479

Real Time Assistance Energy Transfer Allocation applies to all BAAs.

- Allocated to BAAs that pass RSE test pro-rata to net exporters beyond base transfer.
- CAISO sub-allocates to SCs providing incremental net real time imbalance energy (FMM Instructed Imbalance Energy (IIE), RTD IIE, and/or Uninstructed Imbalance Energy (UIE)) excluding Negative Power for Load (NPL).

TRANSFER REVENUE

Transfer System Resource: Concept

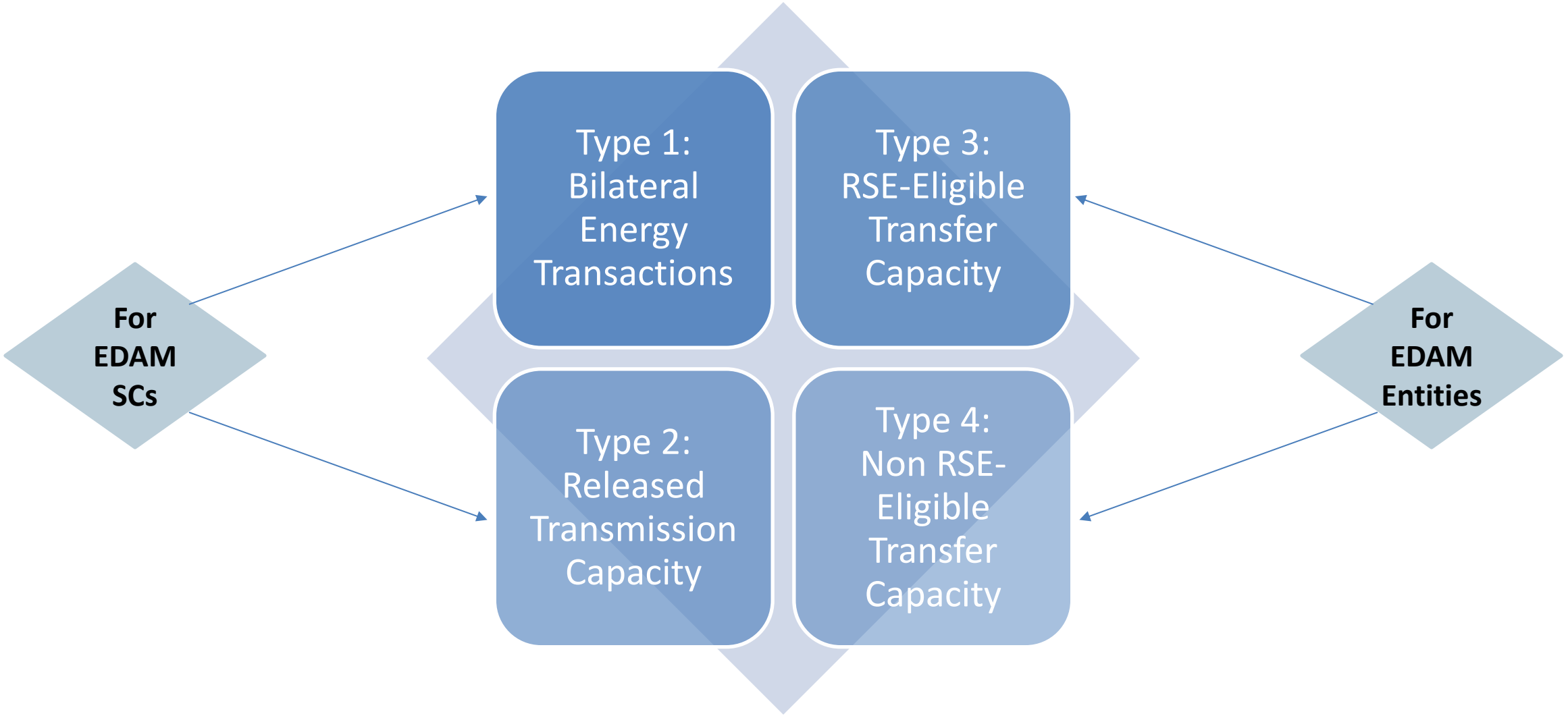


- **EDAM and WEIM:** Based on transfers between Balancing Authority Areas (BAAs).
- **BAA Balance:** Each BAA is kept in balance separately with a power balance constraint.
- **Optimal Net Transfer:** Positive for export or negative for import.

Nuance:
WEIM ETSR = Energy Transfer System Resource (energy only)

EDAM TSR = Transfer System Resource (energy & capacity)

Types of Transfer System Resources (TSRs)



Transfer Revenue Allocation in EDAM

Transfer Revenue Allocation: Except for Type 2 transfer capacity releases occurring before 9:00 am, transfer revenue is generally split evenly between the EDAM Entities on each side of the transfer.

Custom Revenue Splits: If a different revenue-sharing ratio is specified in the Master File (based on BAA pair, intertie, and direction) that ratio will override the default even split.

Revenue Distribution to EDAM SCs: Each EDAM Entity is responsible for distributing its share of the transfer revenue to its EDAM SCs in accordance with its Open Access Transmission Tariff (OATT).

Charge Code Overview: Transfer Revenue

8011

8411

8811

8470

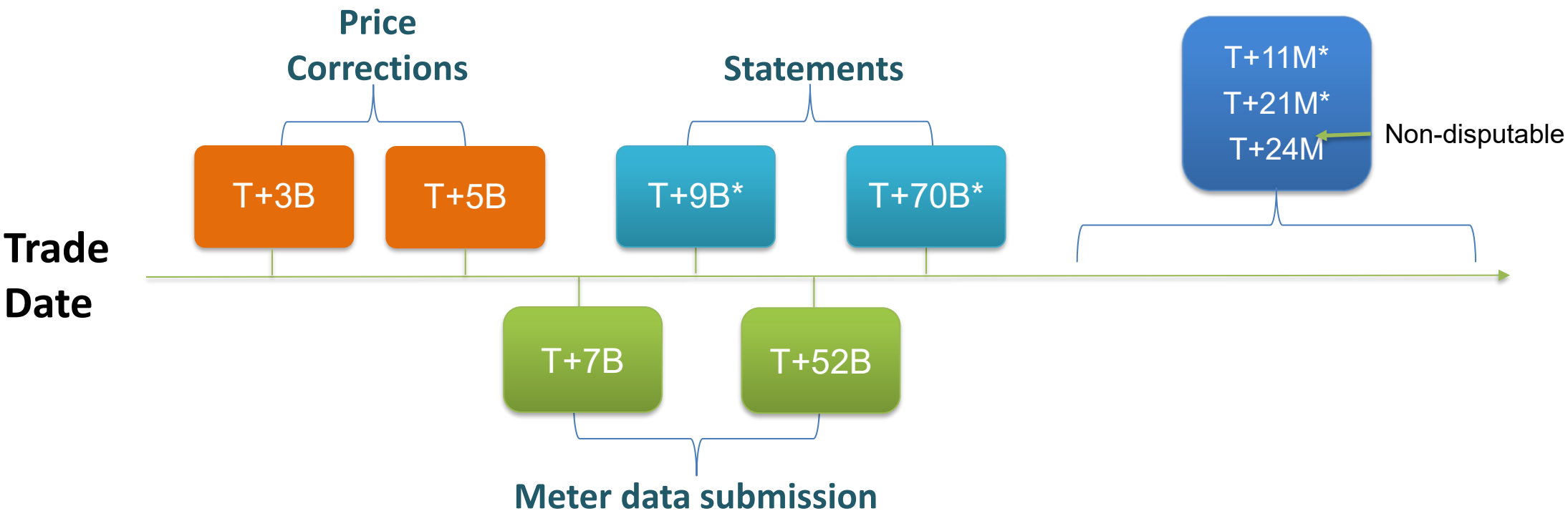
8011 DA Imbalance Reserve Transfer Revenue Settlement
8411 DA Energy Transfer Revenue Settlement
8811 RUC Reliability Capacity Transfer Revenue Settlement
8470 RT Energy Transfer Revenue Settlement

- Calculation of Transfer Revenue at each Transfer location.
- Distribution of Transfer Revenue to associated BAAs (Default ratio is 50/50).
  - Sub-Allocation of TSR Type 2 Transfer Revenue is allocated to SC that released schedule.
  - For EDAM BAAs, Transfer Revenue is allocated to the Entity.
  - For ISO BAA, Transfer Revenue is sub-allocated pro-rata to measured demand (as per section 11.35.2.1.2) less ETC/TOR direct allocation (DA and RT Energy only).
    - No Pay applies for Imbalance Reserve (IR) & Reliability Capacity (RC) Transfer Revenue.
    - Transfer Revenue less congestion.

EDAM TIMING & PAYMENT CALENDAR

Settlements Timelines

T = Trade Date
B = Business Days
M = Months



*Disputes accepted until T+22 business days after published statement

Payments Calendar

Invoices cover the billing periods listed in the Publish Weekly Invoice Column

Invoices published weekly on Wednesdays

This column shows what trade dates are being processed

Invoices due by 10am PPT on Tuesdays & Payments sent by 2pm PPT

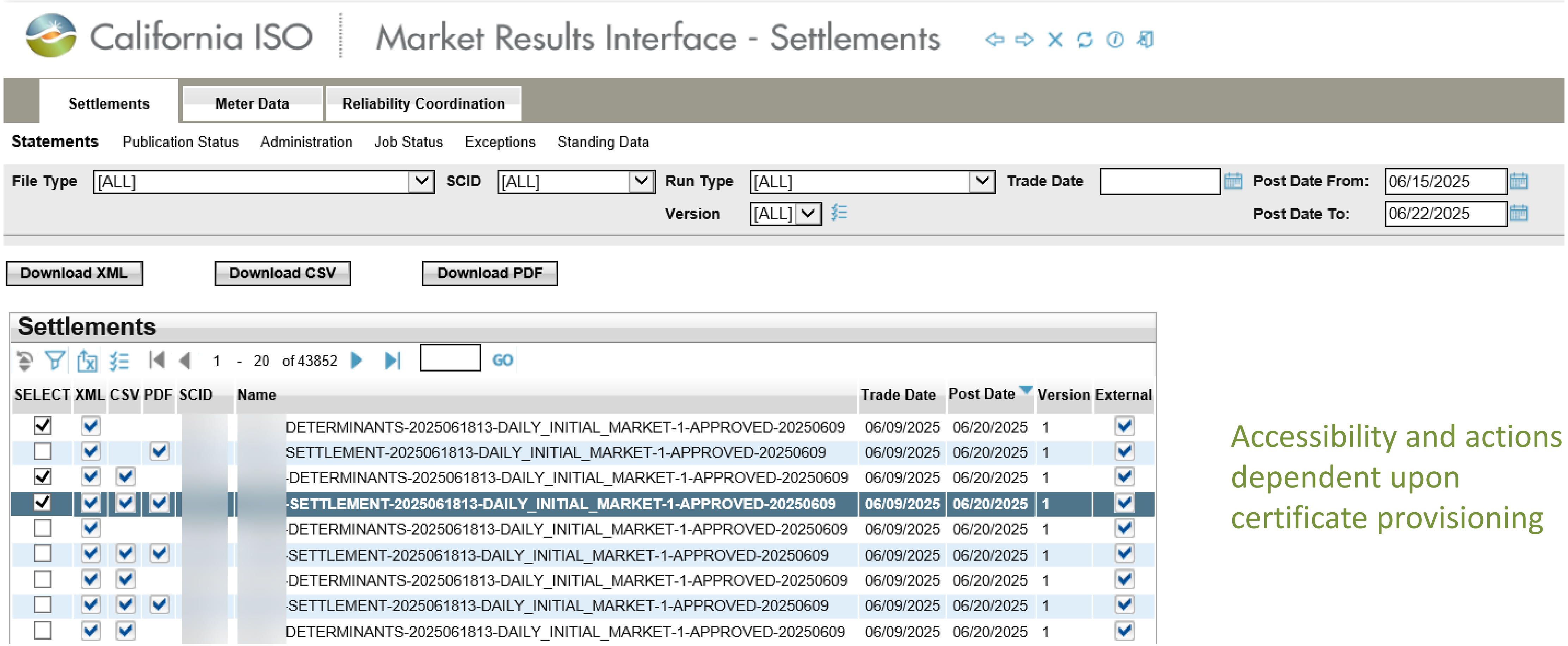
California ISO

CAISO Payments Calendar
January 1, 2025 through December 31, 2025

Timelines ar… …me) except as noted

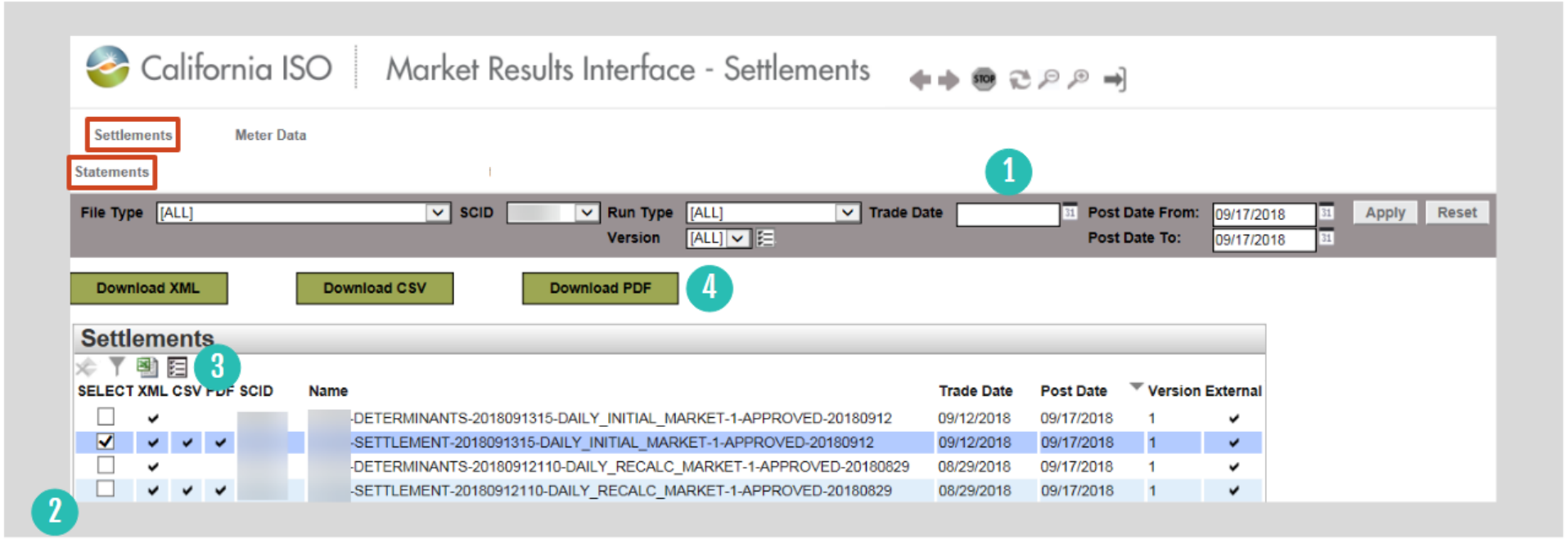
Calendar Date	Day	Publish Day-Ahead Price Corrections T+3B	Publish Real-Time Price Corrections T+5B	Receive End-Use Meter Data, Manual Submission of non-PTO Wheeling Data T+7B at 10:00am	Publish Initial Statement T+9B	Receive End-Use Meter Data (to include non-PTO load) T+52B	Publish Recalculation Statement T+70B	Publish Recalculation Statement T+11M (as T+234B), optional	Publish Weekly Invoice (by bill period)	Weekly Invoice Due by 10:00am for Disbursement at 2:00pm T+4B
1-Jan-25	Wednesday (H)									
2-Jan-25	Thursday	12/27-12/29/2024	12/24-12/25/2024	12/20-12/22/2024	12/18/2024	10/16/2024	09/20-09/22/2024	01/30/2024	T+3B Initial: 12/13-12/18/2024, T+70B Recalc: 09/13-09/19/2024	T+3B Initial: 12/06-12/12/2024, T+70B Recalc: 09/06-09/12/2024
3-Jan-25	Friday	12/30/2024	12/26/2024	12/23/2024	12/19/2024	10/17/2024	09/23/2024	01/31/2024, Jan 2024 Monthly		
4-Jan-25	Saturday									
5-Jan-25	Sunday									
6-Jan-25	Monday	12/31-01/01/2025	12/27-12/29/2024	12/24-12/25/2024	12/20-12/22/2024	10/18-10/20/2024	09/24/2024	02/01/2024		
7-Jan-25	Tuesday	01/02/2025	12/30/2024	12/26/2024	12/23/2024	10/21/2024	09/25/2024	02/02-02/04/2024		
8-Jan-25	Wednesday	01/03-01/05/2025	12/31-01/01/2025	12/27-12/29/2024	12/24-12/25/2024	10/22/2024	09/26/2024	02/05/2024	T+3B Initial: 12/13-12/25/2024, T+70B Recalc: 09/20-09/26/2024, T+11M Recalc: 01/01-01/31/2024, T+21M Recalc: 03/01-03/31/2023	T+3B Initial: 12/13-12/18/2024, T+70B Recalc: 09/13-09/19/2024
9-Jan-25	Thursday	01/06/2025	01/02/2025	12/30/2024	12/26/2024	10/23/2024	09/27-09/29/2024	02/06/2024		
10-Jan-25	Friday	01/07/2025	01/03-01/05/2025	12/31-01/01/2025	12/27-12/29/2024	10/24/2024	09/30/2024, Sep 2024 Monthly	02/07/2024		
11-Jan-25	Saturday									
12-Jan-25	Sunday									
13-Jan-25	Monday	01/08/2025	01/06/2025	01/02/2025	12/30/2024	10/25-10/27/2024	10/01/2024	02/08/2024		
14-Jan-25	Tuesday	01/09/2025	01/07/2025	01/03-01/05/2025	12/31-01/01/2025, Dec 2024 Monthly	10/28/2024	10/02/2024	02/09-02/11/2024		T+3B Initial: 12/13-12/25/2024, T+70B Recalc: 09/20-09/26/2024, T+11M Recalc: 01/01-01/31/2024, T+21M Recalc: 03/01-03/31/2023
15-Jan-25	Wednesday	01/10-01/12/2025	01/08/2025	01/06/2025	01/02/2025	10/29/2024	10/03/2024	02/12/2024	T+3B Initial: 01/01-01/02/2025, T+3B Initial: 12/01-12/31/2024, T+70B Recalc: 10/01-10/03/2024, T+70B Recalc: 09/01-09/30/2024, T+24M Recalc: 12/01-12/31/2022	
16-Jan-25	Thursday	01/13/2025	01/09/2025	01/07/2025	01/03-01/05/2025	10/30/2024	10/04-10/06/2024	02/13/2024		
17-Jan-25	Friday	01/14/2025	01/10-01/12/2025	01/08/2025	01/06/2025	10/31/2024	10/07/2024	02/14/2024		
18-Jan-25	Saturday									
19-Jan-25	Sunday									
20-Jan-25	Monday (H)									
21-Jan-25	Tuesday	01/15/2025	01/13/2025	01/09/2025	01/07/2025	11/01-11/03/2024	10/08/2024	02/15/2024		
22-Jan-25	Wednesday	01/16/2025	01/14/2025	01/10-01/12/2025	01/08/2025	11/04/2024	10/09/2024	02/16-02/19/2024	T+3B Initial: 01/03-01/08/2025	T+3B Initial: 01/01-01/02/2025, T+3B Initial: 12/01-12/31/2024, T+70B Recalc: 10/01-10/03/2024, T+70B Recalc: 09/01-09/30/2024, T+24M Recalc: 12/01-12/31/2022
23-Jan-25	Thursday	01/17-01/20/2025	01/15/2025	01/13/2025	01/09/2025	11/05/2024	10/10/2024	02/20/2024		
24-Jan-25	Friday	01/21/2025	01/16/2025	01/14/2025	01/10-01/12/2025	11/06/2024	10/11-10/13/2024	02/21/2024		
25-Jan-25	Saturday									
26-Jan-25	Sunday									

Market Results Interface – Settlements (MRI-S) is used to retrieve, submit, validate and publish settlements and meter data



Accessibility and actions dependent upon certificate provisioning

MRI-S: Settlements

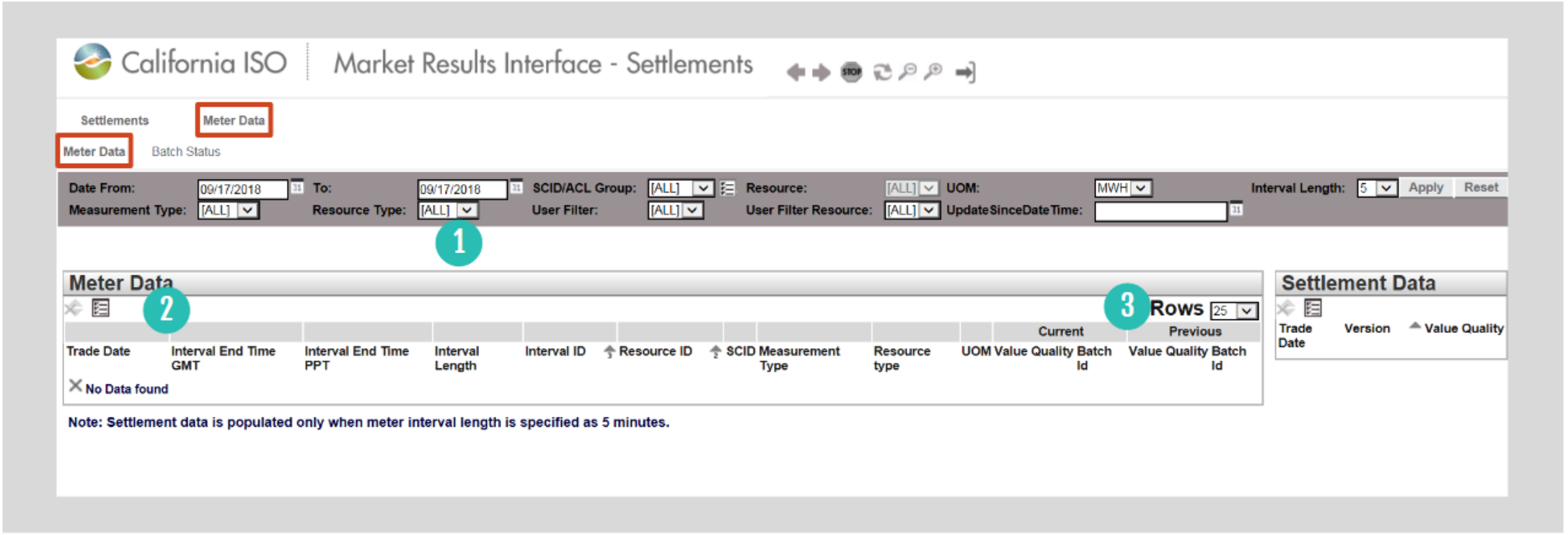


1. Search Parameters
2. Search Results
3. Toolbar
4. Download Buttons

MRI-S: Settlements Data

Bill Determinants	Files that contain the data elements representing information related to market activity. Two types: Business Associate and CAISO.
Settlement Statements	Show the charges and payments for market and transmission-related activities between SCs and the ISO for a specific period of time.
Invoices	Show the net result of weekly settlement statement activity. The invoice reflects what the SC must pay or will be paid.
Configuration Output Files	Contains the settlement configuration rules in the form of XML.

MRI-S: Meter Data



1 Search Parameters

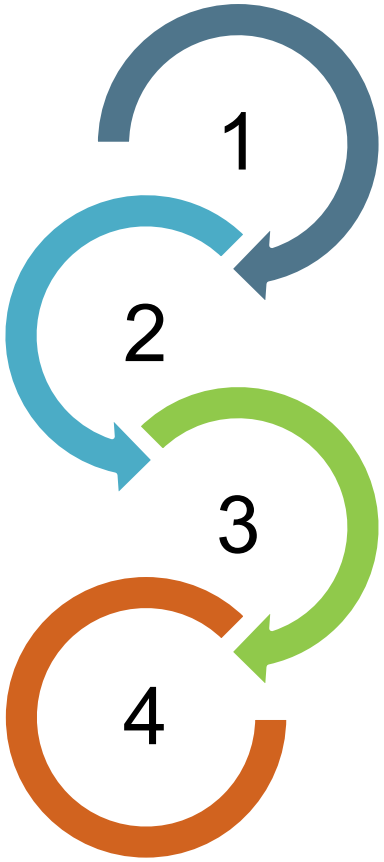
2 Toolbar

3 Versioning

objective

EDAM SETTLEMENTS CONNECTIONS

How can you prepare?



Participate in forums and meetings.

Get to know the documents.

Participate in Market Simulation.

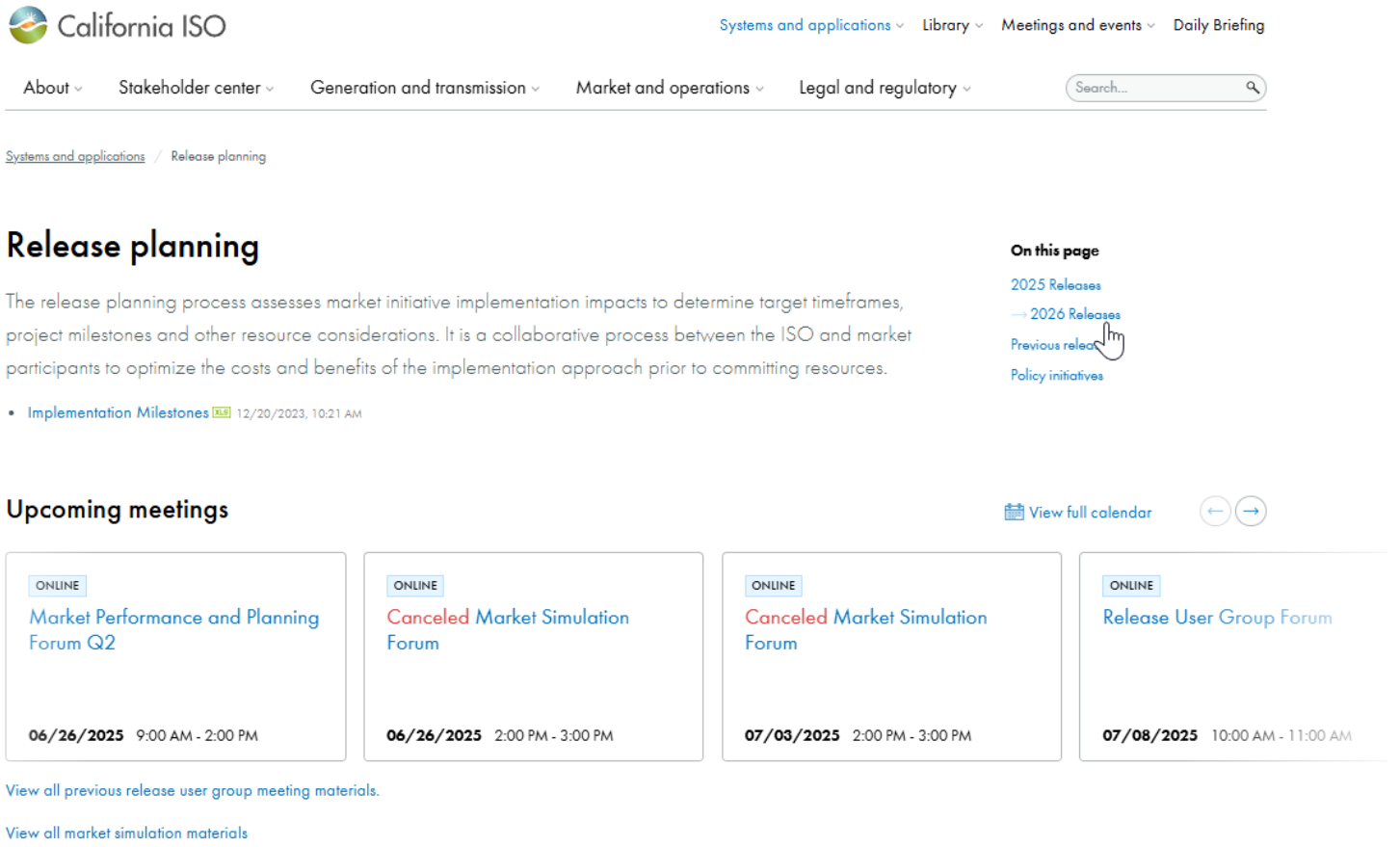
Review training materials & participate in future classes.

User group forums provide additional engagement opportunities

Release User Group (RUG)	Technical User Group (TUG)	Settlement User Group (SUG)	Market Simulation	Business Practice Manual (BPM)
Bi-weekly meeting to assesses market initiative implementation impacts to determine target timeframes, project milestones and other resource considerations.	**Bi-weekly** meeting to assesses process and technology design, implementation and evolution, and identifies and evaluates resolutions for technical issues.	**Bi-weekly** discussion forum for Market Participants and RC West customers to obtain information, provide input and ask questions on current ISO initiatives and activities affecting the settlement and invoicing processes.	**Weekly *(as needed)*** discussion forum for Market Participants to review market initiative implementation impacts, timeframes, millstones, and other relevant information.	**Monthly** meeting to discuss proposed revision requests on Business Practice Manuals (BPMs) that are in the initial and recommendation stages of the BPM change management stakeholder process.
Release User Group	ISO Developer Site	Settlement User Group	Release Planning Meetings	Business Practice Manual Meetings

Find recurring meeting dates on the ISO Calendar:
https://www.caiso.com/meetings-events/calendar

Visit the Release Planning page to view related documents



View the Market Simulation Plan for Spring 2026 Release

California ISO

Market Simulation Plan
Spring 2026 Release

Initiatives –

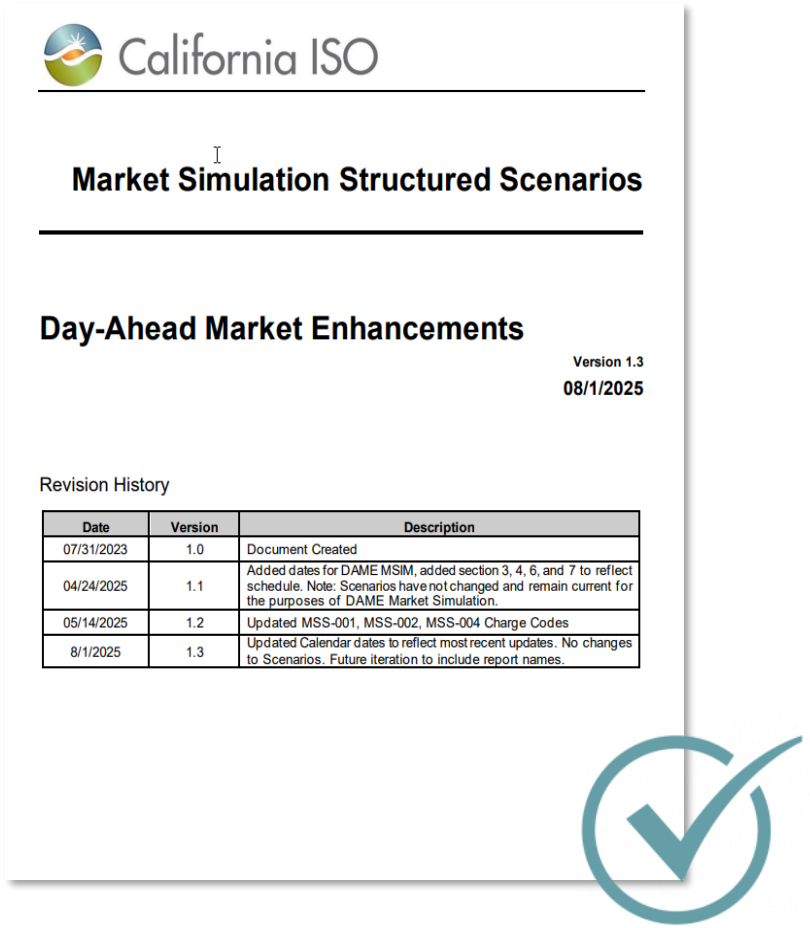
Day-Ahead Market Enhancements

Extended day-ahead market

Extended day-ahead market ISO balancing authority area participation rules

Versi n: 1.1
Jan 22 2025

Practice Simulated Structured Scenarios



California ISO

Market Simulation Structured Scenarios

Day-Ahead Market Enhancements

Version 1.3
08/1/2025

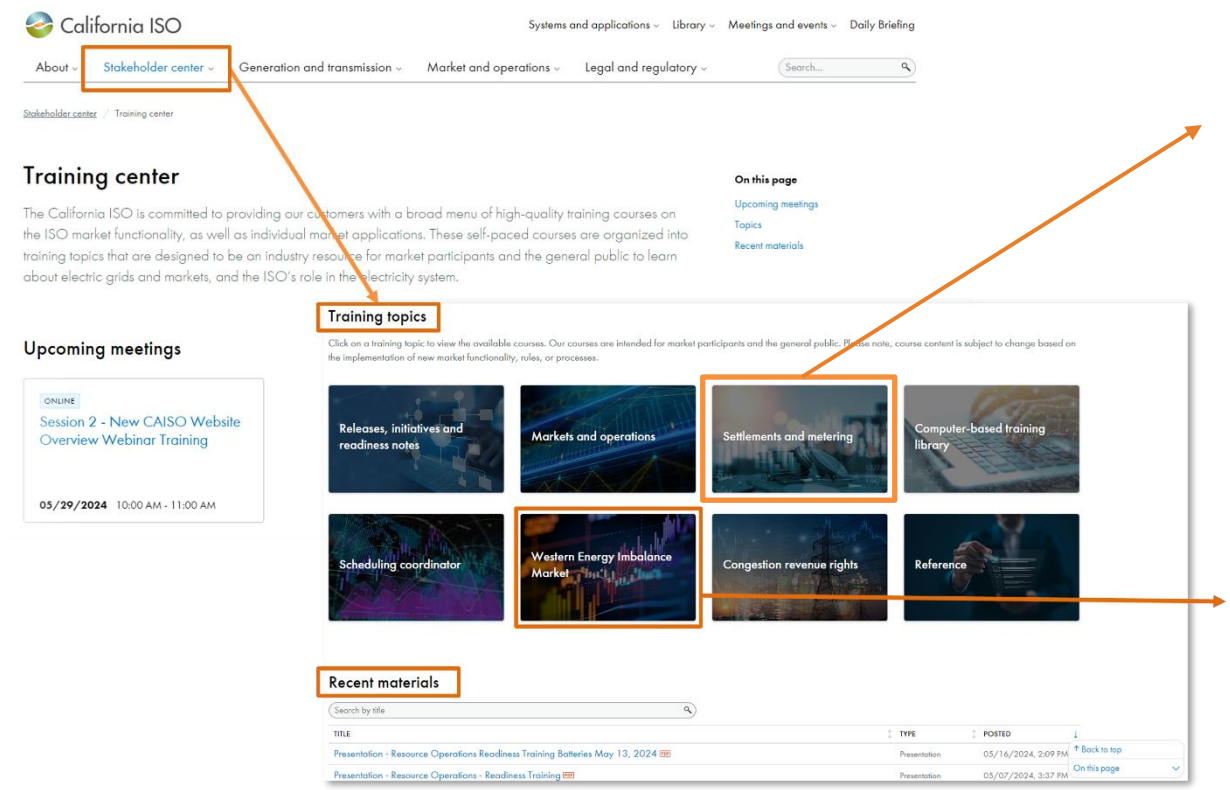
Revision History

Date	Version	Description
07/31/2023	1.0	Document Created
04/24/2025	1.1	Added dates for DAME MSIM, added section 3, 4, 6, and 7 to reflect schedule. Note: Scenarios have not changed and remain current for the purposes of DAME Market Simulation.
05/14/2025	1.2	Updated MSS-001, MSS-002, MSS-004 Charge Codes
8/1/2025	1.3	Updated Calendar dates to reflect most recent updates. No changes to Scenarios. Future iteration to include report names.

Find helpful training resources on the ISO Training Center

Don’t see the training you need?

Submit a CIDI ticket to request training or request your SC to submit one on your behalf



Settlements & Metering Training Resources

Computer-Based Training Courses:

- EDAM Overview Video
- EDAM Processes & Timelines
- EDAM Pricing Model
- EDAM GHG Regulation Obligations
- EDAM Bidding: Basic Concepts
- EDAM Integration with WEIM

Training Modules:

- EDAM Intertie Scheduling
- EDAM SIBR Overview
- DAME, EDAM & EDAM BAA Participation Rules Market & Settlements
- EDAM Imbalance Reserve Requirements Data on OASIS

EDAM/DAME Market Simulation Inquiries

Help us help you! The California ISO's preferred method for outreach is by a CIDI Inquiry Ticket. If you do not have CIDI access, you may utilize our **Contact Us Form**. To best support participant inquiries and aid in timely responses during Market Simulation, we kindly request the following information based on inquiry type:

General Inquiries

Provide detailed questions, relevant screenshots, and background context.

Policy Inquiries

Provide detailed questions and background context for clarification.

User Interface (UI) Inquiries

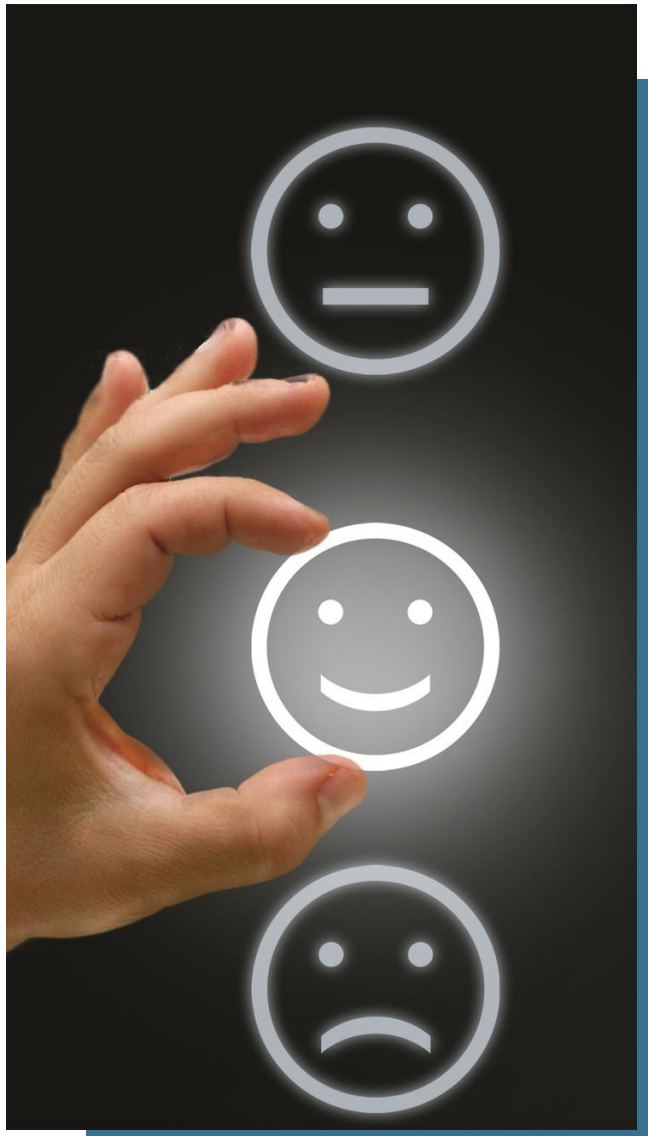
Technical Inquiries (e.g., connection, access, data issues) to include:

- The user certificate being used.
- Time period of issue.
- Screenshot(s) showing the issue.
- URL or page of the application being accessed.

Application Programming Interface (API) Inquiries

Technical Inquiries (e.g., connection, access, data issues) to include:

- The user/system certificate being used.
- Request UUID (for restAPIs only).
- Request submitted to which application.
- Response from which application.
- Endpoint you are connecting to.
- Screenshot(s) showing the issue.



Tell us how we did

Takes 3-5 minutes to complete

Helps us improve future training

Link: https://www.surveymonkey.com/r/caisocoursesurvey

Thank you for your participation!

For clarification on anything presented in this training, send an email to: CustomerReadiness@caiso.com

For other questions or stakeholder specific questions or concerns use one of these methods:

- Submit a CIDI ticket
- Contact your Scheduling Coordinator
- Use the "Contact us" page on caiso.com to submit questions

Settlements Continuation Training:

DAME, EDAM, and EDAM CAISO Balancing Authority Participation Rules

REFERENCE

Resources Tab

The section below provides helpful links during the onboarding process.

Title	Link
Settlements Process Computer Based Training Courses	https://www.caiso.com/stakeholder/training/settlements-and-metering
Draft Design Bill Determinant Standard and Convention Document	https://www.caiso.com/documents/draft-design-bill-determinant-standard-and-convention.docx
Draft of DAME and EDAM Charge Code Change Summary with Tariff Mapping	https://www.caiso.com/documents/dame-and-edam-charge-code-change-summary-with-tariff-mapping.xlsx
Charge Code Matrix - DRAFT	https://www.caiso.com/documents/draft-iso-charge-code-matrix.xlsx
DAME/EDAM/EDAM ISO BAA Settlements Calendar	https://www.caiso.com/documents/dame-edam-edam-caiso-baa-settlements-calendar-2025-2026.xlsx
Draft Market Simulation Plan Spring 2026 Document	https://www.caiso.com/documents/draft-market-simulation-plan-spring-2026-release.pdf
Release Planning Page	https://www.caiso.com/systems-applications/release-planning

Resources Tab

The section below provides helpful links that support topics covered in this course, as well as what will be available post go live.

Title	Link
Settlements Process Computer Based Training Courses	https://www.caiso.com/stakeholder/training/settlements-and-metering
Business Practice Manual for Settlements and Billing	https://bpmcm.caiso.com/Pages/SnBBPMDetails.aspx?BPM=Settlements%20and%20Billing
Draft Design Bill Determinant Standard and Convention Document	https://www.caiso.com/documents/draft-design-bill-determinant-standard-and-convention.docx
Draft of DAME and EDAM Charge Code Change Summary with Tariff Mapping	https://www.caiso.com/documents/dame-and-edam-charge-code-change-summary-with-tariff-mapping.xlsx
Settlements Webpage	https://www.caiso.com/market-operations/settlements
Charge Code Matrix - CURRENT	https://www.caiso.com/documents/iso-charge-code-matrix.xlsx
Payment Calendar	https://www.caiso.com/documents/california-iso-payments-calendar-2025.xlsx

REFERENCE: PRE-CALCULATIONS

- **pre-calculations** refer to intermediate computations that generate foundational data—such as measured demand, load, or export quantities—used across multiple charge codes. These values are calculated before final settlement equations and help ensure consistency and accuracy in allocating payments and charges among market participants

Charge Code Overview: Pre-Calculations

Ancillary Service Pre-Calculation

- Applies to ISO BAA and EDAM BAA(s).
- EDAM QSP and AS Requirements.
- ISO calculation quantities to support of AS Awards settlement and allocations.

Bid Cost Recovery Sequential Netting Pre-Calculation (BCR SEQ NETTING PC)

- Applies to All BAAs.
- Update to include EDAM, sequential netting of RUC revenue and RUC cost, RTM revenue and RTM cost, daily shortfall eligible for RTM BCR.
- EDAM sequential netting of RUC and RTM Bid Cost Uplift similar to ISO BAA.

Day-Ahead Congestion Pre-Calculation (DA CONG PC)

- Update to include IRU/IRD congestion revenue as the sum product of nodal awards and MCC breakdown price and non-negative difference of requirement and surplus congestion amounts.

Charge Code Overview: Pre-Calculations

Existing Transmission Contract (ETC) Pre-Calculation
- Calculation of Balanced ETC/TOR Quantities between Source and Sink Locations.

Flexible Ramping Product (FRP) Pre-Calculation
- Applies to All BAAs.
- Calculation to support FRU/FRD Grouping concepts as well as AET/Non-AET.
- Groupings; Transferred and streamlined calculations from FRU/FRD Allocations to support newer groupings.

Integrated Forward Market (IFM) NET AMT Pre-Calculation
- Applies to ISO BAA and EDAM BAA(s).
- Addition of Imbalance Reserve costs and revenues.

Metered Energy Adjustment Factor (METER ENGY ADJ) Pre-Calculation
- Applies to All BAAs.
- Include BA to BAA association from IR and RC settlement.

Charge Code Overview: Pre-Calculations

Metered Subsystem Deviation Penalty Quantity (MSS_DEVIATION_PNLTY_QTY_PC) Pre-Calculation

- Applies to ISO BAA.
- Added Q' or BAA attribute to some shared raw inputs with other Charge Codes.

Metered Demand (MD) Over Control Area Pre-Calculation

- Applies to ISO BAA and EDAM BAA(s).
- Added ratio calculation of Measured Demand.

Metered Demand Metered Subsystem Netting (MD MSS NETTING PC) Pre-Calculation

- Applies to ISO BAA and EDAM BAA(s).
- Added few Measured Demand aggregation to support successor Charge Codes.

Nodal Pricing Model (NPM) Pre-Calculation

- Applies to NPM BAA(s) Only.
- Include DA Marginal Loss Surplus allocation and IFM BCR uplift allocation processing.

Charge Code Overview: Pre-Calculations

Resource Adequacy Availability Incentive Mechanism (RAAIM) PC
- Applies to ISO BAA Only, and some RA imports at the ISO boundary.
- Added Q' attribute for some shared inputs w/ other CCs.

No Pay Regulation Up/Down (NO PAY REGUP REGDOWN_PC) Pre-Calculation
- Applies to ISO BAA Only.
- Added Q' attribute.

Real-Time Price (RT PRICE PC) Pre-Calculation
- Applies to all BAAs.
- Transferred price calculation from CC 6460 and 64600 for import and export HASP reversal.

Real-Time Congestion (RT CONG PC) Pre-Calculation
- Applies to all BAAs.
- Calculates BAA Congestion Amount by product as well as BAA Congestion Distribution amount by product.

Charge Code Overview: Pre-Calculations

Real-Time Energy (RT ENERGY PC) Pre-Calculation

- Applies to all BAA(s).
  Update to include Reliability Capacity, EDAM Day Ahead Schedules and HASP Reversal
- Transferred quantity calculation from CC 6460 and 64600 for import and export HASP reversal. Replaced Residual Unit Commitment (RUC) with Reliability Capacity Up/Down.

Real-Time Market Net Amount (RTM NET AMT PC) Pre-Calculation

- Applies to all BAAs.
- Update for GHG cost and revenue.

Residual Unit Commitment Net Amount (RUC NET AMT PC) Pre-Calculation

- Applies to All BAAs.
- Added Reliability Capacity Revenues and Costs.
- Remove Residual Unit Commitment Cost calculations.

Residual Unit Commitment No Pay Quantity (RUC NO PAY QTY PC) Pre-Calculation

- Retiring, Termination is 5/1/26.

Charge Code Overview: Pre-Calculations

No Pay Spin/Non-Spin (NO_PAY_SPIN_NSPN_PC) Pre-Calculation

- Applies to ISO BAA and EDAM BAA(s), but some calculations filtered to ISO.
- Added Q' or BAA attribute.
- EDAM BAAs self-provide their Ancillary Service to meet requirement needs.

Startup Cost and Minimum Load Cost (SUC_MLC_PC) Pre-Calculation

- Applies to ISO BAA and EDAM BAA(s).
- Replaced RUC with RCU and RCD.

System Resource Delivery Price (SYS_RSRC_DDLV_PC) Pre-Calculation

- Applies to ISO BAA and EDAM BAA(s).
- Update for input variable descriptions covering inclusion or exclusion of TSR Type 1 and EDAM Legacy.

GRID MANAGEMENT CHARGES

Charge Code Overview: Grid Management Charge - Updated

4512

GMC Inter-Scheduling Coordinator Trade (IST) Transaction Fee contains the activities associated with accepting, processing, and validating Day-Ahead and Fifteen Minute Market (FMM) IST schedules; Addition of Q' to AS inputs, summing over Q' for outputs.

4515

Bid Segment Fee per bid segment for resource Economic Energy Bids, Self Schedule, plus inclusion of Imbalance Reserve Up/Down (IRU/IRC), Reliability Capacity Up/Down (RCU/RCD) products and Q'.

4560

GMC Market Services Charge applies to ISO and EDAM BAAs. Applies to the sum of SC Day Ahead Energy Schedules (Generation, Intertie, and Load, with a Transitional Load Ramp-In applying to Load), Ancillary Service Awards and Self-provisions, specific Real Time Instructed Imbalance Energy dispatches, plus the inclusion of Imbalance Reserve Awards, Reliability Capacity Awards and Q'.

In the first 5 Trade years of EDAM activation(2026-2031), a Transitional Load Ramp-in mechanism will apply to EDAM Load Schedules.

Charge Code Overview: Grid Management Charge – New & Replaced

4566

- **GMC System Operations BAA Service Charge,** applies to ISO BAA Only.
- Designed to recover costs the ISO incurs for transmission planning, summer coordination, and planning coordination costs.
- Calculated by dividing the annual **GMC** revenue requirement allocated to this service category by forecast annual gross absolute value of MWh of real-time energy flows on the ISO controlled grid.

4567

- **GMC System Operations RTD Charge.** applies to EDAM and ISO BAAs.
- Designed to recover costs the ISO incurs for running the grid in real time and applies to metered flows in MWh of supply and demand.
- Calculated by dividing the annual **EDAM Administrative Charge** revenue requirement allocated to this service category by forecast annual gross absolute value of MWh of real-time energy flows on the ISO Controlled Grid.

4561

- Replaced by CCs 4566 & 4567.
- Termination Date was 12/31/25 per Cost of Service Study Initiative.

REFERENCE: IR & RC FORMULAS

Formulas: IRU Settlement

- Imbalance Reserve Up Settlement
  - Imbalance reserve up award settlement
    - $IRUAwardPayment_{i,t} = IRU_{i,t} \times IRUMP_{i,t} - IRUNoPayAmt_{i,t}$
    - $IRUNoPayAmt_{i,t} = IRUNoPayQuantity_{i,t} \times \max(IRUMP_{i,t}, FMMFRUMP_{i,t})$
    - $IRUNoPayQuantity_{i,t} = \min(IRU_{i,t} - IRU5_{i,t}, \max(DAEN_{i,t} + RU_{i,t} + SR_{i,t} + NR_{i,t} + IRU_{i,t} - FMMUEL_{i,t}))$
    - *LSE-RA true-up settlement (described in later slide)*
  - Imbalance reserve up requirement cost
    - $IRURCost_{j,t} = (IRUR_{j,t} - IRUS_{j,t}) \times IRURMP_{j,t} - IRUNoPayAmt_{j,t}$

Formulas: IRD Settlement

- Imbalance Reserve Down Settlement
  - Imbalance reserve down award settlement
    - $IRDAwardPayment_{i,t} = IRD_{i,t} \times IRDMP_{i,t} - IRDNoPayAmt_{i,t}$
    - $IRDNoPayAmt_{i,t} = IRDNoPayQuantity_{i,t} \times \max(IRDMP_{i,t}, FMMFRDMP_{i,t})$
    - $IRDNoPayQuantity_{i,t} = \min(IRD_{i,t} - IRD5_{i,t}, \max(0, FMMLEL_{i,t} + RD_{i,t} + IRD_{i,t} - DAEN_{i,t}))$
    - *LSE-RA true-up settlement (described in later slide)*
  - Imbalance reserve down requirement cost
    - $IRDRCost_{j,t} = (IRDR_{j,t} - IRDS_{j,t}) \times IRDRMP_{j,t} - IRDNoPayAmt_{j,t}$

Reliability Capacity Settlement (Part One)

- Reliability Capacity Up Settlement
  - Reliability capacity up award settlement
    - $RCUAwardPayment_{i,t} = \max(0, RCU_{i,t} \times RCUMP_{i,t} - RCUNoPayAmt_{i,t})$
    - $RCUNoPayAmt_{i,t} = RCUNoPayQuantity_{i,t} \times RCUMP_{i,t}$
    - $RCUNoPayQuantity_{i,t} = \min(RCU_{i,t}, \max(DAEN_{i,t} + RU_{i,t} + SR_{i,t} + NR_{i,t} + IRU_{i,t} + RCU_{i,t} - FMMUEL_{i,t}))$
      - excluding resources with proxy RCU awards

Reliability Capacity Settlement (Part Three)

- Reliability Capacity Down Settlement
  - Reliability capacity down award settlement
    - $RCDAwardPayment_{i,t} = \max\left(0, RCD_{i,t} \times RCDMP_{i,t} - RCDNoPayAmt_{i,t}\right)$
    - $RCDNoPayAmt_{i,t} = RCDNoPayQuantity_{i,t} \times RCDMP_{i,t}$
    - $RCDNoPayQuantity_{i,t} = \min\left(RCD_{i,t}, \max\left(FMMLEL_{i,t} + RD_{i,t} + IRD_{i,t} + RCD_{i,t} - DAEN_{i,t}\right)\right)$
      - excluding resources with proxy RCD awards

Tariff reference

Tariff section references, Section:

- 11.2.1.1, 11.2.3.1.3 – IR Payment
- 11.2.1.8 – IR No Pay
- 11.2.1.9 – IR Cost Allocation
- 11.2.6 – DAME Transition Period, LSE-RA True-Up Settlement
- 11.2.4.1 – IR Congestion charges
- 11.8.2.1, 11.8.2.1.8, 11.8.2.2.1 – BCR

Tariff section references, Section:

- 11.2.2.1 – RC Payment including No Pay
- 11.2.2.2.1 – RC No Pay Quantity
- 11.2.2.2.3, 11.8.6.5.3 – RC Cost Allocation
- 11.2.6 – DAME Transition Period, LSE-RA True-Up Settlement
- 11.8.3, 11.8.3.1.3, 11.8.3.2, 11.8.6.5 – BCR

EDAM ACCESS CHARGE

Charge Code Overview: EDAM Access Charge

8322

EDAM Access Charge Collection applies to ISO BAA and EDAM BAA(s).

- EDAM Access Charge is the product of the BAA Gross Load and each BAA EDAM Access Charge Rate.
- The EDAM Access Charge Rate is derived from EDAM Recoverable Cost from other EDAM/ISO BAA(s) which need to be recovered from this BAA Gross Load.

8326

EDAM Access Charge Payment applies to ISO BAA and EDAM BAA(s).

- BAA EDAM Recovered Costs from other BAAs Gross Load.
- Upstream tool for submission of data needed for ISO to calculate each EDAM BAA's EDAM Access Charge rate is a work in progress.

View 8/19/25 EDAM Access Charge BPM Attachment F document & walkthrough on the Release Planning page for more detailed information

DAY-AHEAD GREENHOUSE GAS

GHG Processes: GHG Model

- EDAM allows utilities and other market participants to bid on energy for the next day, facilitating efficient resource allocation.
- Emissions from the identified resources are considered in market optimization processes.
- GHG regulation area boundaries are determined by state mandates rather than BAs.
- Model is scalable to allow for future non-overlapping GHG regulation areas.

Charge Code Overview: Day-Ahead Greenhouse Gas (DA GHG)

8310

Day-Ahead Greenhouse Gas Emission Cost Revenue applies to ISO BAA and EDAM BAA(s).

- Payment to the Resource with GHG Obligation at DA GHG Marginal Price by GHG Region.

8315

Day-Ahead Greenhouse Gas Offset

- GHG Neutrality Allocate to GHG Region's metered demand.

CONVERGENCE BIDDING

Convergence Bidding are financial positions taken in the day-ahead market and liquidated in the real-time market

- Virtual Demand
  - Bid to buy at day-ahead price and offer to sell at real- time price*
  - Looks like price sensitive demand
- Virtual Supply
  - Bid to sell at day-ahead price and buy at real-time price*
  - Looks like a dispatchable supply resource

* This real-time price is actually the average of 4-15min intervals per hour of FMM LMP.

Charge Code Overview: Day-Ahead Energy, Convergence Bidding

6013

Convergence Bidding DA Energy Settlement of Virtual Awards at relevant Integrated Forward Market Locational Marginal Price (IFM LMP) applies to ISO BAA.

- Inclusion of BAA attribute.
- Will apply to EDAM BAAs starting year 2, unless EDAM BAAs allows it sooner.

6473

Convergence Bidding RT Energy Settlement applies to ISO BAA and EDAM once virtual bidding is activated.

- Imbalance Settlement of IFM Virtual Bids at relevant FMM LMP.
- Inclusion of BAA attribute in quantity.
- Include IFM Virtual Bid Forecasted Movement Imbalance Settlement.

6806

Day-Ahead RUC Tier 1 Allocation

Other potential settlements, based on cost causation.

6636

IFM Bid Cost Recovery Tier 1 Allocation

- Other potential settlements, based on cost causation.

ANCILLARY SERVICE

Charge Code Overview: Ancillary Service

Ancillary Services (AS) Charge Codes:

- Currently apply to ISO BAA Only.
- EDAM BAAs self-provide their Ancillary Services to meet requirement needs.
- Q' attribute and/or 'CISO' BAA filter has been applied to 36 AS Charge Codes to allow for future inclusion of EDAM entities should there be changes allowing EDAM entities to bid in AS.
- There are no new AS Charge Codes for DAME/EDAM.

BID COST RECOVERY

Charge Code Overview – Bid Cost Recovery

6620

Real-Time Market (RTM) Bid Cost Recovery (BCR) Settlement applies to ISO BAA only.

- Removed summation of BAA attribute.

6630

IFM BCR Settlement applies to ISO and EDAM BAAs.

- Compensate Supply resource committed by Market for Energy, AS and Imbalance Reserves (IRU/IRD), if resource daily revenues do not exceed resource daily bid costs.

Charge Code Overview – Bid Cost Recovery

6636

Integrated Forward Market (IFM) BCR Tier 1 Allocation.

- EDAM BAA Allocation will be $0.00.
- ISO allocation is based on SC Net Virtual Demand or SC Net positive metered Demand (increased load).
- For ISO BAA sub-allocation details, see published CC6636 BPM IFM Bid Cost Recovery Tier1 Allocation v5.5.

6637

IFM BCR Tier 2 Allocation.

- Allocation of remaining BAA IFM BCR Recovery Settlement after CC 6636 allocation.
- EDAM BAA Allocation will be to the Entity.
- ISO BAA Sub-Allocation is to Measure Demand less valid Balanced ETC/TOR schedules.

BCR Charge Codes Summary of Changes

CC Number	CC Name/Description	Summary of Change
MEAF_PC	Metered Energy Adjustment Factor PC	Include IR and RC awarded resources to be able to later associate the BA and BAA
SUC_MLC_PC	Startup Cost and Minimum Load Cost PC	Document only change. Residual Unit Commitment (RUC) replaced by RCU/RCD for Reliability Capacity Up or Down; kept RUC keyword for commitment process and term use in BCR. Also, existing RUC eligibility flags for commitment will cover both RCU and RCD (so no DREAMs change).
IFM_NET_AMT	IFM Net Amount PC	Include IR and GHG costs and revenues. Update shared Ancillary Services inputs for BAA attribute Q'.
RUC_NET_AMT	RUC Net Amount PC	Include RCU/RCD costs and revenues. Keep RUC commitment costs to cover RCU/RCD awards energy dispatch. Terminate the old RUC bid costs and revenues.
RTM_NET_AMT	RTM Net Amount PC	Update shared Ancillary Services inputs for BAA attribute Q'.
BCR_Sequential_Netting	BCR Sequential Netting	Per BAA, include IFM BCR Adjustments for IR awards transfer in and transfer out costs. Account for load, and transfer system resources Imbalance Reserve quantities. Include RUC BCR Adjustments based on total BAA RCU minus RCD awards.
NPM_PC	NPM Pre-calculation	Update for BAA attribute Q' in uplift allocation

CONGESTION REVENUE RIGHTS AND ALLOCATION

Charge Code Overview – Congestion Revenue Rights and Allocation

6700

Congestion Revenue Rights (CRR) Hourly Settlement applies to ISO BAA only.

- Transferred some calculations to the day ahead congestion pre-calculation.
- Added Imbalance Reserve deployment scenario to some inputs.

6790

CRR Balancing Account applies to ISO BAA only.

- Included congestion revenues attributable to ISO BAA.

View 8/21/25 EDAM Implementation Workshop presentation and recording for more on this topic

OFFSETS

Charge Code Overview: Day-Ahead (DA) Offsets

8404

DA Energy and Marginal Losses Offset applies to ISO BAA and EDAM BAA(s).

- EDAM BAA Neutrality Amount associate with Marginal Energy Cost (MEC) and Marginal Cost of Losses (MCL) difference to EDAM entity.
- ISO BAA Neutrality Amount associated with MEC and MCL difference is sub-allocated pro rata to measured demand.

8704

Day-Ahead Congestion Offset applies to EDAM BAA only.

- ISO BAA Congestion Revenue is sub-allocated through CRRs (CRR-1B) and metered Demand.
- Sum of product of All Day Ahead Energy Schedules, Virtual Awards settlement and nodal Marginal Cost of Congestion (MCC) breakdown plus any congestion from Imbalance Reserve (IR) award and IR MCC prices.
- Allocated to EDAM Entity.

Charge Code Overview: Real-Time Offset

6477

Real Time Imbalance Energy Offset applies to ISO BAA only.

- EDAM BAAs will settle with Entity in CC 64770.
- Modified to calculate RT Energy Offset by BAA as the sum of all resource within the ISO BAA and BAA Marginal Energy Cost.

6478

Real Time System Imbalance Energy Offset applies to ALL BAAs.

- Modified to account for new GHG Region Offset, RTM GHG Revenue, and RTM Transfer Revenue.

6483

Hour-Ahead Scheduling Process Uplift Settlement applies to ISO BAA only.

- Excludes EDAM BAAs.

EDAM TO WEIM

Charge Code Overview: EDAM to WEIM

64600

Fifteen-Minute Market (FMM) Instructed Imbalance Energy EIM Settlement applies to EDAM BAA(s) and WEIM BAA(s).

- Resource-specific settlement of FMM Instructed Imbalance Energy and relevant FMM LMP.
- Hour Ahead Scheduling Process (HASP) Reversal applies to EDAM intertie resource.
- Accounts for any binding and financial advisory imbalance settlements of the FMM.
- TSRs from Day Ahead.

64700

Real-Time Instructed Imbalance Energy EIM Settlement applies to EDAM BAA(s) and WEIM BAA(s).

- Resource-specific settlement of Real-Time Dispatch IIE plus intertie Operational Adjustments and the RTD LMP.
- Accounts for any binding and financial advisory imbalance settlements of RTD TSRs from FMM.

Charge Code Overview: EDAM to WEIM

64740

Real-Time Unaccounted for Energy EIM Settlement applies to EDAM BAA and WEIM BAA.

- Corresponding ISO BAA Charge Code is CC 6474.

64770

Real-Time Imbalance Energy Offset EIM applies to EDAM BAA and WEIM BAA.

- Corresponding ISO BAA Charge Code is CC 6477.

66200

Real-Time Market (RTM) Bid Cost Recovery EIM Settlement applies to EDAM BAA and WEIM BAA.

- For EDAM BAAs, the resource has sequential netting of Residual Unit Commitment Bid Cost Recovery (RUC BCR) Shortfalls/Surplus with RTM BCR shortfall/surplus.
- For WEIM BAAs, the BCR is solely based upon RTM BCR shortfall/surplus.
- Corresponding ISO BAA Charge Code is CC 6620.

Break Time!