

Market Simulation Structured Scenarios

Extended Day-Ahead Market

Version 1.6 **09/02/2025**

Revision History

Date	Version	Description	
01/26/2024	1.0	Document Created	
03/24/2025	1.1	Updated document with additional information as well as From/To document in section 4.3. DITL and updated MSIM Scenarios to be provided in future version of this document.	
04/21/2025	1.2	Updated Section 6.3 Structured Scenarios	
04/24/2025	1.3	Updated Parallel Operations date from 01/01/26 to 01/26/26 to match RUG calendar.	
04/30/2025	1.4	Added Structured Scenario EDAM-MSS-014. Added Charge Codes for Scenarios.	
08/01/2025	1.5	Added EDAM-MSS-015 and updated EDAM Scenarios. Future iteration shall include CMRI and OASIS report names.	
08/19/2025	1.6	Added Report names to Scenarios.	
09/02/2025	1.6	Updated MSS-005 to exclude RTM related verbiage. Created Clean (Non-Redline) version of document.	



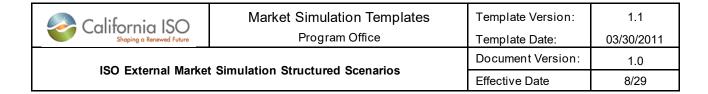
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1. Introduction

The primary goal of market simulation testing is to ensure that CAISO and external participants are prepared for live market conditions and can operate effectively within the CAISO markets. These simulations are crucial when there are new market features, rule changes, system upgrades, and/or new participants joining the market.

- 1. Enhanced Efficiency and Stability: Simulations contribute to efficient and stable market operations by allowing CAISO and entities' systems to work in unison.
- 2. New Rule and Feature validation: CAISO may introduce new market rules, protocols, or features in order to adhere to architecture roadmaps, compliance standards, operational enhancements, and/or policy and stakeholder processes. Simulation testing allows for early detection and correction of issues, ensuring new rules and functionalities do not inadvertently impact market operations.
- 3. Increased Operational Readiness: For market participants, simulations provide a hands-on environment to practice new functionality being implemented to ensure systems are compatible and ready for CAISO's operational protocols.
- 4. Effective Risk Mitigation: By identifying and addressing issues in a controlled environment, both CAISO and market participants can reduce risks associated with software malfunctions, data errors, or misunderstanding of market rules and implementation impacts.

The objective of this document is to provide the information needed for Market Participants to participate in the Extended Day-Ahead Market MAPSTAGE Market Simulation scenarios:

For the scope of this implementation and this initiative, please refer to the Extended Day-Ahead Market External Business Requirements Specification – Release Planning.

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2. Market Simulation Schedule

Initiative	Connectivity Testing		Structured Market Sim	Unstructured Market Sim	Parallel Operations	Activation
Day-Ahead Market Enhancements	06/02/25 – 09/01/25	06/02/25 – 09/01/25	09/02/25 - 12/01/25	12/01/25 – 01/15/26	02/02/26 – 03/26/26 (EDAM OB)	05/01/26
Extended Day- Ahead Market	06/02/25 – 09/01/25	06/02/25 – 09/01/25	09/02/25 - 12/01/25	12/01/25 – 01/15/26	02/02/26 - 03/26/26 (EDAM OB)	05/01/26
EDAM ISO BAA Participation Rules Track A	06/02/25 — 09/01/25	06/02/25 - 09/01/25	09/02/25 – 12/01/25	12/01/25 – 01/15/26	02/02/26 - 03/26/26 (EDAM OB)	05/01/26
Extended Day- Ahead Market On-Boarding - Pacificorp	05/01/25 – 05/31/25	06/02/25 - 09/01/25	09/02/25 – 12/01/25	12/01/25 – 01/15/26	02/02/26 – 03/26/26	05/01/26
Extended Day- Ahead Market - PGE	11/01/25 – 11/30/25	12/01/25 – 03/01/26	03/01/26 - 05/30/26	03/01/26 – 05/30/26	06/01/26 - 09/15/26	10/01/26
WEIM - Berkshire Hathaway Energy Montana	09/01/25 – 10/17/25	10/01/26 – 11/30/26	12/01/25 – 02/13/26	NA	02/16/26 – 04/17/26	05/06/26
WEIM – Black Hills	09/01/25 – 10/17/25	10/01/26 - 11/30/26	12/01/25 – 02/13/26	NA	02/16/26 - 04/17/26	05/06/26

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3. Connectivity Testing - May 2, 2025

3.1 Connectivity Testing Overview

- Covers network testing and certificate provisioning
- Participants without certificates are expected to reach out to their User Access Administrator (UAA) for proper provisioning.
- Participants must attain MAPSTAGE provisioning for the following applications ahead of Market Simulation: MF, SIBR, MRI-S, PLC, webOMS, OASIS, and ALFS.
- Participants must update their firewall settings to ensure proper connections to applications ahead of Market Simulation.

3.2 Connectivity Testing Success Criteria

Certificate	Success Criteria		
YES	 Successful upon completion of following criteria: Access application via User Interface (UI) and login Access application via API 		
NO	 Successful upon completion of following criteria: Access network via UI and/or API and receive error message about incorrect provisioning 		
NO	 Not successful if: Attempt to access network via UI and/or API and receive error message other than request for provisioning 		

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4. Integration Testing – June 1, 2025

4.1 Integration Testing Overview

- Participants have successfully attained certificate provisioning and have successfully completed
 Connectivity Testing to proceed to Integration Testing
- Participants are to test submission and retrieval of data
- For the purposes of Integration Testing ISO shall ensure the following:
 - MAPSTAGE code is completed
 - Availability of MAPSTAGE environment applications externally
 - Mock data for testing of submissions and retrievals

Note: The quality of data at this point in time is not ensured for the purposes of Integration Testing for submission and retrieval.

4.2 Integration Testing Success Criteria - Mock Data

Certificate	Success Criteria
YES	 Successful upon completion of connectivity testing Successful submission and retrieval via UI of Mock Data Successful submission and retrieval via API of Mock Data
YES	 Not successful if: Receiving submission or retrieval error messages. Submit CIDI and email marketsim@caiso.com for support.
NO	 Not successful as participant cannot proceed to Integration Testing without first attaining proper provisioning

4.3 From/To Documentation

Market Participants are expected to review the provided <u>From/To Day In the Life</u> documentation and build an inventory of services being planned for utilization for the purposes of participation in the Extended Day Ahead Market (EDAM). Each participant is to review, and build their own list of planned services for utilization, and then test these services for the purposes of Market Simulation.

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5. Integration + Settlements – July 1, 2025

5.1 Integration Testing + Settlements Overview

- Upon completion of successful Integration Testing participants can continue Integration Testing
 with live data and Settlement results beginning on 7/1/25 Participants are to test submission and
 retrieval of data
- For the purposes of Integration Testing ISO shall ensure the following:
 - o Live data for testing of submissions and retrievals
 - o Publishing of Settlements Statements once a week

Note: Participants must review Settlement Statements to ensure understanding of proper format required for submission.

5.2 Integration Testing Success Criteria – Live Data

Certificate	Success Criteria
YES	 Successful upon completion of connectivity testing and Integration Testing with mock data Successful submission and retrieval via UI of <u>Live</u> Data Successful submission and retrieval via API of <u>Live</u> Data
YES	 Not successful if: Receiving submission or retrieval error messages. Submit CIDI and email marketsim@caiso.com for support.
NO	 Not successful as participant cannot proceed to Integration Testing without first attaining proper provisioning

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6. Market Simulation—Sept. 2, 2025

6.1 Market Simulation Overview

- Covers testing in the MAPSTAGE environment
- MAPSTAGE is an integrated Production-like environment that is available to customers with provisioned access
- Allows customers to experience ISO release/project implementations prior to Production implementation
- Market Simulation will allow customers and the CAISO to conduct specific market scenarios in a test environment prior to the Production activation to ensure that all system interfaces are functioning as expected and to produce simulated market results
- Customers may use MAPSTAGE to validate the interaction of customer-driven changes with the ISO systems

Note: Market participants must submit a request to the ISO by email MarketSim@caiso.com as well as submit a CIDI with their intent to participate in the EDAM Market Simulation. Participants must register by August 15th, 2025.

6.2 Market Simulation Success Criteria - Live Data

Certificate	Success Criteria
YES	 Successful upon completion of connectivity testing and Integration Testing with live data Successful completion of Structured Market Simulation Scenarios
YES	 Not successful if: Receiving submission or retrieval error messages. Submit CIDI and email marketsim@caiso.com for support.
NO	 Not successful as participant cannot proceed to Market Simulation Testing without first attaining proper provisioning

6.3 Structured Scenarios

Note: ISO is currently updating the Structured Market Simulation scenarios and shall request feedback on the scenarios from the participants.

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6.3.1 **EDAM MSS - 001**

Scenario Number	Structured scenario		
	Name	DA-resource sufficiency test upward direction:	
	Market	DAM	
	Description	Identify the impact of binding DA-RSE upward direction test failure and demonstrate no impact of transfer capability in the subsequent passes (GHG reference, IFM, RUC).due to DA RSE failure	
	Market Operator Actions	 Change system condition to fail the binding DA RSE upward direction test, then finish DA run and publish DA results 	
	EDAM Market Participant Actions	 Submit normal bids that are needed for DA run (RSE- eligible bids for DA-RSE run, including type 1 and 3 TSR self-schedule) and load forecast, AS requirement 	
	Expected Outcome	 Verify DA-RSE results and upward shortfall value in CMRI. The following passes transfer capability are not impacted due to DA RSE upward test failure, this can be done by checking TSR awards in CMRI. 	
1		CMRI: EDAM Tab -> Resource Sufficiency Evaluation Binding/Advisory Aggregated Test Results	
		 Day-Ahead EDAM Resource Sufficiency Evaluation Binding/Advisory Contribution Schedules EDAM Two Day-Ahead Advisory Schedules EDAM Three Day-Ahead Advisory Schedules Day-Ahead Three Day-Ahead Advisory Schedule Day-Ahead Transfer System Resource Details EDAM Green House Gas Attribution Real-Time EDAM Green House Gas Attribution Greenhouse Gas Bid Cap Day-Ahead Green House Gas Reference Point 	
		 EDAM Green House Gas Reference Point Day-Ahead Demand Commodity Prices Day-Ahead Generation Commodity Prices Day-Ahead Import-Export Commodity Prices Day-Ahead Demand Market Results 	



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Scenario Number		Structured scenario
		 Day-Ahead Ancillary Service Market Results Day-Ahead Generation Market Results FMM Schedules RTD Schedules EDAM Unit Commitments Day-Ahead Submitted Transfer System Resource Capacity Limit
		 OASIS: EDAM Wind and Solar Forecast Imbalance Reserve Forecasts Imbalance Reserve Results Aggregated/BAA Level Final/Binding Tagged Transmission and Energy Status (HE01-24Hours DAM only (preliminary) Total Net GHG Import Transfer Sufficiency Evaluation Demand Forecast
	Anticipated Settlement Outcome	 Deficient BAA assessed a Deficiency Charge to reflect its shortfall. Surcharge revenue is distributed to compliance BAAs, compensating them for maintaining reliability.
	Expected Settlement Outcome	Charge Code: 8080, 8088

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6.3.2 **EDAM MSS - 002**

Scenario Number	Structured scenario		
	Name	DA-resource sufficiency test downward direction	
	Market	DAM	
	Description	Identify the impact of binding DA-RSE downward direction test failure and demonstrate no impact of transfer capability in the subsequent passes (GHG reference, IFM, RUC) due to DA RSE failure	
	Market Operator Actions	Change system condition to fail the DA RSE downward direction test, then finish DA run and publish DA results N/A	
	EDAM Market Participant Actions	 Submit normal bids that are needed for DA run (RSE- eligible bids for DA-RSE run, including type 1 and 3 TSR self-schedule) and load forecast, AS requirement 	
2	Expected Outcome	Verify DA-RSE results and downward shortfall value in CMRI. The following passes transfer capability are not impacted due to DA RSE downward test failure, this can be done by checking TSR awards in CMRI. CMRI: EDAM Tab -> Resource Sufficiency Evaluation Binding/Advisory Aggregated Test Results	
		 Day-Ahead EDAM Resource Sufficiency Evaluation Binding/Advisory Contribution Schedules EDAM Two Day-Ahead Advisory Schedules EDAM Three Day-Ahead Advisory Schedules Day-Ahead Three Day-Ahead Advisory Schedule Day-Ahead Transfer System Resource Details EDAM Green House Gas Attribution Real-Time EDAM Green House Gas Attribution Greenhouse Gas Bid Cap Day-Ahead Green House Gas Reference Point EDAM Green House Gas Reference Point Day-Ahead Demand Commodity Prices Day-Ahead Generation Commodity Prices Day-Ahead Import-Export Commodity Prices Day-Ahead Demand Market Results Day-Ahead Ancillary Service Market Results 	



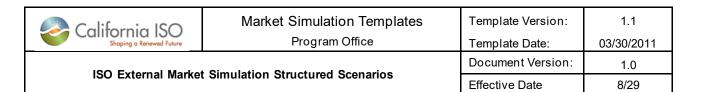
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Scenario Number	Structured scenario		
		 Day-Ahead Generation Market Results FMM Schedules RTD Schedules EDAM Unit Commitments Day-Ahead Submitted Transfer System Resource Capacity Limit OASIS: EDAM Wind and Solar Forecast Imbalance Reserve Forecasts Imbalance Reserve Results Aggregated/BAA Level Final/Binding Tagged Transmission and Energy Status (HE01-24Hours DAM only (preliminary) Total Net GHG Import Transfer 	
	Anticipated Settlement Outcome	 Sufficiency Evaluation Demand Forecast Deficient BAA is charged Downward Deficiency Surcharge based on megawatt quantity and duration of insufficiency. Compliant BAAs may receive a share of this charge as compensation for reliability support. 	
	Expected Settlement Outcome	Charge Code: 8080, 8088	

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6.3.3 **EDAM MSS - 003**

Scenario Number	Structured scenario		
	Name	DA Congestion Management within EDAM Entity BAAs	
	Market	DAM	
	Description	Identify the impact of flowgate congestion caused by outage/ derate within EDAM BAAs. •	
	Market Operator Actions	Check outages/de-rates submitted by the EDAM entity on flowgates that would cause congestion. If none submitted, create outages or de-rates to cause congestion. Ensure that PF is solving in for the DA market and verify congestion in IFM results.	
	EDAM Market Participant Actions	Submit outages/de-rates on selected flowgates that would cause congestion in DA market	
3	Expected Outcome	Congested flowgates are reported in binding transmission constraints in DA and this result is shown in OASIS. Resources impacting the flow in the congested flowgates have a congestion component; if contributing to congestion the component is negative and if relieving congestion the component is positive. CMRI: N/A	
		OASIS: Nomogram/Branch Shadow Prices Intertie Constraint Shadow Prices Interval Intertie Constraint Shadow Prices Interval Nomogram/Branch Shadow Prices Capacity Prices Scheduling Point/Tie Combination Capacity Prices	
	Anticipated Settlement Outcome	Updated Settlements based on adjusted Market Participant binding constraints.	

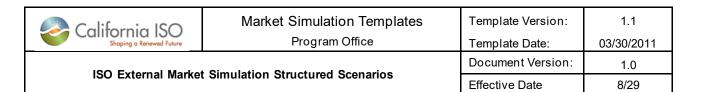


Scenario Number		Structured scenario
	Expected Settlement Outcome	Charge Code: 6700, 6790, 8704

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6.3.4 EDAM MSS - 004

Scenario Number	Structured scenario		
	Name	DA mitigation within EDAM Entity BAAs	
	Market	DAM	
	Description	Identify mitigation on resources deemed as having non- competitive pricing and market power over constrained areas.	
	Market Operator Actions	Create condition in the EDAM BAA to trigger local market power mitigation.	
	EDAM Market Participant Actions	Submit expensive bids on the EDAM participating resources that are expected to be mitigated with respect to their DEB. N/A	
	Expected Outcome	Resources with market power will be mitigated for the corresponding intervals considering their default energy bid and competitive LMP, and reported in CMRI	
4		 CMRI: Day Ahead Market Power Mitigation (MPM) Results Day Ahead Imbalance Reserve and Reliability Capacity Bid Market Power Mitigation (MPM) Results 	
		OASIS: MPM DA Locational Marginal Prices MPM DA Capacity Prices MPM Nomogram/Branch Shadow Prices MPM Nomogram/Branch Competitive Paths MPM Intertie Constraint Shadow Prices MPM Intertie Constraint Competitive Paths MPM Reference Bus MPM Default Competitive Path Assessment List Imbalance Reserve Requirement Thresholds Imbalance Reserve Requirements Input Polynomials Imbalance Reserve Requirements Uncertainty Histograms Imbalance Reserve Demand Curves	
	Anticipated Settlement Outcome	Updated Locational Marginal Prices (LMPs) due to DA resource mitigation.	



Scenario Number		Structured scenario
	Expected Settlement Outcome	Charge Code: N/A

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6.3.5 **EDAM MSS - 005**

Scenario Number	Structured scenario		
	Name	DA Green House Gas allocation and Attribution constraint	
	Market	DAM	
	Description	Identify the capability of EDAM entity to receive GHG allocation, export to GHG regulation area, and enforce gross GHG attribution constraints.	
	Market Operator Actions	 Make sure DA-RSE run succeed at least on upward side. Change system conditions if needed, so the new EDAM BAA can receive GHG allocation and export to GHG regulation area 	
5	EDAM Market Participant Actions	Submit normal bids including GHG bids of GHG regulation area (CA)	
5	Expected Outcome	Check resource that received expected GHG allocation in CMRI CMRI	
		 EIM Green House Gas Attributions EDAM Green House Gas Attribution Day Ahead Generation Market Results OASIS: 	
		Total Net GHG Import Transfer	
	Anticipated Settlement Outcome	DA Settlements for GHG	
	Expected Settlement Outcome	Charge Code: 8310, 8315	

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6.3.6 **EDAM MSS - 006**

Scenario Number	Structured scenario		
	Name	Enable Net Export Transfer Constraint	
	Market	DAM	
	Description	The EDAM Net Export Transfer Constraint is used to communicate a sum amount of resources that can be optimized in support of transfers from one EDAM BA to another BA. Each BA in the EDAM may configure the constraint to establish the an hourly limit on the amount of net EDAM Transfer exports	
	Market Operator Action	Confirm receipt of SIBR values. The market operator will apply the constraint across all IFM market processes including deployment scenarios for IRU/IRD and the RUC.	
6	EDAM Market Participant Actions	Submit hourly Net Export Transfer Constraint (Reliability Margin or "non-exportable capacity margin") values in SIBR UI	
	Expected Outcome	Confirm the additional limit on the amount of capacity held within the balancing area, and view report in CMRI.	
		 CMRI: EDAM Transfer System Resource Details Day Ahead Transfer System Resource Details OASIS: TBD 	
	Anticipated Settlement Outcome	Settlements as normal.	
	Expected Settlement Outcome	N/A	

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6.3.7 **EDAM MSS - 007**

Scenario Number	Structured scenario		
	Name	EDAM Entity BAA isolation	
	Market	DAM	
	Description	Identify the impact of EDAM BAA isolated and demonstrate that each participant has its own MEC.	
	Market Operator Actions	Make sure TSR limit is not submitted. If something is submitted on TSR, change the limit to zero so new EDAM BAA is isolated with other entities	
	EDAM Market Participant Actions	Not submitting TSR limit, submit normal bids in DA	
7	Expected Outcome	All TSR transfer capabilities are reduced to zero and no award on TSR, the EDAM BAA MEC is separated with other BAAs. TSR award can be found in CMRI.	
		 CMRI: EDAM Submitted Transfer System Resource Capacity Limits Day Ahead Submitted Transfer System Resource Capacity Limits 	
		OASIS: • TBD	
	Anticipated Settlement Outcome	Perform Settlements utilizing economic outcomes.	
	Expected Settlement Outcome	Charge Code: N/A	

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6.3.8 **EDAM MSS - 008**

Scenario Number	Structured scenario		
	Name	Transfer capability via MF registered TSR	
	Market	DAM	
	Description	Demonstrate that EDAM BAA export energy and capacity to CAISO via MF registered TSR.	
	Market Operator Actions	Ensure conditions such that CAISO is in need of imports	
	EDAM Market Participant Actions	Submit energy bids for market resources to cover not only their EIM BAA load forecast but have extra room to export to CAISO and bids should be cheaper than other EDAM BAAs. Ensure sufficient capacity on TSRs	
	Expected Outcome	EDAM BAA exports economically to CAISO. TSR award can be found in CMRI.	
8		 CMRI: EDAM Submitted Transfer System Resource Details Day-Ahead Submitted Transfer System Resource Capacity Limit 	
		 OASIS: Aggregated/BAA Level Final/Binding Tagged Transmission and Energy Status EDAM Net Export Transfer Input Parameters?? EDAM Wind and Solar Forecast Imbalance Reserve Forecasts 	
	Anticipated Settlement Outcome	Validate Settlements outcome is as expected based on import/export energy and capacity.	
	Expected Settlement Outcome	Charge Code: 8011, 8411, 8470, 8811	

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6.3.9 **EDAM MSS - 009**

Scenario Number	Structured scenario		
	Name	RUC Energy Net Short	
	Market	DAM	
	Description	Implement an adjustment to the MW target for the RUC pass via the RUC Net Short functionality and demonstrate its effect.	
	Market Operator Actions	Ensure RUC energy net short value enters market correctly	
	EDAM Market Participant Actions	Submit normal DA bids and communicate adjustment value	
9	Expected Outcome	BAA ends up with RUC target matching the adjustment from the RUC Net Short functionality and the market optimizes to mitigate new RUC conditions. The load adjustment can be found in OASIS and resource awards can be found in CMRI	
		 CMRI: Day-Ahead Resource Specific Schedules by Market Priority Types Real-Time Resource Specific Schedules by Market Priority Types OASIS: Aggregated/BAA Level Final/Binding Tagged Transmission and Energy Status	
	Anticipated Settlement Outcome	Settlement RUC Awards settled based on market clearing price for RUC capacity (if offered).	
	Expected Settlement Outcome	Charge Code: 8800, 8806, 8807, 8810, 8816, 8817	

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6.3.10 **EDAM MSS - 010**

Scenario Number	Structured scenario		
	Name	DAM impact on RTM flex ramp up test and FRU procurement	
	Market	DAM, RTM	
	Description	Identify the impact of DAM /SIBR re-supply test results and AET flag on EDAM up pool composition and RTM flex ramp up deployment.	
		Note: Status of AET flag during test will be based on BAA election of the use of the AET functionality.	
10	Market Operator Actions	 ISO will create condition that EDAM entity has undergen infeasibility in DA (IFM or RUC) or fail SIBR re-supply test, which will then fail individual BAA flex ramp up test for at least one hour in RTM ISO shall create condition for EDAM entity to have no undergen infeasibility in DA and pass SIBR re-supply test, then fail EDAM up pool flex ramp up test for at least one hour in RTM 	
	EDAM Market Participant Actions	Submit normal DA and RT bids	
	Expected Outcome	If BAA has no under gen infeasibility in IFM or RUC, and pass SIBR re-supply test, it will be in EDAM up pool and have EDAM pool flex ramp up test; otherwise, BAA will be moved out of EDAM up pool and have flex ramp up test on its own. If a BAA has elected to use Assistance Energy Transfer (AET) and the BAA is short on supply or its upward ramping capability results in a failure of the WEIM RSE, the BAA will still be able to receive WEIM energy transfers. The following are possible outcomes: 1) BAA is in EDAM up pool and EDAM pool passes flex	
		ramp up test, or BAA is moved out of EDAM up pool and passes individual BAA flex ramp up test: BAA is added into EIM up passing group and FRU procurement on EIM passing group	



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Scenario Number		Structured scenario
		 BAA is in EDAM up pool and choose AET flag, EDAM up pool fails flex ramp up test: FRU procurement on AET group and transfer is open on this group BAA is in EDAM up pool and not choose AET flag, EDAM up pool fails flex ramp up test: FRU procurement on NAET group and transfer is locked at this group boundary. BAA is moved out of EDAM up pool and choose AET flag, individual BAA fails flex ramp up test: FRU procurement on its own and transfer open BAA is moved out of EDAM up pool and not choose AET flag, individual BAA fails flex ramp up test: FRU procurement on its own and transfer locked
		 Please see DA results, SIBR re-supply test results and pool composition in OASIS Please see CMRI UI under Energy Imbalance Market -> Flexible Ramp Requirement Sufficiency Test Results.
		CMRI: • External -> Energy Imbalance Market -> Flexible Ramp Requirements Test Results OASIS: • EDAM Wind and Solar Forecast • Imbalance Reserve Forecasts • Imbalance Reserve Results • Aggregated/BAA Level Final/Binding • Imbalance Reserve Requirement Threshold
		 Imbalance Reserve Requirement Input Polynomial Imbalance Reserve Requirement Histogram Flexible Ramp Requirement Threshold Flexible Ramp Requirement Input Polynomial Flexible Ramp Requirement Histogram
	Anticipated Settlement Outcome	Validate Flex Ramp Procurement Awards received as expected.
	Expected Settlement Outcome	Charge Code: 7070, 7071, 7076, 7077, 7078, 7081, 7087, 7088, 6476, 6479

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6.3.11 **EDAM MSS - 011**

Scenario Number	Structured scenario		
	Name	DAM results impact on RTM flex ramp down test and FRD procurement	
	Market	DAM, RTM	
	Description	Identify the impact of DAM results on EDAM down pool composition and RTM flex ramp down deployment.	
	Market Operator Actions	 ISO shall create scenarios for EDAM entity to have overgen infeasibility in DA (IFM or RUC), and then fail individual BAA flex ramp down test for at least one hour in RTM ISO shall create scenarios for EDAM entity to have no overgen infeasibility in DA, and then fail EDAM down pool flex ramp down test for at least one hour in RTM 	
	EDAM Market Participant Actions	Submit normal DA and RT bids	
11	Expected Outcome	If BAA has no over gen infeasibility in IFM or RUC, it will be in EDAM down pool and have EDAM pool flex ramp down test, otherwise, BAA will be moved out of EDAM down pool and have flex ramp down test on its own. The following are possible outcomes: 1) BAA in EDAM down pool and EDAM pool passes flex ramp down test, or, BAA is not in EDAM down pool and passes individual BAA flex ramp down test: BAA is added into EIM down passing group and FRD procurement on EIM passing group 2) BAA in EDAM down pool and EDAM pool fails flex ramp down test: FRD procurement on EDAM down pool and transfer locked for the pool 3) BAA is moved out of EDAM down pool and fails individual	
		 BAA flex ramp down test: FRD procurement on its own and transfer locked Please see DA results and pool composition in OASIS Please see CMRI UI under Energy Imbalance Market -> Flexible Ramp Requirement Sufficiency Test Results CMRI:	



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Scenario Number	Structured scenario		
		External -> Energy Imbalance Market -> Flexible Ramp Requirements Test Results	
		 OASIS: Imbalance Reserve Forecasts Market BA Group Composition (EDAM Pool Results CR21) Imbalance Reserve Requirement Threshold Imbalance Reserve Requirement Input Polynomial Imbalance Reserve Requirement Histogram Flexible Ramp Requirement Threshold Flexible Ramp Requirement Input Polynomial Flexible Ramp Requirement Histogram 	
	Anticipated Settlement Outcome	Validate Flex Ramp Procurement Awards received as expected.	
	Expected Settlement Outcome	Charge Code: 7070, 7071, 7076, 7077, 7078, 7081, 7087, 7088	

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6.3.12 **EDAM MSS - 012**

Scenario Number		Structured scenario	
	Name	WA/CA GHG allocation in RTM	
	Market	RTM	
	Description	Demonstrate the capability of EDAM entity to receive WA/CA GHG allocation, export to GHG regulation area, and enforce gross GHG attribution constraints.	
	Market Operator Actions	Ensure market conditions such that the EDAM BAA can export to a WA/CA GHG area	
	EDAM Market Participant Actions Submit cheap energy and GHG bids to encourage exported by the submit cheap energy and GHG bids to encourage exported by the submit cheap energy and GHG bids to encourage exported by the submit cheap energy and GHG bids to encourage exported by the submit cheap energy and GHG bids to encourage exported by the submit cheap energy and GHG bids to encourage exported by the submit cheap energy and GHG bids to encourage exported by the submit cheap energy and GHG bids to encourage exported by the submit cheap energy and GHG bids to encourage exported by the submit cheap energy and GHG bids to encourage exported by the submit cheap energy and GHG bids to encourage exported by the submit cheap energy and GHG bids to encourage exported by the submit cheap energy and GHG bids to cover its own demands exported by the submit cheap energy and GHG bids to cover its own demands exported by the submit cheap energy and GHG bids to cover its own demands exported by the submit cheap energy and GHG bids to cover its own demands exported by the submit cheap energy and GHG bids to cover its own demands exported by the submit cheap energy and GHG bids to cover its own demands exported by the submit cheap energy and GHG bids to cover its own demands exported by the submit cheap energy and GHG bids to cover its own demands exported by the submit cheap energy and GHG bids to cover its own demands exported by the submit cheap energy and GHG bids to cover its own demands exported by the submit cheap energy and GHG bids to cover its own demands exported by the submit cheap energy and GHG bids to cover its own demands exported by the submit cheap energy and GHG bids to cover its own demands exported by the submit cheap energy and GHG bids to cover its own demands exported by the submit cheap energy and GHG bids to cover its own demands exported by the submit cheap energy and the submit cheap energy		
12	Expected Outcome	EDAM entity <u>to</u> receive WA/CA GHG allocation, export to GHG regulation area, and enforce gross GHG attribution constraints as expected	
		 CMRI: EIM Green House Gas Attributions EDAM Green House Gas Attribution Day Ahead Generation Market Results Real-Time Dispatch Schedules Fifteen Minute Market (FMM) Schedules- OASIS: Total Net GHG Import Transfer 	
	Anticipated Settlement Outcome	RTM Settlements for GHG	
	Expected Settlement Outcome	Charge Code: 491, 495 Note: there will be separate Charge Codes for DA GHG.	

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6.3.13 **EDAM MSS - 013**

Scenario Number	Structured scenario		
	Name	Transient TSRs support for TYPE 1	
	Market	DAM	
	Description	Demonstrate exercise of capacity under CRN for Type 1 TSRs Entity submitting CRN capacity, demonstrate auto matching transfer capability and their utilization in DAM.	
	Market Operator Actions	N/A	
	EDAM Market Participant Actions	Submit a schedule under a CRN for a Type 1 TSR.	
13	Expected Outcome	Schedule for Type 1 TSR is preserved as a self-schedule and flows are seen across TSR and its mirror. Type 1 TSR schedule is considered in DA RSE.	
		CMRI:	
		 EDAM Transfer System Resource Details Day Ahead Transfer System Resource Details 	
		OASIS: • Total Net GHG Import Transfer	
	Anticipated Settlement Outcome	Settlement of Transfer Revenue with appropriate SC	
	Expected Settlement Outcome	Charge Code: 8011, 8411, 8470, 8811	

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6.3.14 **EDAM MSS - 014**

Scenario Number	Structured scenario		
	Name	EDAM Access Charge for Revenue Recovery	
	Market	DAM	
	Description	Utilizing EDAM submission to calculate Access Charge Assessment for Annual True-up for Revenue Recovery	
	Market Operator Actions	N/A	
14	EDAM Market Participant Actions	 EDAM entity must submit all of the following: Annually Recovery in \$ Component 1, 2, and 3 Transmission Access Cost (TAC) True-up value (\$), Bounded Cap (\$), Transmission rates (\$/MWh), Ratio (%), and calculation (via new template) Note: No attestation needed for purposes of Market Simulation. For purposes of Parallel Operations, Participants must complete authorized affidavit from each EDAM Transmission Service Provider attesting accuracy of data provided by EDAM entity and reasonable effort to avoid double recovery costs through EDAM 	
	ISO Settlement Team Action	Access Charge. Publish Revenue Recovery Public Values to CAISO.com	
	Expected Outcome	EDAM entities recover revenue based on Access Charges CMRI/OASIS: N/A	
	Anticipated Settlement Outcome	Annual True-up for Revenue Recovery successfully assessed for EDAM entities as expected	
	Expected Settlement Outcome	Charge Code: 8322, 8326	

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6.3.15 **EDAM MSS - 015**

Scenario Number	Structured scenario		
	Name	Transient TSR support for TYPE 2	
	Market	DAM	
	Description	Demonstrate release of capacity under CRN for Type 2 TSRs	
	Market Operator Actions EDAM Market Participant Actions Release capacity via a Type 2 TSR under a CRN.		
15	Expected Outcome	 Capacity is released to the market and revenue is allocated. 	
		CMRI:	
	Anticipated Settlement Outcome	Settlement of Transfer Revenue with appropriate SC	
	Expected Settlement Outcome	Charge Code: 8011, 8411, 8470, 8811	

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6.4 Configuration Guides and Payment Calendars

DAME, EDAM, EDAM CISO BAA PR Calendar (MAPSTAGE) Jul 01, 2025 through Jan 16, 2026

Refer to the posted <u>Settlements calendar</u> and <u>Charge Codes</u> for more information.

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7. Parallel Operations-Feb. 02, 2026

7.1 Parallel Operations Overview

- Covers testing in the STAGE environment
- STAGE is an integrated Production-like environment that is available to customers with provisioned access
- Allows customers to experience ISO release/project implementations prior to Production implementation
- Parallel Operations will allow customers and the CAISO to conduct specific market scenarios in a test environment prior to the Production activation to ensure that all system interfaces are functioning as expected and to produce simulated market results
- Customers may use STAGE to validate the interaction of customer-driven changes with the ISO systems

7.2 Parallel Operations Success Criteria – Live Data

 Note: ISO to provide updated criteria and most accurate quality of data after MAPSTAGE ahead of Parallel Operations Testing.

Certificate	Success Criteria
YES	 Successful upon completion of connectivity testing, Integration Testing with live data, and Market Simulation Scenarios Successful completion of Parallel Operations Scenarios
YES	 Not successful if: Receiving submission or retrieval error messages. Submit CIDI and email marketsim@caiso.com for support.
NO	 Not successful as participant cannot proceed to Parallel Operations Testing without first attaining proper provisioning

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8. Activation- May 1, 2026

- Complete successful Connectivity, Integration, Market Simulation, and Parallel Operations testing ahead of expected Activation on 5/1/26
- Participants to confirm to Market Simulation team and Customer Readiness team their readiness for activation via submission of CIDI and emailing MarketSim@Caiso.com
- ISO to support participants throughout testing and thereafter for participant readiness

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9. ISO Market Simulation Contact

Please contact MarketSim@caiso.com if you have any questions, feedback, and/or concerns about the testing and/or scenarios disclosed in this document. The ISO appreciates your partnership and participation in the Extended Day Ahead Market (EDAM).