

Market Simulation – Kickoff Call Fall 2021 Release

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Recordings

Calls and webinars are recorded for stakeholder convenience, allowing those who are unable to attend to listen to the recordings after the meetings. The recordings will be publicly available on the ISO web page for a limited time following the meetings. The recordings, and any related transcriptions, should not be reprinted without the ISO's permission.



Agenda

- ISO Market Simulation Support
- Market Simulation Issue Management
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- Initiatives
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 - Energy storage and distributed energy resources phase 4 –implementation
 - Hybrid resources phase 2A
 - Intertie shadow pricing resolution
 - Western EIM base schedule submission deadline phase 1
 - Short-long start definitions
- Fall 2021 Release Market Simulation Overview
- Fall 2021 System Interface Changes
- Next Steps



ISO Market Simulation Support

- Hours: Monday thru Friday 0900-1800 PDT
- ISO's 24x7 Service Desk: (916) 351-2309 (Connectivity
 UI or API)
- Email: <u>MarketSim@caiso.com</u>



Market Simulation Issue Management

- Submit all issues to the CIDI case management system
- CIDI tickets must have "Functional Environment" =
 "Market Simulation Fall 2021" to be reviewed by ISO
 SMEs



Fall 2021 Release Communication Plan

Schedule

Monday	Tuesday	Thursday
August 30	September 7	August 26
September 13,20,27		September 2,9,16,23,30

Connection Information

- Web Conference Information
 - Web Address: https://caiso.webex.com/meet/MarketSim
 - Meeting Number: 962 067 710
 - Audio connection instructions will be available after connecting to the web conference. When
 prompted, select "Call me" and enter the phone number you will use during the call. You will be called
 by the conference shortly.

Conference Call Information

- Dial-in Number:
 - 1-844-517-1271 (Toll Free)
 - 1-682-268-6591
- Access Code: 962 067 710



Fall 2021 Release MAP Stage Availability

- Refer to MAP Stage portal https://portalmap.caiso.com for system availability information
- Current MAP Stage Scheduled Maintenance
 - MRI-S UI/API thru 8/27
 - MF UI/API thru 8/30
 - ALFS API thru 8/30
- MAP Stage Weekly Maintenance Window
 - Friday



Fall 2021 Release MAP Stage Connectivity Testing

Timeline: Aug 30 – Sept 06



Fall 2021 Release Market Simulation Initiatives & Timelines

Fall 2021 Release Initiatives	Start Date	Start Date (Trade Date)	End Date	Structured Simulation Start (Trade Date)
Fall 2021 Release Market Simulation	08/30/21	09/07/21	10/01/21	09/07/21
Real-time settlement review phase 2		09/07		09/07
Energy storage and distributed energy resources phase 4 –implementation		09/21		09/21
Hybrid resources phase 2A		9/15		NA
Intertie shadow pricing resolution		9/21		NA
Western EIM base schedule submission deadline phase 1				Complete (4/15-4/23)
Short-long start definitions		9/15		NA

Market Simulation Plan:

http://www.caiso.com/Documents/MarketSimulationPlan-Fall2021Release.pdf



Market Simulation Initiatives

- Timeline: September 07 October 01
- Real-time settlement review phase 2
 - **Structured**: September 07
 - Structured Scenarios document http://www.caiso.com/Documents/MarketSimulationStructuredScenarios-RealTimeSettlementReview.pdf
 - Business Requirements Specification http://www.caiso.com/Documents/BusinessRequirementsSpecification-Real-TimeSettlementReview.pdf
- Energy storage and distributed energy resources phase 4 –implementation
 - **Structured**: September 21
 - **Business Requirements Specification** http://www.caiso.com/Documents/BusinessRequirementsSpecification-EnergyStorageandDistributedEnergyResourcesPhase4.pdf
 - Structured Scenarios document http://www.caiso.com/Documents/MarketSimulationStructuredScenarios-EnergyStorageandDistributedEnergyResourcesPhase4.pdf



Market Simulation Initiatives

- Timeline : September 07 October 01
- Hybrid resources phase 2A
 - Business Requirements Specification -http://www.caiso.com/Documents/BusinessRequirementsSpecifications-HybridResourcesPhase2.pdf
- Intertie shadow pricing resolution
 - Business Requirements Specification -http://www.caiso.com/Documents/BusinessRequirementsSpecification-IntertieShadowPricingResolution.pdf
- Western EIM base schedule submission deadline phase 1
 - Business Requirements Specification http://www.caiso.com/Documents/BusinessRequirementsSpecification-BaseScheduleSubmissionDeadline.pdf
- Short-long start definitions
 - Business Requirements Specification -http://www.caiso.com/Documents/BusinessRequirementsSpecificationv11-Short-LongStartDefinitions.pdf



Structured Scenario Registration Details

MP's will need to register their request with the ISO to participate in this simulation via the MarketSim@caiso.com mailbox.

Date of registration: August 24th, 2021.

We will do our best to accommodate for late registration



Fall 2021 Release - Market Simulation Overview

Wk	Date	ISO	Market Participants
1	8/30-9/06	Mkt Sim Readiness Testing	Connectivity
2	9/07-10/01		Structured Scenarios
3	9/08-10/01		Unstructured Simulation

Calendar Day	Day	CMRI T+1B	Submit Meter Data by T+2B 10:00 for Initial	Publish Initial Statement T+5B	Submit Meter Data by T+5B 18:00 for Recalc	Publish Recalc Statement T+8B	Publish Market Invoice
			T+9B	T+9B	T+70B	T+70B	
30-Aug-21	Monday						
31-Aug-21	Tuesday						
01-Sep-21	Wednesday	31-Aug					
02-Sep-21	Thursday		31-Aug				
03-Sep-21	Friday	2-Sep					
04-Sep-21	Saturday						
05-Sep-21	Sunday						
06-Sep-21	Monday				CAISO Holiday		
07-Sep-21	Tuesday		2-Sep				
08-Sep-21	Wednesday	7-Sep		31-Aug	31-Aug		
09-Sep-21	Thursday			Monthly Initial 31-Aug			Daily Initial 31-Aug
			7-Sep				Monthly Initial 31-Aug
10-Sep-21	Friday	9-Sep		2-Sep	2-Sep		

Settlements TDs Tue/Thu
Maintenance Friday
Market Simulation Plan
Market Simulation Settlements Calendar



2021 - System Interface Changes

MRI-S				
Project	API Service Name & Major Version, Artifacts	MAP-Stage	Production	Technical Specifications
OSI 2021	Add support for new retrieve requestType: MONITORING_DATA RetrieveMeterData_STLMTv1_AP RetrieveMeterData_STLMTv1_DocAttach_AP percentResidential is returned (for BASE & CBL only) Fault code 1008 details changed to: "Valid values are 5, 15 or 60 for submission and 5, 10, 15 or 60 for meter data retrieve request or 60 for monitoring data retrieve request	UI/API Closure 8/19-8/27 To Be Available 8/30	9/15/21	v2.7; 8/18/21

MF			
Project	API Service Name & Major Version, Artifacts	Production	Technical Specifications
Variable Operations & Maintenance	RetrieveGeneratorRDT_MFRDv5_AP; 20211001 RetrieveGeneratorRDT_MFRDv5_DocAttach_AP; 20211001 SubmitGeneratorRDT_MFRDv5_AP; 20211001 SubmitGeneratorRDT_MFRDv5_DocAttach_AP; 20211001 Added the following Resource attributes to GRDT: ML_ADDER SU_ADDER ML/SU_ADDER_TYPE	1/1/22 - Activation	✓ 8.0.0; 5/27/21
	Added the following attributes to Configuration level for GRDT: ML_ADDER SU_ADDER ML/SU_ADDER_TYPE	Page 14	

https://developer.caiso.com



Fall 2021 - System Interface Changes

Project	System	API Service Name & Major Version, Artifacts	Technical Specification
Troject	System	RetrieveGeneratorRDT MFRDv5 AP; 20211001	recimear specification
		RetrieveGeneratorRDT MFRDv5 DocAttach AP; 20211001	
		SubmitGeneratorRDT MFRDv5 AP; 20211001	
	NAF	SubmitGeneratorRDT_MFRDv5_DocAttach_AP; 20211001	/ F/27/21
	MF	A LL Lui C III i D	√ 5/27/21
		Added the following Resource attributes to GRDT:	
		STORAGE_VARIABLE_COST	
ESDER4		MAX_DAILY_RUN_TIME	
		STORAGE_RANK_LMPM	
	SIBR	SubmitRawBidSet_v5	✓ 8/3/21
	SIBR	RetrieveCleanBidSet_v5	√ 8/3/21
	SIBR	RetrieveCurrentBidResults_v5	✓ 8/3/21
	CMRI	Update to Default Energy Bid Curves with new Default Bid Type "Storage"	✓ v5.0.0; 6/4/21
	OASIS	Added new service version for Public bids to introduce	✓ v7.0.0; 6/4/21
	UASIS	new elements.	V7.0.0; 6/4/21
		RetrieveGeneratorRDT MFRDv5 AP; 20211001	
		RetrieveGeneratorRDT_MFRDv5_DocAttach_AP; 20211001	
		SubmitGeneratorRDT MFRDv5 AP; 20211001	
		SubmitGeneratorRDT MFRDv5 DocAttach AP; 20211001	
Hybrid Resources P2	MF	Added the following Resource attributes to GRDT:	√ 5/27/21
Trybria Resources 12	1411	COMPONENT ID	3,2,721
		CO LOCATED	
		FUEL TYPE (Added "HYBD" enum)	
		rock_iffe (Added Hibb elidili)	
		Added Hybrid Components section in the elements table for GRDT	
+		Added new service version for Intertie Constraint Shadow	
		Prices, Interval Intertie Constraint Shadow Prices,	
		Contingency Dispatch Intertie Constraint Shadow Prices	
		and MPM Intertie Constraint Shadow Prices reports to	
		introduce new element.	
		Added new service version for below services as there are	
		impacts to Group services due to Intertie Constraint	✓ v7.0.0; 6/4/21
ntertie Shadow Pricing Resoultion	OASIS	Shadow Prices & MPM Intertie Constraint Shadow Prices	V7.0.0, 0/ 4/21
		services. However, there are no element changes to the	
		artifacts.	
		- Locational Marginal Prices	
		- AS Clearing Prices	
		- Nomogram/Branch Shadow Prices	
		- MPM Intertie Constraint Competitive Paths	
		- MPM Nomogram/Branch Shadow Prices	
		- MPM Nomogram/Branch Competitive Paths	
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Next Steps

The next teleconference is scheduled on Aug 30 at 2 PM

