Market Simulation – 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

- Fall 2021 Release MAP Stage Availability
- Fall 2021 Release Market Simulation Initiatives & Timelines
- Initiatives
    - Real-time settlement review phase 2
    - 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

- Known Issues
- Fall 2021 - System Interface Changes
- Next Steps

Fall 2021 Release MAP Stage Availability

- Refer to MAP Stage portal https://portalmap.caiso.com for system availability information

- Current MAP Stage Scheduled Maintenance
  - None

- Upcoming MAP Stage Scheduled Maintenance
  - SIBR UI & API Unavailable 9/23 1600 PT thru 9/24 EOD
  - CMRI UI & API Unavailable 10/1 All Day
  - SIBR API Unavailable 10/8 (Tentative)

- MAP Stage Weekly Maintenance Window
  - Friday

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	**10/15/21**	09/07/21
Real-time settlement review phase 2		09/07		09/16 & 9/28
Energy storage and distributed energy resources phase 4 –implementation		09/21		09/23
Hybrid resources phase 2A		**09/23**		NA
Intertie shadow pricing resolution		**09/30**		NA
Western EIM base schedule submission deadline phase 1				Complete (4/15-4/23)
Short-long start definitions		10/4		NA

Market Simulation Plan:

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

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Market Simulation Initiatives

- **Timeline : September 07 – October 15**

- **Real-time settlement review phase 2**
  - **Structured** : September 16 and September 28
  - Structured Scenarios document -
    http://www.caiso.com/Documents/MarketSimulationStructuredScenarios-RealTimeSettlementReview.pdf
  - Business Requirements Specification -
    http://www.caiso.com/Documents/BusinessRequirementsSpecification-Real-TimeSettlementReview.pdf

- **Timeline : September 21 – October 15**

- **Energy storage and distributed energy resources phase 4 –implementation**
  - **Structured** : September 23 (Added 10/6 and 10/13 as additional dates if required for testing)
  - Business Requirements Specification -
    http://www.caiso.com/Documents/BusinessRequirementsSpecification-EnergyStorageandDistributedEnergyResourcesPhase4.pdf
  - Structured Scenarios document –
    http://www.caiso.com/Documents/MarketSimulationStructuredScenarios-EnergyStorageandDistributedEnergyResourcesPhase4.pdf

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Market Simulation Initiatives

- **Timeline : September 07 – October 15**

- **Hybrid resources phase 2A (Sept 23- Oct 15)**
  - Business Requirements Specification - http://www.caiso.com/Documents/BusinessRequirementsSpecifications-HybridResourcesPhase2.pdf

- **Intertie shadow pricing resolution (Sept 30- Oct 15)**
  - 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 (Start Oct 04)**
  - Business Requirements Specification - http://www.caiso.com/Documents/BusinessRequirementsSpecificationv11-Short-LongStartDefinitions.pdf

Known Issues

S. No.	Issue	Fix Date
1	Unable to submit hourly SOC Lower Limit and SOC Upper Limit via API *Users may submit via SIBR UI > Hourly Tab > EOH SOC lower limit; EOH SOC upper limit until API issue is resolved	**Sep 27**

2021 - System Interface Changes

MF				
Project	**API Service Name & Major Version, Artifacts**	**MAP-Stage**	**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 Added the following attributes to Configuration level for GRDT: ML_ADDER SU_ADDER ML/SU_ADDER_TYPE	✓ 8/30/21	1/1/22 – Activation	✓ 8.0.0; 5/27/21

https://developer.caiso.com

Fall 2021 Release				
Project	**System**	**API Service Name & Major Version, Artifacts**	**Technical Specifications**	**MAP-Stage**
ESDER4	MF	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: STORAGE_VARIABLE_COST MAX_DAILY_RUN_TIME STORAGE_RANK_LMPM	✓ 5/27/21	✓ 8/30/21
	SIBR	SubmitRawBidSet_v5	✓ 8/3/21	✓ 9/1/21
	SIBR	RetrieveCleanBidSet_v5	✓ 8/3/21	✓ 9/1/21
	SIBR	RetrieveCurrentBidResults_v5	✓ 8/3/21	✓ 9/1/21
	CMRI	Update to Default Energy Bid Curves with new Default Bid Type "Storage"	✓ v5.0.0; 6/4/21	✓ 9/21/21
	OASIS	Added new service version for Public bids to introduce new elements.	✓ v7.0.0; 6/4/21	✓ 9/21/21
Hybrid Resources P2	MF	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: COMPONENT_ID CO_LOCATED FUEL_TYPE (Added "HYBD" enum) Added Hybrid Components section in the elements table for GRDT	✓ 5/27/21	✓ 8/30/21
Intertie Shadow Pricing Resolution	OASIS	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 Shadow Prices & MPM Intertie Constraint Shadow Prices 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	✓ v7.0.0; 6/4/21	✓ 9/21/21

Next Steps

- The next teleconference is scheduled on Sept 27 at 2 PM

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- Reference Slides

California ISO

ISO Market Simulation Support

- **Hours:** Monday thru Friday 0900-1800 PDT

- **ISO's 24x7 Service Desk:** (916) 351-2309 (Connectivity – UI or API)

- **Email:** MarketSim@caiso.com

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 Connectivity Testing

- **Timeline :** Aug 30 – Sept 06

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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		7-Sep	Monthly Initial 31-Aug			Daily Initial 31-Aug / 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

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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

Market Simulation 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