



Market Simulation – Fall 2019 Release

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November 25, 2019

Recordings

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Agenda

- MAP Stage Availability
- Fall 2019 Release Market Simulation Initiatives & Timelines
- External Interface Changes
- Known Issues
- Settlements Calendar
- Initiatives
 - Commitment Costs and Default Energy Bid Enhancements Phase 1
- Next Steps

Fall 2019 Release MAP Stage Availability

- Refer to MAP Stage portal <https://portalmap.caiso.com> for system availability information
- Current MAP Stage Scheduled Maintenance
 - SIBR - November 26, 30 minute outage for deployment
- Upcoming MAP Stage Maintenance
 - None at this time
- MAP Stage Weekly Maintenance Window
 - Monday 0700 PT - Tuesday 0900 PT

Fall 2019 Release Market Simulation Initiatives & Timelines

Fall 2019 Release Initiatives	Start Date	Start Date (TD)	End Date	Structured Simulation Start (Trade Date)	Expected Participation	Status
Fall 2019 Release Market Simulation Phase 1	09/03/19	09/04/19	10/11/19	09/18/19		
<i>Energy Imbalance Market (EIM) Enhancements 2019 (BAAOP)</i>				N/A	EIM Market Participants	Complete
<i>Energy Storage and Distributed Energy Resources (ESDER) Phase 3A</i>				Scenarios Execution TD 9/18	ISO Market Participants EIM Market Participants	Complete
<i>Federal Energy Regulatory Commission (FERC) Order 841</i>				N/A	ISO Market Participants EIM Market Participants	Complete
<i>Local Market Power Mitigation Enhancements (LMPME)</i>				Scenarios Execution TD 09/25	ISO Market Participants EIM Market Participants	Complete
<i>Real-Time (RT) Market Neutrality Settlement</i>	09/25/19	09/25/19		N/A	EIM Market Participants	Complete
<i>Reliability Must-Run (RMR) and Capacity Procurement Mechanism (CPM) Enhancements</i>				Scenarios Execution TD 09/25	ISO Market Participants	Complete
Fall 2019 Release Market Simulation Phase 2	10/14/19	10/21/19	11/04/19	N/A		
<i>Commitment Costs and Default Energy Bid Enhancements (CCDEBE)</i>	10/14/19	11/07/19	11/26/19	N/A	ISO Market Participants EIM Market Participants	In Progress
<i>Energy Imbalance Market (EIM) Enhancements 2019 (BSAP Interface Changes and Reporting Features)</i>				N/A	EIM Market Participants	Complete

Fall 2019 Release – System Interface Changes

CMRI

Project	Change Type	UI Change	API Service Name & Major Version, Artifacts	MAP Stage	Technical Specifications
LMPME CCDEBE1	Modify	Tab: Default Bids Existing Report: Default Energy Bid Curves	RetrieveDefaultBidCurves_CMRIv2 RetrieveDefaultBidCurves_CMRIv2_DocAttach	LMPME Sep 12, 2019 CCDEBE1 Nov 15, 2019	3.9.3
CCDEBE1	Modify	Tab: Default Bids Existing Report: Default Commitment Costs	RetrieveExternalDefaultCommitmentCost_CMRIv1 RetrieveExternalDefaultCommitmentCost_CMRIv1_DocAttach	Nov 15, 2019	3.9.3
EIM 2019	New	Tab: Energy Imbalance Market New Report: Resource Operating Limits	RetrieveEIMResourceOperatingLimit_CMRIv1 RetrieveEIMResourceOperatingLimit_CMRIv1_DocAttach	Oct 3, 2019	3.9.3
EIM 2019	New	Tab: Real-Time New Report: Resource Operating Limits	RetrieveResourceOperatingLimit_CMRIv1 RetrieveResourceOperatingLimit_CMRIv1_DocAttach	Oct 3, 2019	3.9.3

OASIS

Project	Change Type	UI Change	API Service Name & Major Version, Artifacts	MAP Stage	Technical Specifications
EIM 2019	New	Tab: ENERGY New Report: Transmission Loss	ENE_TRANS_LOSS	Oct 7, 2019	5.1.9

Known Issues -

#	System	Summary	Status	Estimated Fix Date	CIDI #
1	MRI-S	MSG resources settlements statements may not reflect accurately because the MMA Transition Cost functionality is not currently implemented	Open	End of the year	N/A
2	SIBR	UI submit of SUC Adjustment, after submit the display shows blank	Resolved	To be fixed 11/26	N/A
3	SIBR	Energy adjustment submitted for resource with no DEB from RLC rule 31665 invalidates the bid.	Resolved	To be fixed 11/26	N/A
4	SIBR	Energy adjustment bids not setting the origin (ExAnte or Threshold if exceeding the Threshold price curve.	Resolved	To be fixed 11/26	N/A
5	SIBR	Energy adjustment bid does not have to match Energy bid curve segments. (not impacting submissions) This is in discussion with vendor.	Re-Opened	Estimated 11/26	N/A
6	SIBR	SUC adjustments that exceed the Threshold are not showing THRESHOLD as the Origin.	Open	Estimated 11/26	N/A
7	SIBR	SUC Threshold calculation rules enhancement 41353	New	Estimated 11/26	N/A

Settlements Calendar

Calendar Day	Day	CMRI T+1B	Publish Initial Statement T+4B	Submit Meter Data by T+4B 18:00 for Recalc	Publish Recalc Statement T+8B	Publish Market Invoice	
02-Dec-19	Monday						
03-Dec-19	Tuesday						
04-Dec-19	Wednesday	3-Dec					
05-Dec-19	Thursday	4-Dec					
06-Dec-19	Friday						
07-Dec-19	Saturday						
08-Dec-19	Sunday						
09-Dec-19	Monday		3-Dec	3-Dec			
10-Dec-19	Tuesday		4-Dec	4-Dec			
11-Dec-19	Wednesday	10-Dec					
12-Dec-19	Thursday	11-Dec					
13-Dec-19	Friday				3-Dec		
14-Dec-19	Saturday						
15-Dec-19	Sunday						
16-Dec-19	Monday		10-Dec	10-Dec	4-Dec		
17-Dec-19	Tuesday		11-Dec	11-Dec			
18-Dec-19	Wednesday	17-Dec	Monthly Initial 03-Dec - 11-Dec				
19-Dec-19	Thursday	18-Dec				Daily Initial 03-Dec, 04-Dec, 10-Dec, 11-Dec Monthly Initial 03-Dec - 11-Dec	
20-Dec-19	Friday				10-Dec		
21-Dec-19	Saturday						
22-Dec-19	Sunday						
23-Dec-19	Monday		17-Dec	17-Dec	11-Dec		
24-Dec-19	Tuesday		18-Dec	18-Dec	Monthly Recalc 03-Dec - 11-Dec		
25-Dec-19	Wednesday	ISO Holiday					
26-Dec-19	Thursday	24-Dec				Daily Recalc 03-Dec, 04-Dec, 10-Dec, 11-Dec Monthly Recalc 03-Dec - 11-Dec	
27-Dec-19	Friday						
28-Dec-19	Saturday						
29-Dec-19	Sunday						
30-Dec-19	Monday				17-Dec		
31-Dec-19	Tuesday		24-Dec	24-Dec	18-Dec		

Commitment Costs and Default Energy Bid Enhancements Phase 1: FERC Response

- 4-11 Dec Production Go-Live schedule assumed receipt of FERC order by 20-Nov
- FERC response to initial tariff filing not received; FERC deficiency letter received 4-Nov
- CAISO responding to deficiency letter this week, per RUG update on Tuesday
- FERC has up to 60 days to respond with a decision
- CCDEBE's revised implementation date is estimated to be approximately +3 months from the date of FERC's response
- CAISO continuing to resolve Known Issues for SIBR
- Market Simulation unstructured testing planned to end 26 November
- Participants can leverage existing scheduled EIM Settlements Statement run dates

Commitment Costs and Default Energy Bid Enhancements Phase 1

- **SIBR Code:** Unstructured began November 7
SIBR functionality available
 - Submit Regular Bids (without Adjustments), MLC, Startup Cost, Energy
 - Submit Adjustments Cost for MLC, Startup, Energy
 - Retrieve All
 - Submission rules (Underlying rules depends on ECIC payloads)
 - Content validated, calculation
- **CMRI Code:** CMRI UI was available November 13, API was available November 15, unstructured began November 14

Next Steps

- This is the final Market Simulation teleconference for Fall 2019 Release

Reference Slides

Structured Scenario Settlements Calendar -

Calendar Day	Day	CMRI T+1B	Publish Initial Statement T+4B	Submit Meter Data by T+4B 18:00 for Recalc	Publish Recalc Statement T+8B	Publish Market Invoice
21-Oct-19	Monday				9-Oct	
22-Oct-19	Tuesday				10-Oct	
23-Oct-19	Wednesday				Monthly Recalc 09-Oct - 10-Oct	Daily Recalc 09-Oct, 10-Oct Monthly Recalc 09-Oct - 10-Oct
24-Oct-19	Thursday	23-Oct				
25-Oct-19	Friday	24-Oct				
26-Oct-19	Saturday					
27-Oct-19	Sunday					
28-Oct-19	Monday					
29-Oct-19	Tuesday		23-Oct			
30-Oct-19	Wednesday		24-Oct			
31-Oct-19	Thursday	30-Oct	Monthly Initial 23-Oct - 24-Oct			Daily Initial 23-Oct, 24-Oct Monthly Initial 23-Oct - 24-Oct
01-Nov-19	Friday					
02-Nov-19	Saturday					
03-Nov-19	Sunday					
04-Nov-19	Monday					
05-Nov-19	Tuesday		30-Oct			
06-Nov-19	Wednesday					
07-Nov-19	Thursday					
08-Nov-19	Friday					

Energy Imbalance Market Enhancements 2019

- **Timeline: September 3 – November 4**

Area	Features/Scope	Timing Status
BAAOP	<ul style="list-style-type: none"> ▪ Transformer Flow – In MAP Stage ▪ Resource Flex Ramping – In MAP Stage ▪ Flexible Ramping Sufficiency Results – In MAP Stage ▪ EIM Area Summary – In MAP Stage ▪ ETSR Detail – In MAP Stage ▪ EIM Threshold Display and Calculations – In MAP Stage ▪ RTD Dispatch Control – In MAP Stage ▪ RTPD Dispatch Control – In MAP Stage 	Available
Reporting Features and BSAP Interface Changes	<ul style="list-style-type: none"> ▪ Loss Transmission OASIS Report ▪ CMRI Resource Operating Limits Report ▪ CMRI EIM Operating Limits Report ▪ Copy and Modify Base schedule (BSAP) EIM19-BRQ1270 ▪ Add retrieve aggregate service for BS Deviation (BSAP) EIM19-BRQ1560 	Available

Energy Storage & Distributed Energy Resources

Phase 3A

- **Timeline:** September 3 – October 11
- **Structured:** September 16 – September 27
- **Structured Scenarios Execution Date:** Trade Date September 18
- **DRRS Code:** Available September 18
- **Scenario #3:** 15 Min PDR BCR, can be validated on the September 18 Initial Statement.

Local Market Power Mitigation Enhancements

- **Timeline:** September 3 – October 11
- **Structured:** September 16 – September 27
- **Structured Scenarios Execution Date:** Trade Date September 25

Real-Time Market Neutrality Settlements

- **Timeline:** September 25 – October 11

FERC Order 841

- **Timeline:** September 3 – October 11

Fall 2019 Release MAP Stage Data Setup

- Production data seeding the environment is from August 27th, 2019
- CIRA accepting September and October Supply plans

Market Simulation Issue Management

- Submit all issues to the CIDI case management system
- CIDI tickets must have “**Functional Environment**” = “**Market Simulation Fall 2019**” to be reviewed by ISO SMEs

ISO Market Simulation Support

- **Hours:** Monday thru Friday 0900-1800 PPT
- **Market Simulation Coordinator Phone:** (916) 351-2205
- **ISO's 24x7 Service Desk:** (916) 351-2309 (Connectivity – UI or API)
- **Email:** MarketSim@caiso.com

Market Simulation Issue Management

- Submit all issues to the CIDI case management system
- CIDI tickets must have “**Functional Environment**” = “**Market Simulation Fall 2019**” to be reviewed by ISO SMEs

Fall 2019 Release Communication Plan

- **Schedule**

<i>Monday</i>	<i>Tuesday</i>	<i>Thursday</i>
September 9, 16, 23, 30 October 7, 14, 21, 28, November 4, 11, 18, 25	September 3	August 29 September 5, 12, 19, 26 October 3, 10, 17, 24, 31
		November 7, 14, 21

- **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: 866-528-2256
 - International Dial-in: 216-706-7052
 - Access Code: 202 249 0