



Market Simulation – Fall 2019 Release

Christopher McIntosh
Lead Market Simulation Coordinator

November 11, 2019

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

- MAP Stage Availability
- Fall 2019 Release Market Simulation Initiatives & Timelines
- External Interface Changes
- Known Issues
- 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
 - CMRI - November 11 – 12, API Offline
 - Master File - November 11, 30 minute outage for deployment
 - SIBR - November 11, 30 minute outage for deployment
- Upcoming MAP Stage Maintenance
 - SIBR - November 14, 30 minute outage for deployment
- 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 12, 2019	3.9.3
CCDEBE1	Modify	Tab: Default Bids Existing Report: Default Commitment Costs	RetrieveExternalDefaultCommitmentCost_CMRIv1 RetrieveExternalDefaultCommitmentCost_CMRIv1_DocAttach	Nov 12, 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

Retrieve External Default Commitment Cost Update

- Latest Tech Specs Updated 11/6 -
 - <https://developerint.oa.caiso.com/Artifacts/CMRI/TechSpecs/CMRI%20Interface%20Specification%20v3.9.3.pdf>
- Updated XSD -
 - https://developer.caiso.com/Pages/application-services.aspx?app=CMRI&service=RetrieveExternalDefaultCommitmentCost_CMRIv1_AP
 - https://developer.caiso.com/Pages/application-services.aspx?app=CMRI&service=RetrieveExternalDefaultCommitmentCost_CMRIv1_DocAttach_AP

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	Open	To be fixed 11/14	N/A
3	MF	RetrieveGeneratorRDT_MFRDv4 and RetrieveGeneratorRDT_MFRDv4_DocAttach API requests are NOT returning the Additional Bilateral Hub attribute when <resourceID = ALL> in the requests.	Resolved	To be fixed 11/11	218109
4	SIBR	Energy adjustment submitted for resource with no DEB from RLC rule 31665 invalidates the bid.	Open	To be fixed 11/14	N/A
5	SIBR	Energy adjustment bids not setting the origin (ExAnte or Threshold if exceeding the Threshold price curve.	Open	To be fixed 11/14	N/A
6	SIBR	Energy adjustment bid does not have to match Energy bid curve segments. (not impacting submissions) This is in discussion with vendor.	Open	To be fixed 11/14	N/A
7	SIBR	MSG resources with Energy Adjustment firing content rule 21652 rejecting the bid.	Resolved	To be fixed 11/11	N/A
8	SIBR	Retrieve of the CleanBid will not show an offer type (ExAnte/Threshold) if submitted. You will see the ExAnte.	Resolved	To be fixed 11/11	N/A

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:** Connectivity available November 12, unstructured start targeted November 14
- **Go Live 12/4**

Next Steps

- The next teleconference is scheduled on Thursday, November 14 at 1400 PPT

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**

Monday September 9, 16, 23, 30 October 7, 14, 21, 28, November 4, 11, 18, 25	Tuesday September 3	Thursday 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