



Market Simulation – Fall 2019 Release

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Recordings

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Agenda

- MAP Stage Availability
- Fall 2019 Release Market Simulation Initiatives & Timelines
- External Interface Changes
- Known Issues
- Fall 2019 Settlement Calendar
- Initiatives
 - Phase 1
 - RMR and CPM Enhancements
 - EIM 2019 Enhancements
 - Phase 2
 - 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
 - None at this time
- Upcoming MAP Stage Maintenance
 - CMRI Offline 10/21
 - SIBR/BSAP Offline 10/21
- MAP Stage Weekly Maintenance Window
 - Monday 0700 PT thru 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>	SIBR 10/16/19 CMRI 10/28/19			N/A	ISO Market Participants EIM Market Participants	In Progress
<i>Energy Imbalance Market (EIM) Enhancements 2019 (BSAP Interface Changes and Reporting Features)</i>	BSAP 10/16/19			N/A	EIM Market Participants	In Progress

Fall 2019 Release – System Interface Changes

MF

Project	Change Type	API Service Name & Major Version, Artifacts	Minor Version	RDT	MAP Stage	Technical Specifications
ESDER3A LMPME CCDEBE1	Modify	RetrieveGeneratorRDT_MFRDv4 RetrieveGeneratorRDT_MFRDv4_DocAttach	20191001		Sep 5, 2019	5.1
ESDER3A LMPME	Modify	SubmitGeneratorRDT_MFRDv4 SubmitGeneratorRDT_MFRDv4_DocAttach	20191001	GRDT v13.0	Sep 5, 2019	5.1

SIBR/BSAP

System	Project	Change Type	API Service Name & Major Version, Artifacts	MAP Stage	Technical Specifications
SIBR	CCDEBE1	Modify	RetrieveCleanBidSet_SIBRv5 RetrieveCleanBidSet_SIBRv5_DocAttach	Oct 16, 2019	v13.1
SIBR	CCDEBE1	Modify	RetrieveCurrentBidResults_SIBRv5 RetrieveCurrentBidResults_SIBRv5_DocAttach	Oct 16, 2019	v13.1
SIBR	CCDEBE1	Modify	SubmitRawBidSet_SIBRv5 SubmitRawBidSet_SIBRv5_DocAttach	Oct 16, 2019	v13.1
BSAP	EIM 2019	Modify	RetrieveBalancingTestResults_BSAPv2 RetrieveBalancingTestResults_BSAPv2_DocAttach	Oct 16, 2019	1.7.1

Fall 2019 Release – System Interface Changes

CMRI

Project	Change Type	UI Change	API Service Name & Major Version, Artifacts	MAP Stage	Technical Specifications
LMPME	Modify	Tab: Default Bids Existing Report: Default Energy Bid Curves	RetrieveDefaultBidCurves_CMRIv2 RetrieveDefaultBidCurves_CMRIv2_DocAttach	Sep 12, 2019	3.9.1
CCDEBE 1	Modify	Tab: Default Bids Existing Report: Default Commitment Costs	RetrieveExternalDefaultCommitmentCost_CMRIv1 RetrieveExternalDefaultCommitmentCost_CMRIv1_DocAttach	Oct 28, 2019	3.9.1
EIM 2019	New	Tab: Energy Imbalance Market New Report: Resource Operating Limits	RetrieveEIMResourceOperatingLimit_CMRIv1 RetrieveEIMResourceOperatingLimit_CMRIv1_DocAttach	Oct 3, 2019	3.9.1
EIM 2019	New	Tab: Real-Time New Report: Resource Operating Limits	RetrieveResourceOperatingLimit_CMRIv1 RetrieveResourceOperatingLimit_CMRIv1_DocAttach	Oct 3, 2019	3.9.1

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	RTM	Hourly resource rounding issue with PDR's	Closed	Corrected 10/9 forward	216930
3	SIBR	SIBR Rule Net Benefit Test for TD 9/18 was set to \$-30	Closed	Corrected 9/19 forward	216897
4	RTM	HE 18 and 19 TD 9/18 Award generated bids failed to make it to RTM	Closed	Corrected 9/19 forward	N/A
5	CMRI	ExternalDefaultCommitmentCost_v1.xsd incorrectly state optional element is mandatory	Closed	Updated 10/3	216521
6	BAAOP	Flexible Ramping Sufficiency Results, the DB Factor UP and DB Factor DN are display an incorrect value	Closed	Corrected 10/9 forward	N/A
7	BAAOP	There are some resources reported with non zero flex up capacity under existing resource flex ramping display not showing in the new UI	Closed	Corrected 10/9 forward	N/A
8	CMRI	Resource Operating Limits Report, not accessible with "Entity" only certificate.	Open	ETA 10/21	N/A
9	BSAP	Retrieve of BalancingTestResults_v2 will return BaseScheduleDeviation however the implementation for MarketType is missing	Open	ETA 10/21	N/A
10	SIBR	Retrieve CleanBid / CurrentBid not showing ExAnte when submitted, visible on the UI only	Open	ETA 10/21	N/A
11	SIBR	UI submit of SUC Adjustment, after submit the display shows blank	Open	ETA 10/21	N/A
12	ADS	ADS Query Tool in MAP Stage is not functioning	Open	TBD	217745

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
14-Oct-19	Monday				2-Oct	
15-Oct-19	Tuesday		9-Oct	9-Oct	3-Oct	
16-Oct-19	Wednesday		10-Oct	10-Oct	Monthly Recalc 02-Oct - 03-Oct	Daily Recalc 02-Oct, 03-Oct Monthly Recalc 02-Oct - 03-Oct
17-Oct-19	Thursday	16-Oct	Monthly Initial 09-Oct - 10-Oct			Daily Initial 09-Oct, 10-Oct Monthly Initial 09-Oct -10-Oct
18-Oct-19	Friday	17-Oct				
19-Oct-19	Saturday					
20-Oct-19	Sunday					
21-Oct-19	Monday				9-Oct	
22-Oct-19	Tuesday		16-Oct	16-Oct	10-Oct	
23-Oct-19	Wednesday		17-Oct	17-Oct	Monthly Recalc 09-Oct - 10-Oct	Daily Recalc 09-Oct, 10-Oct Monthly Recalc 09-Oct - 10-Oct
24-Oct-19	Thursday	23-Oct	Monthly Initial 16-Oct - 17-Oct			Daily Initial 16-Oct, 17-Oct Monthly Initial 16-Oct - 17-Oct
25-Oct-19	Friday	24-Oct				
26-Oct-19	Saturday					
27-Oct-19	Sunday					
28-Oct-19	Monday				16-Oct	
29-Oct-19	Tuesday		23-Oct		17-Oct	
30-Oct-19	Wednesday		24-Oct		Monthly Recalc 16-Oct - 17-Oct	Daily Recalc 16-Oct, 17-Oct Monthly Recalc 16-Oct - 17-Oct
31-Oct-19	Thursday		Monthly Initial 23-Oct - 24-Oct			Daily Initial 23-Oct, 24-Oct Monthly Initial 23-Oct - 24-Oct
01-Nov-19	Friday					

Reliability Must-Run and Capacity Procurement Mechanism Enhancements

- **Timeline:** September 3 – October 11
- **Structured:** September 16 – September 27
- **Structured Scenarios Execution Date:** Trade Date September 25
- **Scenarios 1-6:** Verified by ISO as successful
- **Scenario 7:** Complete, TD 9/25 Re-Calc statement republished on 10/17 with successful scenario #7

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 	CMRI available now, OASIS available now, BSAP available now

Commitment Costs and Default Energy Bid Enhancements Phase 1

- **SIBR Code:** Available October 16
- **CMRI Code:** Available October 28

- **Go Live 12/4**

Next Steps

- The next teleconference is scheduled on Monday, October 21 at 1400 PPT

Reference Slides

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> September 9, 16, 23, 30 October 7, 14, 21, 28	<i>Tuesday</i> September 3	<i>Thursday</i> August 29 September 5, 12, 19, 26 October 3, 10, 17, 24, 31
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- **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