



Market Simulation – Fall 2019 Release

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September 16, 2019

Recordings

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Agenda

- MAP Stage Availability
- Connectivity Testing
- Fall 2019 Release Market Simulation Initiatives & Timelines
- Initiatives
 - Phase 1
 - Energy Storage and Distributed Energy Resources Phase 3A
 - RMR and CPM Enhancements
 - Local Market Power Mitigation Enhancements
 - EIM 2019 Enhancements
 - Real-Time Market Neutrality Settlement
 - FERC Order 841 – Energy Storage Resources
 - 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
 - DRRS Offline September 16 – September 18
 - OMS Offline September 17 – September 19
- MAP Stage Weekly Maintenance Window
 - Monday 0700 PT thru Tuesday 0900 PT

Fall 2019 Release MAP Stage Connectivity Testing

- **Timeline Phase 1:** September 3 – September 13
- **Timeline Phase 2:** October 14 – October 18

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 14, 2019	v13.1
SIBR	CCDEBE1	Modify	RetrieveCurrentBidResults_SIBRv5 RetrieveCurrentBidResults_SIBRv5_DocAttach	Oct 14, 2019	v13.1
SIBR	CCDEBE1	Modify	SubmitRawBidSet_SIBRv5 SubmitRawBidSet_SIBRv5_DocAttach	Oct 14, 2019	v13.1
BSAP	EIM 2019	Modify	RetrieveBalancingTestResults_BSAPv2 RetrieveBalancingTestResults_BSAPv2_DocAttach	Sep 18, 2019	1.7

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
CCDEBE1	Modify	Tab: Default Bids Existing Report: Default Commitment Costs	RetrieveExternalDefaultCommitmentCost_CMRIv1 RetrieveExternalDefaultCommitmentCost_CMRIv1_DocAttach	Oct 14, 2019	3.9.1
EIM 2019	New	Tab: Energy Imbalance Market New Report: Resource Operating Limits	RetrieveEIMResourceOperatingLimit_CMRIv1 RetrieveEIMResourceOperatingLimit_CMRIv1_DocAttach	Oct 14, 2019	3.9.1
EIM 2019	New	Tab: Real-Time New Report: Resource Operating Limits	RetrieveResourceOperatingLimit_CMRIv1 RetrieveResourceOperatingLimit_CMRIv1_DocAttach	Oct 14, 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 14, 2019	5.1.9

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
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 and BSAP Interface Changes)</i>				N/A	EIM Market Participants
<i>Energy Storage and Distributed Energy Resources (ESDER) Phase 3A</i>				Scenarios Execution TD 9/18	ISO Market Participants EIM Market Participants
<i>Federal Energy Regulatory Commission (FERC) Order 841</i>				N/A	ISO Market Participants EIM Market Participants
<i>Local Market Power Mitigation Enhancements (LMPME)</i>				Target 09/25 & 09/26	ISO Market Participants EIM Market Participants
<i>Real-Time (RT) Market Neutrality Settlement</i>				N/A	EIM Market Participants
<i>Reliability Must-Run (RMR) and Capacity Procurement Mechanism (CPM) Enhancements</i>				Target 09/25 & 09/26	ISO Market Participants
Fall 2019 Release Market Simulation Phase 2	10/14/19	10/15/19	11/04/19	N/A	
<i>Commitment Costs and Default Energy Bid Enhancements (CCDEBE)</i>				N/A	ISO Market Participants EIM Market Participants
<i>Energy Imbalance Market (EIM) Enhancements 2019 (Reporting Features)</i>				N/A	EIM Market Participants

Market Simulation Plan:

<http://www.aiso.com/Documents/MarketSimulationPlan-Fall2019Release.pdf>

Energy Storage & Distributed Energy Resources

Phase 3A

- **Timeline:** September 3 – October 11
- **Structured:** September 16 – September 27
- **Structured Scenario Target Dates:** Trade Date September 18
- **DRRS Code:** Available September 18

Structured Scenarios document -

<http://www.caiso.com/Documents/ESDER3MarketSimulationScenariosFall2019.pdf>

Reliability Must-Run and Capacity Procurement Mechanism Enhancements

- **Timeline:** September 3 – October 11
- **Structured:** September 16 – September 27
- **Structured Scenario Target Dates:** Trade Dates September 25 and 26

Structured Scenarios document -

<http://www.caiso.com/Documents/RMR-CPMEnhancementsMarketSimulationScenariosFall2019.pdf>

Local Market Power Mitigation Enhancements

- **Timeline:** September 3 – October 11
- **Structured:** September 16 – September 27
- **Structured Scenario Target Dates:** Trade Dates September 25 and 26

Structured Scenarios document -

<http://www.caiso.com/Documents/LMPMEenhancementsMarketSimulationScenariosFall2019.pdf>

Energy Imbalance Market Enhancements 2019

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

Area	Features/Scope	Timing Status
BAAOP and BSAP Interface Changes	<ul style="list-style-type: none"> ▪ Transformer Flow ▪ Resource Flex Ramping ▪ Flexible Ramping Sufficiency Results ▪ EIM Area Summary ▪ ETSR Detail ▪ EIM Threshold Display and Calculations ▪ RTD Dispatch Control ▪ RTPD Dispatch Control ▪ Copy and Modify Base schedule (BSAP) EIM19-BRQ1270 ▪ Add retrieve aggregate service for BS Deviation (BSAP) EIM19-BRQ1560 	Target availability in MAP Stage Sept 18
Reporting Features	<ul style="list-style-type: none"> ▪ Loss Transmission OASIS Report ▪ CMRI Resource Operating Limits Report ▪ CMRI EIM Operating Limits Report 	Target availability in MAP Stage Oct 14

Real-Time Market Neutrality Settlements

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

FERC Order 841

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

Commitment Costs and Default Energy Bid Enhancements Phase 1

- **Timeline:** October 14 – November 4

Next Steps

- The next teleconference is scheduled on Thursday, September 19 at 1400 PPT

Reference Slides

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