



Market Simulation – Summer 2021 Release

Anshuman Vaidya
Market Simulation Coordinator

June 28, 2021

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

- Summer 2021 Release MAP Stage Availability
- Summer 2021 Release Market Simulation Initiatives & Timelines
- Initiatives
 - Resource adequacy enhancements track 1
 - Summer 2021 readiness
- Summer 2021 - System Interface Changes
- Next Steps

Summer 2021 Release MAP Stage Availability

- Refer to MAP Stage portal <https://portalmap.caiso.com> for system availability information
- Current MAP Stage Scheduled Maintenance
 - OMS UI/API 6/29-6/30
- MAP Stage Weekly Maintenance Window
 - Friday

Summer 2021 Release Market Simulation Initiatives & Timelines

<u>Summer 2021 Release Initiatives</u>	<u>Start Date</u>	<u>Start Date (Trade Date)</u>	<u>End Date</u>	<u>Structured Simulation Start (Trade Date)</u>	<u>Go Live Date</u>
Summer 2021 Release Market Simulation	04/26/21	04/26/21	07/06/21	05/10/21	
Resource adequacy enhancements track 1 <ul style="list-style-type: none"> Phase 2 – Scenario 3,4,5 OMS Prevention of Extension; Overlapping Outages; Prevention of Curtailment Increase; Ambient Outages 		<ul style="list-style-type: none"> Phase 2 – 6/16 OMS Changes - 7/1 		<ul style="list-style-type: none"> Phase 2 – 6/17 OMS Changes - 7/1 	<ul style="list-style-type: none"> Phase 2- June 30 OMS Changes - July 15
Summer 2021 readiness Phase 3 – Scenario 3,4		Phase 3 – 6/14		Phase 3 - 6/17	Phase 3 – June 30
Summer 2021 readiness Export, wheeling, and load scheduling priorities		6/30		7/7	By July 15

Market Simulation Plan:

<http://www.caiso.com/Documents/MarketSimulationPlan-Summer2021Release.pdf>

Scenario Description

- **Resource Adequacy Enhancements - OMS Changes**

Scenario #3: “Outages already started cannot be extended” **This scenario will be tested as unstructured*

Scenario #6: Curtailments for active outages cannot be increased beyond the max curtailment MW for a given trading day

Scenario #7: Allowing Overlapping outages for 4 Nature of Work (NOW)

- **Summer Readiness – Export, wheeling, and load scheduling priorities**

Scenario #8 (a & b) “Post-HASP adjustment pro rata allocate import and internal transmission to high priority wheels”

Scenario #9 “Outage Pro-rata impact on RA and non-RA capacity on a supporting resource”

**This scenario will be tested as unstructured*

Market Simulation Initiatives

- **Timeline : April 26 – July 9**
- **Summer 2021 readiness**
 - **Structured :**
 - **Phase 3: June 17**
 - Export, wheeling, and load scheduling priorities: July 7
 - Business Requirements Specification -
<http://www.caiso.com/Documents/BusinessRequirementsSpecificationSummer2021Readiness.pdf>
 - Structured Scenarios document -
<http://www.caiso.com/Documents/MarketSimulationStructuredScenariosSummerReadiness2021.pdf>

Export, wheeling, and load scheduling priorities (For Production)

- *New fields are being added to the Generator Resource Data Template (GRDT) and the Intertie Resource Data Template (IRDT) for Summer Readiness to support Export and PT Wheeling scheduling priorities.*
- *To register a new PT Wheel resource ID, the Scheduling Coordinator must submit a New Intertie Resource Request (<http://www.caiso.com/Documents/NewIntertieResourceRequest.xls>) to RDT@caiso.com. Requests for the months of July and August 2021 are due by June 29.*
- *SCs who wish to indicate a designated resource to support export Self-Schedules at Scheduling Points backed by non-Resource Adequacy Capacity may do so by submitting the updated GRDT v15 with the EXP_SUPPORT column set to Y. Updates are subject to the Master File 5-business day timeline. Due to the timing of the FERC decision on the tariff provisions, expected by June 27, if the SC wishes an expedited effective date, please send an email to RDT@caiso.com.*

Market Simulation Initiatives

- **Timeline : April 26 – July 6**
- **Resource adequacy enhancements track 1**
 - **Structured : Phase 2: June 17**, OMS changes : 7/1
 - Business Requirements Specification -
<http://www.caiso.com/Documents/Business-Requirements-Specification-Resource-Adequacy-Enhancements-Track-1-Clean.pdf>
 - Structured Scenarios document -
<http://www.caiso.com/Documents/MarketSimulationResourceAdequacyEnhancementTrack1.pdf>

OMS Summer Release Timeline

Project	Functionality	MAP Stage	Production
RAE Track 1	Denials of CAISO Outages based on Planned Substitutions	05/17/21 ✓	06/03/21 ✓
RAE Track 1	Preventing Extension of Planned CAISO Outage	07/01/21	07/15/21
RAE Track 1	Preventing Curtailment Increase of Planned CAISO Outage	07/01/21	07/15/21
RAE Track 1	Allowing Overlapping Outages for 3 Ambient NOW & RIMS Testing	07/01/21	07/15/21
RAE Track 1	Creation of 'Ambient Due to Temp' & 'Ambient Not Due To Temp' outages in a forced timeframe only	07/01/21	07/15/21
OSI 2021 Enh	Overlapping Pmax NGR	07/01/21	07/15/21
OSI 2021 Enh	Resource-Participant Association fix	07/01/21	07/15/21
OSI 2021 Enh	Curtailed and Non-Operational Gen. Rpt. Changes	NA	06/24/21 ✓

Summer 2021 - System Interface Changes

Summer 2021 Release

Project	System	API Service Name & Major Version, Artifacts	MAP Stage	Production	Technical Specifications/Publication
Summer Readiness	MF	GeneratorRDT_v5 GRDT spreadsheet Version 15.0	✓ 5/12/21	✓ 6/10/21	✓ v7.0; 4/16/21 ✓ 6/11/21
	MF	IntertierRDT_v1 IRDT (spreadsheet) Version 6.0	✓ 5/12/21	✓ 6/10/21	✓ v7.0; 4/16/21 ✓ 6/11/21
	MF	GRDT & IRDT Definitions v15	N/A	N/A	✓ 6/11/21
	SIBR	CleanBidSet_v5; 20210401	6/30/21	By 7/15/21	✓ v13.3; 4/19/21
	SIBR	RawBidSet_v5; 20210401	6/30/21	By 7/15/21	✓ v13.3; 4/19/21
	SIBR	BidResults_v5; 20210401	6/28/21	By 7/15/21	✓ v13.3; 4/19/21
	OASIS	ENE_SCH_BY_TIE Energy > Schedule by Tie	✓	6/30/21	✓ v6.0.0; 4/9/21
RA Enhancements	CMRI	RetrieveStorageOperatingLimit_CMRIv1_AP RetrieveStorageOperatingLimit_CMRIv1_DocAttach_AP UI > Real-Time > Effective SOC Limits	✓	By 6/30/21	✓ v4.1.0; 4/16/21
	OASIS	ENE_UND_SPLY_INF_EC Energy > Under Supply Infeasibility and Enforced Constraints	✓	By 6/30/21	✓ v6.1.0; 4/16/21
	CIRA	Application Changes	✓ 5/5/21	✓ 6/3/21	N/A
	OMS	Application Changes (Denials in webOMS based on planned substitutions)	✓ API 5/17/21 ✓ UI 5/19/21	✓ 6/3/21	N/A
	OMS	Application Changes (Preventing extension; overlapping outages; preventing curtailment increase; creation of ambient outages)	7/1/21	7/15/21	N/A
FERC831	OASIS	PRC_HRLY_ENE_SHAPING_FCTR Pricing > Hourly Energy (Price) Shaping Factor	✓ 5/21/21	✓ 6/13/21	✓ v6.0.0; 4/9/21
	OASIS	ATL_CNSTR_RLXN_THRESHOLD Atlas Reference > Constraint Relaxation Threshold	✓ 5/21/21	✓ 6/13/21	✓ v6.0.0; 4/9/21
	SIBR	DA/RT Ceiling (Enhancement) Currently available in UI > "Energy bid ceiling" API for Retrieve DA/RT Ceiling (Enhancement) <ul style="list-style-type: none"> RetrieveEnergyBidData_SIBRv1 RetrieveEnergyBidData_SIBRv1_DocAttach 	✓ UI API - TBD	✓ UI 6/13/21 API - TBD (after activation)	July 2021
DR LPA	MRI-S	DR Meter Monitoring Data Submission for BASE, CBL, including % Residential	TBD	TBD	✓ 6/7/21
OSI 2021 Enh.	OMS	Overlapping Pmax NGR; Resource-Participant Association fix	7/1/21	7/15/21	N/A
OSI 2021 Enh.	CAISO.com	New 'Curtailed & Non-Operational Generator' report for prior trade date Add data for 3 additional BAs to existing 'Curtailed & Non-Operational Generator' report	N/A	✓ 6/24/21	N/A

Next Steps

- The next teleconference is scheduled on July 1 at 2 PM

Reference Slides

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

Spring 2021 Release Communication Plan

- **Schedule**

<i>Monday</i>	<i>Thursday</i>
April 26 May 3,10,17,24	April 22, 29 May 6,13,20,27

- **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

Market Simulation Issue Management

- Submit all issues to the CIDI case management system
- CIDI tickets must have “**Functional Environment**” = “**Market Simulation Summer 2021**” to be reviewed by ISO SMEs

Known Issues:

Item	Summary	Status
1	RAE OASIS: RUC Under Supply Infeasibility and Enforced Constraints Report – Deactivation Timestamp – 74242	Closed
2	RAE CMRI: Effective SOC Limits - API Request does not have Resource - 74810	Resolved, No code change needed.

Summer 2021 Release MAP Stage Connectivity Testing

- **Timeline** : April 26 – May 10

Structured Scenario 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

FERC 831 & Summer 2021 readiness – May 6th, 2021

We will do our best to accommodate for late registration

Summer 2021 Release - Market Simulation Overview

Wk	Date	ISO	Market Participants
1	4/26-5/10	Mkt Sim Readiness Testing	Connectivity
2	5/10-5/28		Structured Scenarios
3	5/10-5/28		Unstructured Simulation

Calendar Day	Day	CMRI T+1B	Submit Meter Data by T+2B 10:00 AM 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
24-May-21	Monday		20-May				
25-May-21	Tuesday			18-May	18-May	13-May	
26-May-21	Wednesday	25-May				Monthly Recalc 11-May -13-May	Daily Recalc 11-May; 13-May Monthly Recalc 11-May - 13-May
27-May-21	Thursday	26-May	25-May	20-May	20-May		
28-May-21	Friday	27-May	26-May	Monthly Initial 18-May -20-May		18-May	Daily Initial 18-May; 20-May Monthly Initial 18-May - 20-May

Settlements TDs Tue/Thu

Maintenance Friday

[Market Simulation Plan](#)

[Market Simulation Settlements Calendar](#)



Market Simulation Initiatives

- **Timeline : April 26 – June 07**
- **FERC order 831**
 - **Structured : Trading Date May 25, 26, 27 (Buffer dates June 3, 4)**
 - Structured Scenarios document -
<http://www.caiso.com/Documents/MarketSimulationStructuredScenarios-FERCOrder831.pdf>
 - Business Requirements Specification -
<http://www.caiso.com/Documents/BusinessRequirementsSpecificationFERC831ImportBiddingMarketParameters.pdf>
- FERC Order 831 - Market Simulation Scenarios [Customer Training](#) on 5/18. Refer to the [ISO Learning Center](#) for the presentation and video.