

Market Simulation – Summer 2021 Release

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Recordings

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Agenda

- Summer 2021 Release MAP Stage Availability
- Summer 2021 Release Market Simulation Initiatives & Timelines
- Initiatives
 - FERC order 831 pricing parameters, import bid screening, and validation
 - 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
 - None
- MAP Stage Weekly Maintenance Window
 - Friday



Summer 2021 Release Market Simulation Initiatives & Timelines

Summer 2021 Release Initiatives	Start Date	Start Date (Trade Date)	End Date	Structured Simulation Start	Go Live Date
				(Trade Date)	
Summer 2021 Release Market Simulation	04/26/21	04/26/21	05/28/ 21	05/10/21	
FERC order 831				05/25-05/27	June 15
Resource adequacy enhancements track 1 Phase 1 – Scenario 1,2 Phase 2 – Scenario 3,4,5 OMS Curbing, Ambient Outages		 Phase 1 – 5/19 Phase 2 – 6/14 OMS Curbing, Ambient Outages – 6/17 		 Phase 1 - 5/20 Phase 2 - 6/15 OMS Curbing, Ambient Outages - 6/17 	 Phase 1 - June 03 Phase 2- June 30 OMS Curbing, Ambient Outages - July 1
Summer 2021 readiness Phase 1 – Scenario 6,7 Phase 2 – Scenario 1,2,5 Phase 3 – Scenario 3,4		Phase 1 – 5/20 Phase 2 – 5/27 Phase 3 – 6/14		Phase 1 – 5/20 & 5/25 Phase 2 – 6/1, 6/2 & 6/3 Noon to 5 PM Phase 3 – 6/15 & 6/17	Phase 1&2 –June 15 Phase 3 – June 30
Summer 2021 readiness Export, wheeling, and load scheduling priorities	TBD	TBD		TBD	By July 15

Market Simulation Plan:

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



Scenario Description

Resource Adequacy Enhancements - Phase 1

Scenario #1: "Description Fully covered substitution"

Scenario #2: "Less than full substitution"

Resource Adequacy Enhancements - Phase 2

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

Scenario #4: "Binding Min EOH SOC Requirements"

Scenario #5: "Deactivation of Enforcement of Binding Min EOH SOC Requirements in RTM"

OMS Curbing, Ambient Outages

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 - Phase 1

Scenario #6 "Flexible Ramping Capacity and Sufficiency Tests."

Scenario #7 "Auto-mirroring for specified mirror resources

Summer Readiness - Phase 2

Noon to 5PM: DA+RT: Scenario #1 "RTM Import & Export Market Incentives during Tight System Conditions":

Noon to 5PM: RT Scenario #2 "Release of All Applicable (Contingent & non-Contingent) Operating Reserves at the Bid Cap Price".

Noon to 5PM: RT Scenario #5 "RDRR Enable dispatch in RTM

Summer Readiness - Phase 3

Scenario #3 "Ensure Storage Resources have Sufficient SOC to Support Regulation Up and Regulation Down Awards for at Least 30 Minutes in RTM":

Scenario #4 "Operator Utilization of Traditional ED for Storage Resources"



Market Simulation Initiatives

- Timeline : April 26 June 07
- FERC order 831
 - Structured: <u>Trading Date</u> May 25, 26, 27 (Buffer dates June 1, 2, 3)
 - 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 <u>Customer Training</u> on 5/18. Refer to the <u>ISO Learning Center</u> for the presentation and video.



Market Simulation Initiatives

- Timeline : April 26 June 24
- Resource adequacy enhancements track 1
 - Structured : Phase 1: May 20, Phase 2: June 15
 - 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
- Showing period reduced to 1 hour for Market Sim for 2 weeks
 - Substitution to be submitted within 1 hour of outage assignment in CIRA



Market Simulation Initiatives

- Timeline : April 26 June 24
- Summer 2021 readiness
 - Structured: Phase 1: May 20 & 25, Phase 2: June 01,02 & 03, Phase 3: June 15 & 17
 - Business Requirements Specification -http://www.caiso.com/Documents/BusinessRequirementsSpecificationSummer2021Readiness.pdf
 - Structured Scenarios document http://www.caiso.com/Documents/MarketSimulationStructuredScenariosSummerReadiness2021.pdf
- RDRR resource dispatch option: 15 minute or 60 minute



Summer 2021 - System Interface Changes

Summer 2021 Release						
Project	System	API Service Name & Major Version, Artifacts	MAP Stage	Production	Technical Specifications/Publica tion	
	MF	GeneratorRDT_v5	✓ 5/12/21	By 6/30/21	✓ v7.0; 4/16/21	
		GRDT spreadsheet Version 15.0 Draft			√ 5/7/21	
	MF	IntertieRDT_v1	✓ 5/12/21	By 6/30/21	✓ v7.0; 4/16/21	
		IRDT (spreadsheet) Version 6.0 Draft			√ 5/7/21	
Summer Readiness	MF	GRDT & IRDT Definitions v15 Draft	N/A	N/A	√ 5/7/21	
	SIBR	CleanBidSet_v5; 20210401	5/27/21	By 6/30/21	✓ v13.3; 4/19/21	
	SIBR	RawBidSet_v5; 20210401	5/27/21	By 6/30/21	✓ v13.3; 4/19/21	
	SIBR	BidResults_v5; 20210401	5/27/21	By 6/30/21	✓ v13.3; 4/19/21	
	OASIS	ENE_SCH_BY_TIE Energy > Schedule by Tie	6/14/21	By 6/30/21	✓ v6.0.0; 4/9/21	
	CMRI	StorageOperatingLimit_v1	6/15/21	By 6/30/21	✓ v4.1.0; 4/16/21	
	OASIS	ENE_UND_SPLY_INF_EC Energy > Under Supply Infeasibility and Enforced Constraints	6/15/21	By 6/30/21	✓ v6.1.0; 4/16/21	
RA Enhancements	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 (Curbing, Ambient Outages)	6/17/21	7/1/21	N/A	
	OASIS	PRC_HRLY_ENE_SHAPING_FCTR Pricing > Hourly Energy (Price) Shaping Factor	√ 5/21/21	6/15/21	✓ v6.0.0; 4/9/21	
FERC831	OASIS	ATL_CNSTR_RLXN_THRESHOLD Atlas Reference > Constraint Relaxation Threshold	√ 5/21/21	6/15/21	✓ v6.0.0; 4/9/21	
	SIBR	Ceiling (Enhancement)	TBD	TBD	TBD	



Next Steps

The next teleconference is scheduled on May 27 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: <u>MarketSim@caiso.com</u>



Spring 2021 Release Communication Plan

Schedule

Monday	Thursday		
April 26	April 22, 29		
May 3,10,17,24	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



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 <u>T+2B</u> 10:00 AM for Initial	Publish Initial Statement <u>T+5B</u>	Submit Meter Data by <u>T+5B</u> 18:00 for Recalc	Publish Recalc Statement <u>T+8B</u>	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

