

Market Simulation – Summer 2021 Release

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June 21, 2021

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Agenda

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



Summer 2021 Release MAP Stage Availability

- Refer to MAP Stage portal <u>https://portalmap.caiso.com</u> for system availability information
- Current MAP Stage Scheduled Maintenance
 - OMS UI/API 6/24-6/28
 - SIBR UI/API 6/25 (Tentative)
- MAP Stage Weekly Maintenance Window
 Friday



Summer 2021 Release Market Simulation Initiatives & Timelines

Summer 2021 Release Initiatives	<u>Start</u> Date	Start Date (Trade Date)	<u>End</u> Date	Structured Simulation Start (Trade Date)	Go Live Date
Summer 2021 Release Market Simulation	04/26/21	04/26/21	07/06/ 21	05/10/21	
 Resource adequacy enhancements track 1 Phase 2 – Scenario 3,4,5 OMS Prevention of Extension; Overlapping Outages; Prevention of Curtailment Increase; Ambient Outages 		 Phase 2 – 6/16 OMS Changes - 6/28 		 Phase 2 – 6/17 OMS Changes - 6/28 	 Phase 2- June 30 OMS Changes - July 12
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	7/6	TBD	By July 15

Market Simulation Plan:

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



Scenario Description

<u>Resource Adequacy Enhancements - Phase 2</u>

Scenario #4: "Binding Min EOH SOC Requirements"

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

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)

<u>Summer Readiness - Phase 3</u>

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 24
- Summer 2021 readiness
 - Structured : Phase 3: June 17
 - Business Requirements Specification -<u>http://www.caiso.com/Documents/BusinessRequirementsSpecificationSummer2021Readiness.pdf</u>
 - Structured Scenarios document -http://www.caiso.com/Documents/MarketSimulationStructuredScenariosSummerReadiness2021.pdf

Export, wheeling, and load scheduling priorities

- 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 (<u>http://www.caiso.com/Documents/NewIntertieResourceRequest.xls</u>) to <u>RDT@caiso.com</u>. 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 June 24
- Resource adequacy enhancements track 1
 - Structured : Phase 2: June 17
 - Business Requirements Specification http://www.caiso.com/Documents/Business-Requirements-Specification-Resource-Adequacy-Enhancements-Track-1-Clean.pdf
 - Structured Scenarios document -<u>http://www.caiso.com/Documents/MarketSimulationResourceAdequacyEnhancementTrack1.pdf</u>



OMS Summer Release Timeline

Project	Functionality	Map Stage	Productio n
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	06/28/21	07/12/21
RAE Track 1	Preventing Curtailment Increase of Planned CAISO Outage	06/28/21	07/12/21
RAE Track 1	Allowing Overlapping Outages for 3 Ambient NOW & RIMS Testing	06/28/21	07/12/21
RAE Track 1	Creation of 'Ambient Due to Temp' & 'Ambient Not Due To Temp' outages in a forced timeframe only	06/28/21	07/12/21
OSI 2021 Enh	 Overlapping Pmax NGR BRS 6/1 Procedure documentation will be published as well 	06/28/21	07/12/21



Known Issues:

ltem	Summary	Status	
1	RAE OASIS: RUC Under Supply Infeasibility and Enforced Constraints Report – Deactivation Timestamp – 74242	Closed	
2		Resolved, No code change needed.	



Summer 2021 - System Interface Changes

Summer 2021 Release							
Project	System	API Service Name & Major Version, Artifacts	MAP Stage	Production	Technical Specifications/Publicati on		
		GeneratorRDT_v5	✓ 5/12/21	✓ 6/10/21	✓ v7.0; 4/16/21		
	MF						
		GRDT spreadsheet Version 15.0 Draft			✓ 5/7/21		
		IntertieRDT_v1	✓ 5/12/21	✓ 6/10/21	🗸 v7.0; 4/16/21		
	MF						
Summer		IRDT (spreadsheet) Version 6.0 Draft			✓ 5/7/21		
Readiness	MF	GRDT & IRDT Definitions v15 Draft	N/A	N/A	✓ 5/7/21		
	SIBR	CleanBidSet_v5; 20210401	6/28/21	By 7/15/21	✓ v13.3; 4/19/21		
	SIBR	RawBidSet_v5; 20210401	6/28/21	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	√ 6/9/21	6/30/21	✓ v6.0.0; 4/9/21		
		Energy > Schedule by Tie			, , , ,		
		RetrieveStorageOperatingLimit_CMRIv1_AP RetrieveStorageOperatingLimit CMRIv1 DocAttach AP		By 6/30/21			
	CMRI		\checkmark		✓ v4.1.0; 4/16/21		
		UI > Real-Time > Effective SOC Limits					
		ENE UND SPLY INF EC					
RA	OASIS	Energy > Under Supply Infeasibility and Enforced Constraints	✓	By 6/30/21	✓ v6.1.0; 4/16/21		
Enhancements	CIRA	Application Changes	√ 5/5/21	✓ 6/3/21	N/A		
	0146	Application Changes (Denials in webOMS based on planned	✓ API 5/17/21		N1/A		
	OMS	substitutions)	✓ UI 5/19/21	✓ 6/3/21	N/A		
	OMS	Application Changes (Preventing extension; overlapping outages;	6/29/21	7/12/21	N/A		
	UNIS	preventing curtailment increase; creation of ambient outages)	6/28/21	//12/21			
	OASIS	PRC_HRLY_ENE_SHAPING_FCTR	✓ 5/21/21	✓ 6/13/21	✓ v6.0.0; 4/9/21		
	0/010	Pricing > Hourly Energy (Price) Shaping Factor	5/21/21	0,13,21			
	OASIS	ATL_CNSTR_RLXN_THRESHOLD	✓ 5/21/21	✓ 6/13/21	✓ v6.0.0; 4/9/21		
		Atlas Reference > Constraint Relaxation Threshold	-, ,	-, -,	, , , - ,		
FERC831	SIBR	DA/RT Ceiling (Enhancement)					
		Currently available in UI > "Energy bid ceiling" API for Retrieve DA/RT Ceiling (Enhancement)	✓ UI	1 LU C /12 /21	July 2021		
	SIBK	RetrieveEnergyBidData SIBRv1	API - TBD	✓ UI 6/13/21 API - TBD (after activation)	July 2021		
		RetrieveEnergyBidData_SIBRv1 DocAttach	AFT-TOD	AFT-TBD (after activation)			
	DR Meter Monitoring Data Submission for BASE_CBL includi			+ +			
DR LPA	MRI-S	Residential	TBD	TBD	✓ 6/7/21		
OSI 2021 Enh.	OMS	Overlapping Pmax NGR	6/28/21	7/12/21	N/A		
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• The next teleconference is scheduled on June 24 at 2 PM



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Reference Slides



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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

Thursday		
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



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 <u>Market Simulation Plan</u> <u>Market Simulation Settlements Calendar</u>



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Market Simulation Initiatives

- Timeline : April 26 June 07
- FERC order 831
 - Structured : <u>Trading Date May 25, 26, 27</u> (Buffer dates June 3, 4)
 - Structured Scenarios document -<u>http://www.caiso.com/Documents/MarketSimulationStructuredScenarios-FERCorder831.pdf</u>
 - Business Requirements Specification -<u>http://www.caiso.com/Documents/BusinessRequirementsSpecificationFERC831ImportBiddingMarketParameters.pdf</u>
- 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.

