

## Market Simulation – Summer 2021 Release

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May 17, 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
  - 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 <u>https://portalmap.caiso.com</u> for system availability information
- Current MAP Stage Scheduled Maintenance
  - OMS UI closure thru 5/17; OMS API available 5/17
     1300 PT
  - SIBR UI/API closure 5/14-5/20
  - OASIS UI/API maintenance 5/18-5/20
- MAP Stage Weekly Maintenance Window
   Friday



# Summer 2021 Release Market Simulation Initiatives & Timelines

Summer 2021 Release Initiatives	<u>Start</u> Date	<u>Start Date</u> (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	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		<ul> <li>Phase 1 – 5/17</li> <li>Phase 2 – 6/14</li> <li>OMS Curbing, Ambient Outages – 6/17</li> </ul>		<ul> <li>Phase 1 - 05/18 &amp; 5/20 10 AM-Noon</li> <li>Phase 2 - 6/15</li> <li>OMS Curbing, Ambient Outages - TBD</li> </ul>	<ul> <li>Phase 1 - June 03</li> <li>Phase 2- June 30</li> <li>OMS Curbing, Ambient Outages - July 1</li> </ul>
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 <b>2 PM to 5 PM</b> Phase 2 – 6/01 & 6/03 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



California ISO

## **Scenario Description**

#### Resource Adequacy Enhancements - Phase 1

Scenario #1: "Description Fully covered substitution" Scenario #2: "Less than full substitution"

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

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"

#### Summer Readiness - Phase 1

Scenario #6 "Flexible Ramping Capacity and Sufficiency Tests." Scenario #7 "Auto-mirroring for specified mirror resources

#### Summer Readiness - Phase 2

Scenario #1 "RTM Import & Export Market Incentives during Tight System Conditions": Scenario #2 "Release of All Applicable (Contingent & non-Contingent) Operating Reserves at the Bid Cap Price": 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** : May 25, 26, 27 (Buffer dates June 1, 2, 3)
  - Structured Scenarios document -<a href="http://www.caiso.com/Documents/MarketSimulationStructuredScenarios-FERCorder831.pdf">http://www.caiso.com/Documents/MarketSimulationStructuredScenarios-FERCorder831.pdf</a>
  - 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 11:00AM - 12:30PM PT available on the ISO Calendar



### **Market Simulation Initiatives**

- Timeline : April 26 June 24
- Resource adequacy enhancements track 1
  - Structured : Phase 1: May 18 & 20, Phase 2: June 15
  - Business Requirements Specification -<u>http://www.caiso.com/Documents/Business-Requirements-Specification-Resource-Adequacy-Enhancements-Track-1-Clean.pdf</u>
  - Structured Scenarios document -<u>http://www.caiso.com/Documents/MarketSimulationResourceAdequacyEnhancementTrack1.pdf</u>
- Feedback on reducing showing period to be reduced to 1 hour
  - 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 & 03, Phase 3: June 15 & 17
  - Business Requirements Specification -<u>http://www.caiso.com/Documents/BusinessRequirementsSpecificationSummer2021Readiness.pdf</u>
  - Structured Scenarios document -<a href="http://www.caiso.com/Documents/MarketSimulationStructuredScenariosSummerReadiness2021.pdf">http://www.caiso.com/Documents/MarketSimulationStructuredScenariosSummerReadiness2021.pdf</a>

#### • Feedback on RDRR resource dispatch option : 15 minute or 60 minute



### Summer 2021 - System Interface Changes

Summer 2021 Release					
System	API Service Name & Major Version, Artifacts	MAP Stage	Production	Technical Specifications/Publica tion	
MF	GeneratorRDT_v5 GRDT spreadsheet Version 15.0 Draft		By 6/30/21		
MF	IntertieRDT_v1 IRDT (spreadsheet) Version 6.0 Draft		By 6/30/21		
MF	GRDT & IRDT Definitions v15 Draft	N/A	N/A		
SIBR	CleanBidSet_v5; 20210401	5/27/21	By 6/30/21		
SIBR	RawBidSet_v5; 20210401	5/27/21	By 6/30/21		
SIBR	BidResults_v5; 20210401	5/27/21	By 6/30/21		
	ENE_SCH_BY_TIE Energy > Schedule by Tie	6/14/21	By 6/30/21		
	StorageOperatingLimit_v1	6/15/21	By 6/30/21		
	ENE_UND_SPLY_INF_EC Energy > Under Supply Infeasibility and Enforced Constraints	6/15/21	By 6/30/21		
CIRA	Application Changes		6/3/21	N/A	
	Application Changes (Denials in webOMS based on planned substitutions)	5/17/21* API available UI planned by 5/18	6/3/21	N/A	
	Application Changes (Curbing, Ambient Outages)	6/17/21	7/1/21	N/A	
UASIS	PRC_HRLY_ENE_SHAPING_FCTR Pricing > Hourly Energy (Price) Shaping Factor	5/20/21	6/15/21		
	ATL_CNSTR_RLXN_THRESHOLD Atlas Reference > Constraint Relaxation Threshold	5/20/21	6/15/21		
	MF MF SIBR SIBR SIBR OASIS CMRI OASIS CIRA OMS OMS	GeneratorRDT_v5         MF         GRDT spreadsheet Version 15.0 Draft         IntertieRDT_v1         MF         IRDT (spreadsheet) Version 6.0 Draft         MF         GRDT & IRDT Definitions v15 Draft         SIBR         CleanBidSet_v5; 20210401         SIBR         BidResults_v5; 20210401         SIBR         BidResults_v5; 20210401         CASIS         ENE_SCH_BY_TIE         Energy > Schedule by Tie         CMRI         StorageOperatingLimit_v1         OASIS         ENE_UND_SPLY_INF_EC         Energy > Under Supply Infeasibility and Enforced Constraints         CIRA       Application Changes         OMS       Application Changes (Denials in webOMS based on planned substitutions)         OMS       Application Changes (Curbing, Ambient Outages)         OASIS       PRC_HRLY_ENE_SHAPING_FCTR         OASIS       PRC_HRLY_ENE_SHAPING_FCTR         OASIS       ATL_CNSTR_RLXN_THRESHOLD         Atlas Reference > Constraint Relaxation Threshold	MFGeneratorRDT_v5 GRDT spreadsheet Version 15.0 DraftIntertieRDT_v1MFIntertieRDT_v1IntertieRDT_v1MFIRDT (spreadsheet) Version 6.0 DraftN/ASIBRGRDT & IRDT Definitions v15 DraftN/ASIBRCleanBidSet_v5; 202104015/27/21SIBRBidResults_v5; 202104015/27/21SIBRBidResults_v5; 202104015/27/21OASISENE_SCH_BY_TIE Energy > Schedule by Tie6/14/21CMRIStorageOperatingLimit_v16/15/21OASISENE_UND_SPLY_INF_EC Energy > Under Supply Infeasibility and Enforced Constraints6/15/21CIRAApplication Changes (Denials in webOMS based on planned substitutions)5/17/21* S/17/21OMSApplication Changes (Curbing, Ambient Outages)6/17/21OASISPRC_HRLY_ENE_SHAPING_FCTR Pricing > Hourly Energy (Price) Shaping Factor5/20/21OASISATL_CNSTR_RLNN_THRESHOLD Atlas Reference > Constraint Relaxation Threshold5/20/21	MFGeneratorRDT_v5By 6/30/21MFGRDT spreadsheet Version 15.0 DraftBy 6/30/21MFIntertieRDT_v1By 6/30/21MFRDT (spreadsheet) Version 6.0 DraftN/AMFGRDT & IRDT Definitions v15 DraftN/ASIBRCleanBidSet_v5; 202104015/27/21SIBRRawBidSet_v5; 202104015/27/21BidResults_v5; 202104015/27/21CMRIStorageOperatingLimit_v1GMSApplication ChangesApplication Changes (Denials in webOMS based on planned substitutions)GMSApplication Changes (Curbing, Ambient Outages)GMSApplication Changes (Curbing, Ambient Outages)GMSApplication Changes (Curbing, Ambient Outages)GMSApplication Changes (Curbing, Ambient Outages)GMSApplication Changes (Curbing, Ambient Outages)	





• The next teleconference is scheduled on May 20 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

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

#### Connection Information

- Web Conference Information
  - Web Address: <u>https://caiso.webex.com/meet/MarketSim</u>
  - 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 6<sup>th</sup>, 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>

