



# 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
  - OASIS UI/API maintenance 5/21
- MAP Stage Weekly Maintenance Window
  - Friday

# Summer 2021 Release Market Simulation Initiatives & Timelines

| <b>Summer 2021 Release Initiatives</b>                                                                                              | <b>Start Date</b> | <b>Start Date (Trade Date)</b>                                                                                                        | <b>End Date</b> | <b>Structured Simulation Start (Trade Date)</b>                                                                                      | <b>Go Live Date</b>                                                                                                                          |
|-------------------------------------------------------------------------------------------------------------------------------------|-------------------|---------------------------------------------------------------------------------------------------------------------------------------|-----------------|--------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Summer 2021 Release Market Simulation</b>                                                                                        | 04/26/21          | 04/26/21                                                                                                                              | 05/28/21        | 05/10/21                                                                                                                             |                                                                                                                                              |
| <b>FERC order 831</b>                                                                                                               |                   |                                                                                                                                       |                 | 05/25-05/27                                                                                                                          | June 15                                                                                                                                      |
| <b>Resource adequacy enhancements track 1</b><br>Phase 1 – Scenario 1,2<br>Phase 2 – Scenario 3,4,5<br>OMS Curbing, Ambient Outages |                   | <ul style="list-style-type: none"> <li>Phase 1 – 5/19</li> <li>Phase 2 – 6/14</li> <li>OMS Curbing, Ambient Outages – 6/17</li> </ul> |                 | <ul style="list-style-type: none"> <li>Phase 1 - 5/20</li> <li>Phase 2 – 6/15</li> <li>OMS Curbing, Ambient Outages – TBD</li> </ul> | <ul style="list-style-type: none"> <li>Phase 1 - June 03</li> <li>Phase 2- June 30</li> <li>OMS Curbing, Ambient Outages - July 1</li> </ul> |
| <b>Summer 2021 readiness</b><br>Phase 1 – Scenario 6,7<br>Phase 2 – Scenario 1,2,5<br>Phase 3 – Scenario 3,4                        |                   | Phase 1 – 5/20<br>Phase 2 – 5/27<br>Phase 3 – 6/14                                                                                    |                 | Phase 1 – 5/20 & 5/25<br><b>2 PM to 5 PM</b><br>Phase 2 – 6/01 & 6/03<br>Phase 3 – 6/15 & 6/17                                       | Phase 1&2 – June 15<br>Phase 3 – June 30                                                                                                     |
| <b>Summer 2021 readiness</b><br>Export, wheeling, and load scheduling priorities                                                    | TBD               | TBD                                                                                                                                   |                 | TBD                                                                                                                                  | By July 15                                                                                                                                   |

## Market Simulation Plan:

<http://www.aiso.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**

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 : Trading Date** 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 [Customer Training](#) on 5/18. Refer to the [ISO Learning Center](#) 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 & 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/Publication |
|------------------|--------|-------------------------------------------------------------------------------------|-----------|------------|--------------------------------------|
| Summer Readiness | MF     | GeneratorRDT_v5<br><a href="#">GRDT spreadsheet Version 15.0 Draft</a>              |           | By 6/30/21 |                                      |
|                  | MF     | IntertieRDT_v1<br><a href="#">IRDT (spreadsheet) Version 6.0 Draft</a>              |           | By 6/30/21 |                                      |
|                  | MF     | <a href="#">GRDT &amp; IRDT Definitions v15 Draft</a>                               | 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 |                                      |
|                  | OASIS  | ENE_SCH_BY_TIE<br>Energy > Schedule by Tie                                          | 6/14/21   | By 6/30/21 |                                      |
| RA Enhancements  | CMRI   | StorageOperatingLimit_v1                                                            | 6/15/21   | By 6/30/21 |                                      |
|                  | OASIS  | ENE_UND_SPLY_INF_EC<br>Energy > Under Supply Infeasibility and Enforced Constraints | 6/15/21   | By 6/30/21 |                                      |
|                  | CIRA   | Application Changes                                                                 |           | 6/3/21     | N/A                                  |
|                  | OMS    | Application Changes (Denials in webOMS based on planned substitutions)              |           | 6/3/21     | N/A                                  |
|                  | OMS    | Application Changes (Curbing, Ambient Outages)                                      | 6/17/21   | 7/1/21     | N/A                                  |
| FERC831          | OASIS  | PRC_HRLY_ENE_SHAPING_FCTR<br>Pricing > Hourly Energy (Price) Shaping Factor         | 5/21/21   | 6/15/21    |                                      |
|                  | OASIS  | ATL_CNSTR_RLXN_THRESHOLD<br>Atlas Reference > Constraint Relaxation Threshold       | 5/21/21   | 6/15/21    |                                      |

# Next Steps

- The next teleconference is scheduled on May 24 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](mailto:MarketSim@caiso.com)

# Spring 2021 Release Communication Plan

- **Schedule**

| <i><b>Monday</b></i> | <i><b>Thursday</b></i> |
|----------------------|------------------------|
| 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](mailto: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 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<br>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<br>Monthly Initial 18-May - 20-May |

Settlements TDs Tue/Thu

Maintenance Friday

[Market Simulation Plan](#)

[Market Simulation Settlements Calendar](#)

