

Market Simulation – Summer 2021 Release

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June 21, 2021

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Recordings

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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.

