Market Simulation – Summer 2021 Release

Anshuman Vaidya
Market Simulation Coordinator

July 22, 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
  – Summer 2021 readiness
• Summer 2021 - System Interface Changes
• Next Steps
Summer 2021 Release MAP Stage Availability

• Refer to MAP Stage portal https://portalmapp.caiso.com for system availability information

• Current MAP Stage Scheduled Maintenance
  – ADS UI/API - 7/22 After 5PM – Brief interruption

• MAP Stage Weekly Maintenance Window
  – Friday
## Summer 2021 Release Market Simulation Initiatives & Timelines

<table>
<thead>
<tr>
<th>Initiatives</th>
<th>Start Date</th>
<th>Start Date (Trade Date)</th>
<th>End Date</th>
<th>Structured Simulation Start (Trade Date)</th>
<th>Go Live Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer 2021 Release Market Simulation</td>
<td>04/26/21</td>
<td>04/26/21</td>
<td>07/31/21</td>
<td>05/10/21</td>
<td></td>
</tr>
<tr>
<td>Summer 2021 readiness</td>
<td></td>
<td></td>
<td></td>
<td>7/27</td>
<td></td>
</tr>
<tr>
<td>Export, wheeling, and load scheduling priorities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>By July 31</td>
</tr>
</tbody>
</table>

Market Simulation Plan:
Market Simulation Initiatives

• **Timeline**: April 26 – July 31
• **Summer 2021 readiness**
  – **Structured**:
    • Export, wheeling, and load scheduling priorities:
      – July 13\(^\text{th}\) (PT Export)
      – July 27\(^\text{th}\) (HASP post process)
    **Scenario Description:**
    Scenario #8 (a & b) “Post-HASP adjustment pro rata allocate import and internal transmission to high priority wheels”

  – **Business Requirements Specification** -

  – **Structured Scenarios document** -
## Summer 2021 - System Interface Changes

### Summer 2021 Release

<table>
<thead>
<tr>
<th>Project</th>
<th>System</th>
<th>API Service Name &amp; Major Version, Artifacts</th>
<th>MAP Stage</th>
<th>Production</th>
<th>Technical Specifications/Publication</th>
</tr>
</thead>
</table>
| MF      | GeneratorRDT_v5  
GRDT spreadsheet Version 15.0 | ✓ 5/12/21  
✓ 6/10/21 | ✓ 5/12/21  
✓ 6/10/21 | ✓ v7.0; 4/16/21  
✓ v7.0; 4/16/21  
✓ v6/11/21 |
| MF      | IntertieRDT_v1  
IRDT (spreadsheet) Version 6.0 | ✓ 5/12/21  
✓ 6/10/21 | ✓ 5/12/21  
✓ 6/10/21 | ✓ v7.0; 4/16/21  
✓ v6/11/21  
✓ v6/11/21 |
| MF      | GRDT & IRDT Definitions v15 | N/A | N/A | ✓ v6/11/21 |
| SIBR    | CleanBidSet_v5; 20210401 | ✓ 7/9/21  
By 7/29/21 | ✓ 7/9/21  
By 7/29/21 | ✓ v13.3; 4/19/21  
✓ v13.3; 4/19/21  
✓ v6/11/21 |
| SIBR    | RawBidSet_v5; 20210401 | ✓ 7/9/21  
By 7/29/21 | ✓ 7/9/21  
By 7/29/21 | ✓ v13.3; 4/19/21  
✓ v13.3; 4/19/21  
✓ v6/11/21 |
| SIBR    | BidResults_v5; 20210401 | ✓ 7/9/21  
By 7/29/21 | ✓ 7/9/21  
By 7/29/21 | ✓ v13.3; 4/19/21  
✓ v13.3; 4/19/21  
✓ v6/11/21 |
| CIRA    | Application Changes | ✓ By 7/29/21 | ✓ By 7/29/21 | N/A |
| OASIS   | ENE_SCH_BY_TIE  
Energy > Schedule by Tie | ✓ Deploy 6/30/21  
Activation July 2021 | ✓ Deploy 6/30/21  
Activation July 2021 | ✓ v6.0.0; 4/9/21 |
| CMRI    | RetrieveStorageOperatingLimit_CMRIv1_AP  
RetrieveStorageOperatingLimit_CMRIv1_DocAttach_AP  
UI > Real-Time > Effective SOC Limits | ✓ 6/30/21 | ✓ 6/30/21 | ✓ v4.1.0; 4/16/21 |
| OASIS   | ENE_UND_SPLY_INF_EC  
Energy > Under Supply Infeasibility and Enforced Constraints | ✓ 6/30/21 | ✓ 6/30/21 | ✓ v6.1.0; 4/16/21 |
| CIRA    | Application Changes | ✓ API 5/5/21  
✓ UI 5/19/21 | ✓ 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 (Preventing extension; overlapping outages; preventing curtailment increase; creation of ambient outages, cancel pending requests prior to automatically denying outages) | ✓ 7/1/21  
✓ 7/15/21 | ✓ 7/15/21 | N/A |
| OASIS   | PRC_HRLY_ENE_SHAPING_FCTR  
Pricing > Hourly Energy (Price) Shaping Factor | ✓ 5/21/21  
✓ 6/13/21 | ✓ 6/13/21 | ✓ v6.0.0; 4/9/21 |
| OASIS   | ATL_CNSTR_RLXN_THRESHOLD  
Atlas Reference > Constraint Relaxation Threshold | ✓ 5/21/21  
✓ 6/13/21 | ✓ 6/13/21 | ✓ v6.0.0; 4/9/21 |
| SIBR    | DA/RT Ceiling (Enhancement)  
Currently available in UI > “Energy bid ceiling”  
API for Retrieve DA/RT Ceiling (Enhancement)  
• RetrieveEnergyBidData_SIBRv1  
• RetrieveEnergyBidData_SIBRv1_DocAttach | ✓ UI 6/13/21  
API - TBD (after activation) | ✓ UI 6/13/21  
API - TBD (after activation) | July 2021 |
| DR LPA  | MRI-S | ✓ 7/12 | ✓ 7/14 | ✓ 6/7/21 |
| OMS     | Overlapping Pmax NGR; Resource-Participant Association fix | ✓ 7/1/21  
✓ 7/15/21 | ✓ 7/15/21 | N/A |
| OSI 2021 Enh. | CAISO.com  
Add data for 3 additional BAs to existing 'Curtailed & Non-Operational Generator' report | N/A | ✓ 6/23/21 | N/A |
Next Steps

- The next teleconference is scheduled on July 27 at 2 PM
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
Spring 2021 Release Communication Plan

• Schedule

<table>
<thead>
<tr>
<th>Monday</th>
<th>Thursday</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 26</td>
<td>April 22, 29</td>
</tr>
<tr>
<td>May 3, 10, 17, 24</td>
<td>May 6, 13, 20, 27</td>
</tr>
</tbody>
</table>

• 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
## Known Issues:

<table>
<thead>
<tr>
<th>Item</th>
<th>Summary</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>RAE CMRI: Effective SOC Limits - API Request does not have Resource - 74810</td>
<td>Resolved, No code change needed.</td>
</tr>
</tbody>
</table>
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

<table>
<thead>
<tr>
<th>Wk</th>
<th>Date</th>
<th>ISO</th>
<th>Market Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4/26-5/10</td>
<td>Mkt Sim Readiness Testing</td>
<td>Connectivity</td>
</tr>
<tr>
<td>2</td>
<td>5/10-5/28</td>
<td>Structured Scenarios</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>5/10-5/28</td>
<td>Unstructured Simulation</td>
<td></td>
</tr>
</tbody>
</table>

### Market Simulation Plan

<table>
<thead>
<tr>
<th>Calendar Day</th>
<th>Day</th>
<th>CMRI T+1B</th>
<th>Submit Meter Data by T+2B 10:00 AM for Initial</th>
<th>Publish Initial Statement T+5B</th>
<th>Submit Meter Data by T+5B 18:00 for Recalc</th>
<th>Publish Recalc Statement T+8B</th>
<th>Publish Market Invoice</th>
</tr>
</thead>
</table>

Settlements TDs Tue/Thu  
Maintenance Friday  
Market Simulation Plan  
Market Simulation Settlements Calendar
Market Simulation Initiatives

- **Timeline**: April 26 – June 07
- **FERC order 831**
  - **Structured**: **Trading Date** May 25, 26, 27 (Buffer dates June 3, 4)

- **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 – July 6
- **Resource adequacy enhancements track 1**
  - **Structured**: OMS changes : 7/1
  - Business Requirements Specification -
  - Structured Scenarios document -
<table>
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<tr>
<th>Project</th>
<th>Functionality</th>
<th>MAP Stage</th>
<th>Production</th>
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</thead>
<tbody>
<tr>
<td>RAE Track 1</td>
<td>Denials of CAISO Outages based on Planned Substitutions</td>
<td>05/17/21</td>
<td>06/03/21</td>
</tr>
<tr>
<td>RAE Track 1</td>
<td>Preventing Extension of Planned CAISO Outage</td>
<td>07/01/21</td>
<td>07/15/21</td>
</tr>
<tr>
<td>RAE Track 1</td>
<td>Preventing Curtailment Increase of Planned CAISO Outage</td>
<td>07/01/21</td>
<td>07/15/21</td>
</tr>
<tr>
<td>RAE Track 1</td>
<td>Allowing Overlapping Outages for 3 Ambient NOW &amp; RIMS Testing</td>
<td>07/01/21</td>
<td>07/15/21</td>
</tr>
<tr>
<td>RAE Track 1</td>
<td>Creation of ‘Ambient Due to Temp’ &amp; ‘Ambient Not Due To Temp’ outages in a forced timeframe only</td>
<td>07/01/21</td>
<td>07/15/21</td>
</tr>
<tr>
<td>RAE Track 1</td>
<td>Cancel pending requests prior to automatically denying outages</td>
<td>07/01/21</td>
<td>07/15/21</td>
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<td>OSI 2021 Enh</td>
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<td>Resource-Participant Association fix</td>
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