Market Simulation Call - Fall 2020 Release & Independent 2020 Releases

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Market Simulation Coordinator

October 19, 2020
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

- MAP Stage & Stage Availability
- Known Issues – ADS
- ADS Replacement Transition
- Independent 2020 Releases Structured Scenario Registration Details
- Independent 2020 Releases Market Simulation Initiatives & Timelines
- Market Simulation Initiatives
- Next Steps
Fall 2020 Release MAP Stage Availability

• Refer to MAP Stage portal [https://portalmap.caiso.com](https://portalmap.caiso.com) for system availability information

• Current MAP Stage & Stage Maintenance
  – **MAP STAGE**
    • All systems available
  – **STAGE**
    • ADS available

• Upcoming MAP Stage & Stage Maintenance
  – **MAP STAGE**
    • None
  – **STAGE**
    • None

• MAP Stage Weekly Maintenance Window
  – Friday
## Known Issues - ADS

<table>
<thead>
<tr>
<th>#</th>
<th>System</th>
<th>Summary</th>
<th>Status</th>
<th>Estimated Fix Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ADS</td>
<td>Support to share/port over the profiles across environment</td>
<td>Will help manually porting over one profile per user upon request. Please submit CIDI ticket with the details (Profile Name, User ID &amp; Environment To &amp; From)</td>
<td>N/A</td>
</tr>
</tbody>
</table>
ADS Replacement Transition

• Refer to Implementation Plan on www.caiso.com > Stay Informed > Release Planning

• Refer to www.caiso.com calendar for customer bridge:
  – 10/20 - Phase 1 - Add to calendar
  – 10/21 - Phase 2 - Add to calendar
  – Bridge open 0830-1700 PT both days
  – Automated Dispatch System Replacement - Phase 1 & 2 Transition Customer Bridge
    • By phone: call 1-866-528-2256, access code: 1465216
Independent 2020 Releases
Independent 2020 Releases 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 October 9, 2020.
We will do our best to accommodate for late registration
## Independent 2020 Releases Market Simulation Initiatives & Timelines

<table>
<thead>
<tr>
<th>Independent 2020 Release Initiatives</th>
<th>Start Date</th>
<th>End Date</th>
<th>Structured Simulation Start (Trade Date)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent 2020 Release Market Simulation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FRP Improvements - Buffer and Min</td>
<td>10/13/20</td>
<td>10/28/20</td>
<td>10/14/20</td>
</tr>
<tr>
<td>Energy Imbalance Market (EIM) Enhancements 2020</td>
<td>10/26/20</td>
<td>10/30/20</td>
<td>N/A</td>
</tr>
<tr>
<td>Hybrid Resources - Phase 1</td>
<td>10/26/20</td>
<td>11/13/20</td>
<td>N/A</td>
</tr>
<tr>
<td>Commitment Costs and Default Energy Bid Enhancements Phase 1</td>
<td>7/27/20</td>
<td>11/24/20</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>11/10/20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nodal Pricing Model</td>
<td>10/6/20</td>
<td>11/13/20</td>
<td>10/20/20 &amp; 10/21/20</td>
</tr>
<tr>
<td>Intertie Deviation Settlement</td>
<td>10/26/20</td>
<td>11/20/20</td>
<td>10/27/20</td>
</tr>
<tr>
<td>Symmetrical Wheeling</td>
<td>10/26/20</td>
<td>11/20/20</td>
<td></td>
</tr>
<tr>
<td>Settlements Q4/Winter Release</td>
<td>10/6/20</td>
<td>11/13/20</td>
<td></td>
</tr>
</tbody>
</table>

**Market Simulation Settlements Calendar:**
Market Simulation Initiatives

• FRP Improvement Buffer and Min
  – **Timeline:** October 13 – October 28
  – Structured Scenarios document -

• Energy Imbalance Market (EIM) Enhancements 2020
  – **Timeline:** October 26 – October 30 (CMRI)
  – BAAOP & BSAP currently available in MAP-Stage
  – Unstructured Scenarios document
Market Simulation Initiatives

• Hybrid Resources - Phase 1
  – **Timeline:** October 26 – November 13
  – Business Requirements Specification -

• Commitment Costs and Default Energy Bid Enhancements
  – **Timeline:** July 27 – November 24; November 10 - November for new SIBR rules
  – Training

• Nodal Pricing Model
  – **Timeline:** October 6 – October 30 (CMRI)
  – **Structured:** October 20 - October 21
  – Structured Scenarios document -
Market Simulation Initiatives

• Intertie Deviation Settlement
  – **Timeline:** October 26– November 20
  – **Structured:** October 27
  – Structured Scenarios document -

• Symmetrical Wheeling
  – **Timeline:** October 26 – November 20
  – Business Requirements Specification -
Settlements Q4/Winter Release

Release Milestones as follows:

• 1st draft technical documentation posted = 8/10
  – Posted IDS and Day Ahead Nodal (NPM project)
• 1st draft configuration output file + initial release component summary to post = 8/25
  – Will include current project scope -> IDS, Day Ahead Nodal & Symmetrical Wheeling
  – Also 1st draft tech doc for Symmetrical Wheeling
• 2nd draft configuration output file + 2nd draft tech docs + updated release component summary posted = 9/14
  – Includes 2 dispute related production adjustments:
    • RTM Net Amount PC for RMR capacity payment
    • Spin Non-Spin No Pay Quantity PC for fast start units
• 3rd draft configuration output file (pre market sim) posted = 10/8
• MAP-Stage deployment - 10/6
• Connectivity for PAC 10/13 - 10/21
• Structured scenarios 10/20

Winter 2020 settlements release draft settlements technical documentation:
http://www.caiso.com/Pages/documentsbygroup.aspx?GroupID=EF90CE68-D8D0-43F7-8052-04FBE1D0825B
Next Steps

• The next teleconference is scheduled on Thursday, October 22 at 1400 PDT
Reference Slides
Independent 2020 Releases Communication Plan

• Schedule

<table>
<thead>
<tr>
<th>Monday</th>
<th>Thursday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sep 28,</td>
<td>Oct 1,8,15, 22, 29</td>
</tr>
<tr>
<td>Oct 5,12,19, 26</td>
<td>Nov 5, 12</td>
</tr>
<tr>
<td>Nov 2, 9</td>
<td>Nov 2, 9</td>
</tr>
</tbody>
</table>

• Connection Information
  – Web Conference Information
    • Web Address: [https://caiso.webex.com/meet/MarketSim](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: 866-528-2256
    • International Dial-in: 216-706-7052
    • Access Code: 202 249 0
Market Simulation Issue Management

• Submit all issues to the CIDI case management system
• CIDI tickets must have “Functional Environment” = “Market Simulation Independent 2020” to be reviewed by ISO SMEs
ISO Market Simulation Support

- **Hours:** Monday thru Friday 0900-1800 PDT
- **ISO’s 24x7 Service Desk:** (916) 351-2309 (Connectivity – UI or API)
  - Issues called in after hours will be worked on during the next business day
- **Email:** MarketSim@caiso.com
Automated Dispatch System (ADS) replacement

- **Timeline:** July 27 – September 04
- **Structured:** August 11 (Completed)
  Rerun on 8/18 per Market Participant Request - Complete

Structured Scenarios document -

Training -
ADS: Update on Changes for FMM AS/EN

- Based on several feedback we planned to make some changes for ‘FMM AS/EN’ from Interval Grid and how it’s filter the data when user click on ‘Filter Resource’ checkbox. Summary is given below:

  - **Proposed change:**
    - Renamed the ‘FMM AS/EN’ as ‘FMM AS’
    - Checkbox must filter only the operating reserve (Non-zero SR, NR, RU & RD).

  - **Notes:**
    - For FMM AS, keep processing and displaying all productType (SR, NR, RU, RD, FRU, FRD, LFU, LFD as applicable) for
      - Visual alert (pop-up/dialogue) – FMM AS
      - Visual alert (Flash) – No change
      - Audio alert - No Change
    - For FMM Energy, keep processing and displaying productType (EN)
      - Visual alert (pop-up/dialogue) – FMM Energy
      - Visual alert (Flash) – **No Flashing**
      - Audio alert - No Change

    - The audio alert for **FMM energy** will still be able to be configured for no alarm, 1 time, or continuous
    - Batch types will remain two separate (batchType = 11 for ‘FMM Energy’, batchType = 3 for ‘FMM AS’ (‘RT AS’) also known as ‘AS Awards’)
    - The message will show as own message in message history.
    - API remains same (FMM energy dispatches & intertie bid type available)

**Update:** This ADSUI changes is completed and will be ready on MKT-SIM on 9/28.
ADS SSL Cipher Settings with ADS Cutover

As discussed on 9/15 TUG:

- **New SSL cipher settings will be enforced with for ADS with ADS cutovers in MAP-Stage, Stage, and Production**
- **No change in TLS version - TLS will remain 1.2**
- **We encourage customers to transition to the new SSL cipher settings as early as possible to avoid impacts when the new settings become enforced for ADS**
- **In MAP-Stage and Stage**
  - On **11/4/20** old ADS will no longer be available, and participants will need to have the new SSL cipher settings to continue using new ADS UI and any ADS API (including v7)
- **In Production**
  - When new ADS is available 10/1, we will not enforce the new SSL cipher settings
  - On **2/1/21** old ADS will no longer be available, and participants will need to have the new SSL cipher settings to continue using new ADS UI and any ADS API (including v7)
Here is the list of the ciphers being accepted today, in comparison to the reduced list that will be enforced with the ADS cutover:

<table>
<thead>
<tr>
<th>Currently Supported TLS 1.2 ciphers</th>
<th>Future Supported TLS 1.2 ciphers to be enforced 11/4 in MAP-STAGE/STAGE and 2/1 in PRODUCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>TLS_DHE_RSA_WITH_AES_128_CBC_SHA</td>
<td>TLS_ECDHE_RSA_WITH_AES_128_CBC_SHA256</td>
</tr>
<tr>
<td>TLS_DHE_RSA_WITH_AES_128_CBC_SHA256</td>
<td>TLS_ECDHE_RSA_WITH_AES_128_GCM_SHA256</td>
</tr>
<tr>
<td>TLS_DHE_RSA_WITH_AES_128_GCM_SHA256</td>
<td>TLS_ECDHE_RSA_WITH_AES_256_CBC_SHA384</td>
</tr>
<tr>
<td>TLS_DHE_RSA_WITH_AES_256_CBC_SHA</td>
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<td>TLS_DHE_RSA_WITH_AES_256_GCM_SHA384</td>
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</table>
ADS: Upcoming Changes for Query Tool

Based on several feedback we planned to make some changes for ‘Query Tool’, It will also improve the performance. Summary is given below:

• Allow user to retrieve data for 39 months:
  – 30 days max at a time for batchType Instructions
  – System will allow only 1 day at a time for batchType ‘Trajectory’ & ‘MSS LF Instructions’
    • System to allow user select only startDate
    • System will automatically adjust the EndDate with user selected startDate.

• Provide user the option to choose what batchType to query for (Making it similar to Existing Query Tool functionality).
  – Available batchType:
    • Instructions (Includes following):
      – DOT
      – Commitment
      – AS Awards
      – Operating Instructions
      – ASTEST
      – Energy
      – Exceptional dispatch
    • Trajectory
    • MSS LF Instructions
ADS: Visual for Upcoming Changes for Query Tool
Trouble-shooting tips to access ADS

- Check your firewall settings.
- Clear the browser cache & cookies.
- Pop-up blockers on your browser may lead to issues accessing CAISO ADS.
- If you use a pop-up blocker, you must whitelist the CAISO domain (caiso.com)