Market Simulation Call - Independent 2020 Release

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Market Simulation Coordinator

November 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
• Independent 2020 Releases Communication Plan
• Independent 2020 Releases Market Simulation Initiatives & Timelines
• Market Simulation Initiatives
• OMS Enhancements
• ADS Phase 3: Activation of New Features
• Next Steps
MAP Stage Availability

• Refer to MAP Stage portal https://portalmapi.cafoo.com for system availability information

• Current MAP Stage Maintenance
  • None

• Upcoming MAP Stage Maintenance
  • 11/23: CMRI UI/API brief interruption

• MAP Stage Weekly Maintenance Window
  – Friday
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, 19</td>
</tr>
<tr>
<td>Nov 2, 9, 16, 23, 30</td>
<td>Dec 3, 10, 17</td>
</tr>
<tr>
<td>Dec 7, 14</td>
<td></td>
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</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
## 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 (Complete)</td>
</tr>
<tr>
<td>Energy Imbalance Market (EIM) Enhancements 2020 - CMRI</td>
<td>11/23/20</td>
<td>12/07/20</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>12/15/20</td>
<td>N/A</td>
</tr>
<tr>
<td>Nodal Pricing Model</td>
<td>10/6/20</td>
<td>11/13/20</td>
<td>10/20/20 -10/22/20 (Complete)</td>
</tr>
<tr>
<td>Intertie Deviation Settlement</td>
<td>12/1/20</td>
<td>12/18/20</td>
<td>12/1/20</td>
</tr>
<tr>
<td>Symmetrical Wheeling</td>
<td>11/17/20</td>
<td>12/03/20</td>
<td></td>
</tr>
<tr>
<td>Settlements Q4/Winter Release</td>
<td>10/6/20</td>
<td>11/13/20</td>
<td></td>
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</table>

### Market Simulation Settlements Calendar:
Market Simulation Initiatives

• Intertie Deviation Settlement
  – **Timeline:** December 1 - December 18
  – **Structured:** December 1
  – Please use [https://demo.caiso.tag.oati.com/](https://demo.caiso.tag.oati.com/) to submit tags in MapStage environment

• Symmetrical Wheeling
  – **Timeline:** November 17 – December 3
Market Simulation Initiatives

• Hybrid Resources - Phase 1
  – **Timeline:** October 26 – November 13
  – Business Requirements Specification -
  – New flag will be in ISO’s Master File and not in the RDT

• Commitment Costs and Default Energy Bid Enhancements
  – **Timeline:** July 27 – December 18; December 1 - December 15 for new SIBR rules in market simulation
  – Training
  – SIBR business rules, release notes published 10/27
Market Simulation Initiatives

- **Nodal Pricing Model**
  - **Timeline:** October 6 – November 13
  - **Structured:** October 20 - October 22

<table>
<thead>
<tr>
<th>Project Info</th>
<th>Details/Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excerpt from the market notice:</td>
<td>“The California ISO is hosting an informational stakeholder call on Dec. 18, 2019, to discuss an agreement that it intends to file with Federal Energy Regulatory Commission (FERC) that will provide PacifiCorp with an advisory nodal pricing model (NPM) service. Information related to this effort available on the ISO website at <a href="http://www.caiso.com/informed/Pages/MeetingsEvents/MiscellaneousStakeholderMeetings/Default.aspx">http://www.caiso.com/informed/Pages/MeetingsEvents/MiscellaneousStakeholderMeetings/Default.aspx</a>. This service will produce separate advisory day-ahead nodal pricing results for locations within PacifiCorp’s balancing authority areas, without a financial settlement or impact to the ISO’s day-ahead market. PacifiCorp will pay the ISO’s estimated cost to provide the service. PacifiCorp plans to use the NPM solution results as the basis for its power cost allocation among the states within which it provides retail electric service, consistent with the recently filed inter-jurisdictional cost allocation agreement.”</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Milestone Type</th>
<th>Milestone Name</th>
<th>Dates</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tariff</td>
<td>FERC Approval</td>
<td>Feb 28, 2020</td>
<td>✓</td>
</tr>
<tr>
<td>Config Guides</td>
<td>Publish Config Guide</td>
<td>Aug 10, 2020</td>
<td>✓</td>
</tr>
<tr>
<td>Market Sim</td>
<td>Market Sim Window</td>
<td>Oct 06, 2020 - Nov 13, 2020</td>
<td></td>
</tr>
<tr>
<td>Production Activation</td>
<td>Day Ahead Nodal Pricing Model</td>
<td>Jan 15, 2021</td>
<td></td>
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</tbody>
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Market Simulation Initiatives

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

• Energy Imbalance Market (EIM) Enhancements 2020
  – **Timeline:** November 23 – December 7 (CMRI)
  – BAAOP & BSAP currently available in MAP-Stage
  – Unstructured Scenarios document
Settlements Q4/Winter Release

Release Scope:
• Day Ahead Nodal (NPM project)
• Intertie Deviation Settlement (IDS)
• EIM Enhancement: Symmetrical Wheeling
• Production defects as noted in release component SUG email

Release Milestones as follows:
• 1st draft technical documentation posted = 8/10
• 1st draft configuration output file + initial release component summary posted = 8/25
• 2nd draft configuration output file + 2nd draft tech docs + updated release component summary posted = 9/14
• 3rd draft configuration output file (pre market sim) posted = 10/8
• Unplanned draft configuration output file posted - 10/29
  – IDS calc granularity change from MW to MWh
• Deployed to MAP-Stage = 10/6
• Pre-prod configuration output file + release artifacts to post - 12/9
• Production deployment - 12/16

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

<table>
<thead>
<tr>
<th>Release</th>
<th>Major Changes</th>
<th>Participant</th>
<th>MAPStage</th>
<th>Production</th>
</tr>
</thead>
</table>
| October | Remove defaulting discovery date  
- For retro-active outages submit discovery date.  
- Handle no discovery date if not previously submitted.                                                                                              | All         | ✓ 11/05/2020 | 1/11/2021  |
|         | Aggregate Resource Outage retrieve results changes  
- Handle receiving only parent and impacted children.                                                                                                                                                       | All         |              |            |
|         | Transmission Retrieve Changes  
- If moving to new version (= 10012020), consume new XSD and handle receipt of multiple change requests.                                                                                     | All         |              |            |
|         | Retrieve Resource/Transmission outage change request  
- Limiting to 50  
- Disable querying with participant ID & Date Range.  
- Query by Outage ID, Change request ID and Equipment ID/Resource ID                                                                                                                                       | All         |              |            |
## 2020 - System Interface Changes - OMS

<table>
<thead>
<tr>
<th>OMS Project</th>
<th>Service Description</th>
<th>Summary</th>
<th>Tech Spec</th>
<th>MAP Stage</th>
<th>Production</th>
</tr>
</thead>
</table>
  - Retrieve up to 50 outages by querying on outage ID  
  - Retrieve based on Change Request ID  
  - Retrieve based on Equipment ID  
  - Removed capability of querying by participant ID  
  - Recommended use to sync data | ✓ 8/11/20, v2.1 | ✓ 11/5/2020 | 1/11/2021 |
| N/A         | RetrieveTransmissionOutageChangeRequest_OMSv2_AP RetrieveTransmissionOutageChangeRequest_OMSv2_DocAttach_AP RetrieveTransmissionOutageChangeRequest_OMSv3_AP RetrieveTransmissionOutageChangeRequest_OMSv3_DocAttach_AP |  
  - WebOMS system will not default the discovery date | ✓ 8/11/20, v2.1 | ✓ 11/5/2020 | 1/11/2021 |
| N/A         | SubmitResourceOutage_OMSv2_AP SubmitResourceOutage_OMSv2_DocAttach_AP SubmitResourceOutage_OMSv3_AP SubmitResourceOutage_OMSv3_DocAttach_AP |  
  - Changes to aggregate resource outage submission for performance improvement  
    - Submit de-rate for parent resource (required) and only the impacted child resources  
    - Retrieve results will not be include (for both v2 and v3 services) child resources that have no curtailment  
    - Parent resource availability points need not match with child resources' but will remain within the overall outage start and end date span  
    - Child resource outages can be added to existing outage if the outage has not commenced  
    - UI display and retrieve results for historical outages will be modified to support this model  
    - Changes are being done to enhance webOMS performance | ✓ 8/11/20, v2.1 | ✓ 11/5/2020 | 1/11/2021 |

https://developer.caiso.com
ADS Phase 3: Activation of New Features

- 10/20: ADS Phase 1: Network
- 10/20: ADS Phase 2: New ADS UI, API v8 available
- 10/30: Close Stage, End Parallel Operations
  - MAP-Stage remains available with active features from now on
- **12/16: Activation of New Features**
  - Only available on New ADS UI, API v8
    - DOTT
    - Unannounced AS Test
    - RTCD Commitment
    - Follow DOT Flag
    - Operating Instructions
- 2/1/21: ADS Phase 4: Decommission of Old ADS client, API v6
ADS Phase 3: Activation of New Features

12/16: Activation of New Features

- Only available on New ADS UI, API v8
- ISO invites customers to leverage ISO Assisted Customer Cutover lines
  - To transition to new ADS UI, API v8
  - To report transition plans, progress, issues
  - By phone: call 1-866-528-2256, access code: 1465216
  - Dates: 11/4, 11/11, 11/18, skip 11/26 due to holiday, 12/2, 12/9 and 12/16
  - Time: 1300-1400 PT
- Recommendation
  - Run ADS Client and new ADS UI in parallel for validation
  - Cutover to API v8 now, as it provides same functionality as v7
Next Steps

• The next teleconference is scheduled on Monday, November 23rd at 1400 PDT
Reference Slides
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 mailbox.

Date of registration October 9, 2020.
We will do our best to accommodate for late registration
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](mailto:MarketSim@caiso.com)
## 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>