Agenda

• Fall 2014 Market Simulation Initiatives and Timelines
• Fall 2014 MAP Stage Availability
• FNM Expansion with EIM
• OMS
• Many to Many
• Next Steps
• Reference Slides
Outage Management System Replacement - July 28th, 2014 – November 28th, 2014 (Unstructured)

Many to Many: Standard Capacity Payment (SCP) Availability Calculations - October 20th, 2014 – October 31st, 2014 (Structured)
Fall 2014 Release MAP Stage Availability

- MAP Stage Scheduled Maintenance – To be announced on October 30th, 2014 Market Simulation Call

- MAP Stage Scheduled Maintenance OMS – To be announced on October 30th, 2014 Market Simulation Call

- On November 10th, 2014 ISO will transition MAP Stage SIBR URL’s to match Sandbox and Production - "/sst/runtime.asvc" -> "/sst/sibr"
Parallel Operations Environment

- Parallel Operations OASIS – Opened 10/23
FNM Expansion with EIM

The Full Network Model Expansion with Energy Imbalance Market Simulation timeline –

• FNM Expansion with EIM: July 28th - September 30th, 2014 (Structured and Unstructured)
• FNM Expansion with EIM: July 28th - September 1st, 2014 (Structured)
• FNM Expansion with EIM: September 2nd, 2014 - September 30th, 2014 (Unstructured)


Week 1 - Scenario #1 TD 7/30 and # 2 TD 7/31 – Bid to Market Output, completed successfully

Week 2 - Scenario #5 TD 8/6 and #4 8/7 – Successful executed, Statements posting this week, one day delay in 8/7 statement posting

Week 3 - No Scenarios

Week 4 - TD 8/19 12, 13, 14 and 15 - TD 8/20 7, 18 and 19 – completed successfully TD 8/21 6 and 8. Executed and scenario 8 failed. Will be re-executed in Week 6

Week 5 - TD 8/26 9 and 20 – completed successfully

Week 6 - TD 9/3 11,TD 09/04 8, 9 and 10 – completed successfully

Scenario 16 - To be determined

Scenario 17 ran 10/16
Outage Management System

The Outage Management System Market Simulation –

- **Outage Management System**: July 28th – November 28th, 2014 (Unstructured)

Beginning July 28th, 2014 ISO will approve outages with no ISO operations review; this will last until August 1st, 2014. ISO will be approving outages throughout the day for outages submitted prior to 16:00, for immediate outage approval please email MarketSim@caiso.com.

Beginning August 4th, 2014 ISO operations will review submitted outages prior to 16:00 daily, this support will end August 15th, 2014.

The time period from August 18th, 2014 through the end of unstructured market simulation November 28th, 2014. ISO will be approving outages throughout the day for outages submitted prior to 16:00, for immediate outage approval please email MarketSim@caiso.com.
<table>
<thead>
<tr>
<th>#</th>
<th>Application</th>
<th>Severity (H/M/L)</th>
<th>New or Existing Variance</th>
<th>Variance Description</th>
<th>Resolution Expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>OMS</td>
<td>H</td>
<td>Fixed</td>
<td>Unable to submit transmission outages via API using TR ID. Error message: &quot;Equipment mRID is not found.\r\n&quot;</td>
<td>Fixed in last maintenance window</td>
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<tr>
<td>2</td>
<td>OMS</td>
<td>M</td>
<td>Fixed</td>
<td>Retrieve availability and resource outage API for aggregate resources contains errors (incorrect and not child resource data)</td>
<td>Fixed in last maintenance window</td>
</tr>
<tr>
<td>3</td>
<td>OMS</td>
<td>M</td>
<td>Fixed</td>
<td>Retrieve availability API for MSG resources contains errors (incorrect data)</td>
<td>Fixed in last maintenance window</td>
</tr>
<tr>
<td>4</td>
<td>OMS</td>
<td>H</td>
<td>Existing</td>
<td>Outage submission on aggregate resources showing incorrect MW availability points values</td>
<td>CAISO is investigating</td>
</tr>
</tbody>
</table>
Many to Many: SCP Availability Calculations

Many to Many: Standard Capacity Payment (SCP) Availability Calculations
– October 20\textsuperscript{th}, 2014 – October 31\textsuperscript{st}, 2014 (Structured)

DATA
1. Use October NQC and October reference data
2. Select max of two RA resources from October supply plan for each availability calculation scenario
3. Create outages in OMS for selected RA resources
4. Select substitute resources from RAAM. The sub resources will be based of the September supply plan using the formula Non RA = NQC-RA. No limit on the number of substitute units.
   – Follow DA and RT substitution timelines and for RT ensure the units are prequalified. If local units are not prequalified then send a request to reliabilityrequirements@caiso.com to get the units prequalified

• Note: Update Structured Scenarios posted on Market Sims Release Site 10/13.
# Many to Many: SCP Availability Calculation and FRAC-MOO

## Market Sims Timeline

<table>
<thead>
<tr>
<th>Project</th>
<th>Description</th>
<th>Market Sim Date</th>
<th>Type</th>
<th>Go Live</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRAC-MOO</td>
<td>Submission of RA and Supply Plans</td>
<td>9/22 - 10/3</td>
<td>Unstructured</td>
<td>11/6/2014</td>
<td>Complete</td>
</tr>
<tr>
<td>FRAC-MOO</td>
<td>Settlements testing</td>
<td>12/1</td>
<td>Structured</td>
<td>1/1/2015</td>
<td>Will trigger CPM Charge codes and will also test Settlement statements</td>
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<tr>
<td>FRAC-MOO</td>
<td>RUC Validation</td>
<td>12/1</td>
<td>Structured</td>
<td>12/22/2014</td>
<td>Will need to test for when Generic RA &gt; Flex RA</td>
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<tr>
<td>Many to Many</td>
<td>SCP Availability Calculations</td>
<td>10/20 - 10/31</td>
<td>Structured</td>
<td>12/1/2014</td>
<td>Will test SCP &amp; CPM availability calculations, forced outages, RAAM UIs, DA &amp; RT substitutions</td>
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ISO Settlements MAP Stage

- ISO Settlements Many to Many

<table>
<thead>
<tr>
<th>Calendar Day</th>
<th>CMRI/ RAAM T+1B</th>
<th>Publish Initial Statement T+4B</th>
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<tbody>
<tr>
<td>21-Oct-14</td>
<td>20-Oct</td>
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<tr>
<td>22-Oct-14</td>
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<td>22-Oct</td>
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<tr>
<td>29-Oct-14</td>
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<td>Oct-20-22 MTHLY</td>
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Next Steps

• The next teleconference will take place @ 13:00 PPT on Thursday, October 30th, 2014
Fall 2014 Release Market Simulation Plan

ISO Market Simulation Support

- **Hours** - 09:00 - 18:00, PST (Monday through Friday)
- **Mkt Sim Coordinator Phone** - (530) 518 - 8539
- **ISO’s 24X7 Help Desk** - (916) 351-2309 (Connectivity - GUI or API)
- **Email** - MarketSim@caiso.com
Market Simulation Issue Management

- Submit all issues to the CIDI case management system.
- CIDI tickets will need to have “Functional Environment = Market Simulation Fall 2014” to be reviewed by ISO SME’s.
ISO will host Bi-weekly call on Mondays and Thursdays starting July 28th, 2014

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
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<tbody>
<tr>
<td>July</td>
<td>28 – Kick Off Call, 31 4, 7, 11, 14, 18, 21, 25, 28 4, 8, 11, 15, 18, 22, 25, 29</td>
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<td>August</td>
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<td>September</td>
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1:00 p.m. to 2:30 p.m. (Pacific Time)

Please refer to the California ISO public calendar at http://www.caiso.com/Pages/Calendar.aspx for current login information relevant for each meeting.