Outage Management System
Customer Partnership Group
(OMS CPG)

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Kalyani Abhyankar – Operations Engineering
CPG Scope and Objective

- Created in response to customer’s request to have more involvement in the planning, design and usability validation phases of ISO application development
- Provide an open interactive partnership forum to identify potential opportunities to improve the overall customer experience
- Share ideas, opinions and provide feedback
- Discuss issues and concerns, and answer customer questions
- All ideas are welcome and will be considered based upon feasibility, prioritization and timeline constraints. Not all ideas may be feasible to implement
- Meetings vary in frequency to review progress, provide feedback on design and usability and discuss implementation approaches
- Active participation is critical to the CPG success and to improve our customer’s experience interacting with ISO applications
Agenda

• Functional Changes deployed in Production since last CPG Meeting

• Planned Functional Changes in Future Releases

• Recapitulating from Last CPG
Functional Changes Deployed to Production Since Last CPG Meeting
Decommissioned V1 Services

• Following 16 V1 services were disabled
• Retrieves:
  – RetrieveResourceOutage_OMSv1_AP
  – RetrieveResourceOutage_OMSv1_DocAttach_AP
  – RetrieveResourceOutageChangeRequest_OMSv1_AP
  – RetrieveResourceOutageChangeRequest_OMSv1_DocAttach_AP
  – RetrieveTransmissionOutage_OMSv1_AP
  – RetrieveTransmissionOutage_OMSv1_DocAttach_AP
  – RetrieveTransmissionOutageChangeRequest_OMSv1_AP
  – RetrieveTransmissionOutageChangeRequest_OMSv1_DocAttach_AP
Decommissioned v1 Services (continued...)

- Submits:
  - SubmitResourceOutage_OMSv1_AP
  - SubmitResourceOutage_OMSv1_DocAttach_AP
  - SubmitResourceOutageChangeRequest_OMSv1_AP
  - SubmitResourceOutageChangeRequest_OMSv1_DocAttach_AP
  - SubmitTransmissionOutage_OMSv1_AP
  - SubmitTransmissionOutage_OMSv1_DocAttach_AP
  - SubmitTransmissionOutageChangeRequest_OMSv1_AP
  - SubmitTransmissionOutageChangeRequest_OMSv1_DocAttach_AP
AMBIENT_DUE_TO_TEMP Outages Process Change

The following workflow changes were made to the RC_CAILO & EIM Customers:

- <Add MW Threshold>
- Auto-approve outages with nature of work as AMBIENT_DUE_TO_TEMP
- Auto-accept all change requests on approved AMBIENT_DUE_TO_TEMP outages
- Auto-accept all cancellations of AMBIENT_DUE_TO_TEMP outages
Planned Functional Changes for Future Releases
TransmissionOutageResults_v3 Service

- Fix to include all pending requests is ready
- XSD version not incremented but new XSD has to be consumed by participants
  - XSD is modified to allow including multiple pending requests in the response.
- Change will be deployed to Map_Stage on 06/01/2020
- Change will be deployed to production tentatively on 07/15/20
Aggregate Resource Outage Submission

• Current process requires submission of all child resources, even though there is no impact to them.

• Going forward, 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.
Remedial Action Scheme (RAS) Changes

Modeling for 4 RAS Flags will be modified from check-boxes to drop-down boxes in the UI: (Y)es, (N)o and N/A (Undefined or Null)

- RAS/SPS Out of Service
- RAS/SPS Reduced Redundancy
- Protection Zone
- EMS/ICCP Outage

- API validation changes are to require the submission of these flags for Nature of Work ‘COMMUNICATION’ or ‘RELAY WORK’.
  - API submission will continue to take in a ‘Y’ or ‘N’ for these flags.
  - Changes will be made to validate to only v3 services (submit and retrieves)
  - No changes to v2 services
- No Changes to historical outages
Significant Change Determination & Workflow Efficiency

- Improvements to workflow engine in webOMS planned for faster processing of the outage cards
- Especially applicable to non BES equipment
- Workflow is for new and changes to existing outages
- Workflow improvements will be based on rules in the Outage Management BPM
Changes Expected in July 2020

RC Priority Date Logic
- RC Priority date will not reset or re-calculate when you check/ uncheck BA/TOP confirmed flag

Nature of Work (NOW) = COMMUNICATION or PATH LIMITATION
- webOMS will not check pending requests on overlapping outages for COMMUNICATION & PATH LIMITATION NOW
- To allow participant to submit multiple changes on the same communication equipment
Changes Expected in July 2020 (Continued..)

Retrieve Change Request Services

• Implementing 50 outages limit for change request services
Developer.caiso.com

For various API services, watch for:

• Guidance on usage patterns
• Sample XMLs
• XSDs
• End-points
• Common errors & warnings
• Active versus retired services
Customer Service Communications

Releases
• For each release we are providing release notes.

System Maintenance
• Bronto Messages
• ISO system portal

Issues/Questions/Clarifications
• CIDI Tickets
• Contact Customer Service
  – Ph: 916-608-7320
  – Email: isoclientrepresentatives@caiso.com
Questions?
Recapitulating from Last CPG
Discovery Date Changes – Moved to Q3-Q4

• Per tariff section 9.3.10.3(a &b), in anticipation of a forced outage, the CAISO control center must be notified as soon as feasible if:
  – Generating Unit or Resource specific system resource has a reduction of current availability >10MW
  – Eligible intermittent resource of Pmax >10MW has reduction in current availability>1MW
• If prior notice is not possible,
  – Transmission facilities must notify the ISO through OMS within 30 minutes of the outage occurring.
  – Generating units and resource specific system resources and Eligible intermittent resources with Pmax>10MW must notify through OMS within 60minutes of discovery of outage with the discovery time of the issue.
• WebOMS system will not default the discovery date
• Refer section 7.2.1 of the Outage Management (OM) BPM
## WebOMS Usage Guidelines

<table>
<thead>
<tr>
<th>Topic</th>
<th>Do:</th>
<th>Don’t:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outage event</td>
<td>✓ Create a separate outage for each event</td>
<td>✗ Span an outage across months when the resource comes back into service</td>
</tr>
<tr>
<td>Availability</td>
<td>✓ Consolidate availability and split the outage points only when availability changes</td>
<td>✗ Split outage points on an hourly or daily basis if the availability has not changed</td>
</tr>
<tr>
<td>Span</td>
<td>✓ Limit outage period to a:</td>
<td>✗ Create an outage with several break-points spanning 1 or more months</td>
</tr>
<tr>
<td></td>
<td>• Week for hourly changes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Month for daily changes</td>
<td></td>
</tr>
<tr>
<td>Outage Updates</td>
<td>✓ Submit changes to outage when the availability changes by 1 MW or more</td>
<td>✗ Submit changes when the availability changes are &lt; 1 MW</td>
</tr>
<tr>
<td></td>
<td>✓ Limit the change submission to once every 12 hours, when the outage start time is more than 48 hours from current time</td>
<td>✗ Frequently submission of changes to outages that have a start time well into the future</td>
</tr>
<tr>
<td>Topic</td>
<td>Do:</td>
<td>Don’t:</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>----------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td>API queries</td>
<td>✓ Spread API requests over a few minutes between submits &amp; retrieves</td>
<td>✗ Submit multiple requests at or around the same time</td>
</tr>
<tr>
<td></td>
<td>✓ Read CAISO’s Acceptable Use Policy (AUP)</td>
<td></td>
</tr>
<tr>
<td>Retrieve volume</td>
<td>✓ Retrieve over a near term interval for studies using the UPDATE parameter to pull only changes since the last pull</td>
<td>✗ Retrieve without UPDATE parameter</td>
</tr>
<tr>
<td></td>
<td>✓ Retrieve each day to keep data current &amp; within 24 hours of outage changes</td>
<td>✗ Frequently query (within 5 minutes)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>✗ Query for large time periods (several future months/years)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>✗ Pull large volumes of data for a total refresh of your records</td>
</tr>
<tr>
<td>Retrieve Resource/Transmission Outage</td>
<td>✓ Use v3 version of the service</td>
<td>✗ Use the ‘Change Request’ service frequently to sync data (as it pulls all outage versions)</td>
</tr>
<tr>
<td></td>
<td>✓ Check for warnings &amp; errors to correct the outage under (OutageValidation)</td>
<td>✗ Use v2 or v1 service</td>
</tr>
<tr>
<td>Retrieve Availability</td>
<td>✓ Use v2 version of the service</td>
<td>✗ Use v1 service</td>
</tr>
</tbody>
</table>
# WebOMS Acceptable Use Policy (AUP)

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enforcement of the AUP</td>
<td>• Applied per service per user certificate in production and Map_Stage</td>
</tr>
<tr>
<td></td>
<td>• No non-production use in production</td>
</tr>
<tr>
<td>Expected size of payload (average &amp; maximum)</td>
<td>Variable (1KB to 1MB+)</td>
</tr>
<tr>
<td>Expected frequency (average &amp; maximum)</td>
<td>• On demand (50/day –1,000/day)</td>
</tr>
<tr>
<td></td>
<td>• A service shall be invoked no more than once every 5 seconds</td>
</tr>
<tr>
<td>Longest unavailable time for a service</td>
<td>• 30 minutes unless planned WebOMS maintenance</td>
</tr>
<tr>
<td></td>
<td>• Outage Coordinators can call ISO directly with critical near-term outages</td>
</tr>
<tr>
<td>Expected response time for a service</td>
<td>Variable (.1 sec –30 sec)</td>
</tr>
<tr>
<td>Expected time to exchange</td>
<td>Variable (.1 sec –30 sec)</td>
</tr>
<tr>
<td>Service time out</td>
<td>Request–to–Response 5 minutes</td>
</tr>
</tbody>
</table>
Questions?

For follow-up questions or to suggest future topics please contact your client representative or submit a CIDI ticket.