BPM Change Management Meeting

Nicole Hines
BPM Change Management Process Administrator
BPM_CM@caiso.com

April 27, 2021

The information contained in these materials is provided for general information only and does not constitute legal or regulatory advice. The ultimate responsibility for complying with the ISO FERC Tariff and other applicable laws, rules or regulations lies with you. In no event shall the ISO or its employees be liable to you or anyone else for any decision made or action taken in reliance on the information in these materials.
Reminders

• This call is being recorded for informational and convenience purposes only. Any related transcriptions should not be reprinted without ISO permission.
  – Video recording will be posted to the BPM webpage within 3 business days

• To ask a question, press #2 on your telephone keypad.

• Calls are structured to stimulate an honest dialogue and engage different perspectives.

• Please keep comments friendly and respectful.
# Agenda – BPM Change Management Meeting
## April 27, 2021

<table>
<thead>
<tr>
<th>Topic</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction / Meeting Overview</td>
<td>Nicole Hines</td>
</tr>
<tr>
<td><strong>Discussion of active proposed changes:</strong></td>
<td></td>
</tr>
<tr>
<td>Settlements and Billing BPM</td>
<td>Brenda Corona</td>
</tr>
<tr>
<td>Market Operations BPM</td>
<td>Jamal Batakji</td>
</tr>
<tr>
<td>Market Instruments BPM</td>
<td>Jamal Batakji</td>
</tr>
<tr>
<td>Direct Telemetry BPM</td>
<td>Priyanka Namburi</td>
</tr>
<tr>
<td>Metering BPM</td>
<td>Priyanka Namburi</td>
</tr>
<tr>
<td>Wrap-Up and Next Steps</td>
<td>Nicole Hines</td>
</tr>
</tbody>
</table>

BPM Change Management Process

[BPM_CM@caiso.com](mailto:BPM_CM@caiso.com)
California ISO Stakeholder Initiative Process

- Business Practice Manuals
  - The purpose of BPMs is to set forth business practices that implement the ISO tariff.
  - The ISO conducts a yearly policy initiative roadmap process to consider and rank initiatives.  
    - *Policy changes submitted though the PRR process will be referred to the policy initiative road map process.*
  - Each subject area in a BPM is based on enabling language in the ISO tariff.  
    - *The PRR process cannot be used to introduce changes that are not supported by existing tariff authority.*
## Settlements and Billing BPM

<table>
<thead>
<tr>
<th>PRR</th>
<th>PRR Title</th>
<th>Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1335</td>
<td>Update CC 7020 reliability must run capacity payment BPM to clawback excess revenue when reliability must run designation is for system transmission access charge area</td>
<td>Initial</td>
</tr>
<tr>
<td>1333</td>
<td>Updated BPM configuration guide for pc spin non-spin no pay quantity to accommodate channel 4 meter quantity being included for LESR and DDR resources</td>
<td>Recommendation</td>
</tr>
<tr>
<td>1332</td>
<td>Adding attribute to support unique pricing for day ahead marginal cost of losses price in day ahead settlement</td>
<td>Recommendation</td>
</tr>
</tbody>
</table>
## Settlemnts and Billing BPM

<table>
<thead>
<tr>
<th>PRR</th>
<th>PRR Title</th>
<th>Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1331</td>
<td>Updated BPM configuration guide pc system resource deemed delivered energy quantity to accommodate system resources whose e-tags are curtailed in the middle of the trade hour</td>
<td>Recommendation</td>
</tr>
<tr>
<td>1330</td>
<td>Updated BPM configuration guide for CC 8835 annual resource adequacy availability incentive mechanism neutrality to accommodate adding a flexible formula stream</td>
<td>Recommendation</td>
</tr>
<tr>
<td>1329</td>
<td>Updated multiple BPM configuration guides to accommodate the real time settlement review - phase 1 initiative</td>
<td>Recommendation</td>
</tr>
</tbody>
</table>
## Settlements and Billing BPM

<table>
<thead>
<tr>
<th>PRR</th>
<th>PRR Title</th>
<th>Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1328</td>
<td>To support the hybrid resources phase 1 initiative, configuration changes are needed to settle hybrid resources for forecasting services</td>
<td>Recommendation</td>
</tr>
<tr>
<td>1323</td>
<td>To eliminate double penalty settlement for intertie resources that switch between 15 minute economic bid and hourly bid option within a given trade date</td>
<td>Recommendation</td>
</tr>
<tr>
<td>1322</td>
<td>Update settlements configuration guide for grid management charge bid segment fee in relation to day ahead nodal pricing model initiative to correct bid segment counts</td>
<td>Recommendation</td>
</tr>
</tbody>
</table>
PPR 1335 – Update CC 7020 reliability must run capacity payment BPM to clawback excess revenue when reliability must run designation is for system transmission access charge area

• Reason for revision
  – Recent new data for RMR designation meant for system-wide TAC area exposed an error in the Settlements formulation under CC 7020 RMR Capacity Payment. Total excess revenues received by the RMR resource as calculated based on Tariff section 11.13 are not clawed back from the resource’s RMR full capacity payment. This issue started with February 1, 2021 data in production. While the capacity payment to the resource as well as the allocation of costs were properly made when designation is for system TAC area, the expected claw back of excess revenues didn’t occur for this specific type of designation.
  – Configuration guide for CC 7020 Daily RMR Capacity Payment has been updated. The changes are to formulas: updated one formula and reflected its new value in another formula that it feeds, and then remove one formula that is no longer needed.
  – The fix will be deployed on or about April 28, 2021 with an effective date of TD 1/1/2020. However, the actual effect will only start with TD 2/1/2021 as that is the first time an RMR resource was designated for system-wide TAC area. As customary for retroactive settlement, Trade Dates that were already settled prior to the production fix will be resettled with the scheduled recalculation for those trade dates.

• Initial comments:
  – No comments submitted

• Initial comment period expired:
  – April 13, 2021

• Next step:
  – Post recommendation
PRR 1333 – Updated BPM configuration guide for pc spin non-spin no pay quantity to accommodate channel 4 meter quantity being included for LESR and DDR resources

• Reason for revision
  – CAISO confirmed that currently DReAMS is considering only Channel 4 meter quantity in the meter measure for LESR and DDR resources. If the resource is in charging mode, DReAMS is not taking the Channel 1 meter data. This is causing incorrect settlement for these resources. In order to correct, Gen & Load Measurement Types in DReAMS will be netted for LESR & DDR. The BPM will reflect a documentation only update to account for the new netting process. PC Spin Non-Spin No Pay Quantity is impacted.
  – The effective trade date of the change is retroactive to 11/1/2019 T-18M and the anticipated implementation date is 5/28/2021.

• Recommendation comments:
  – No comments submitted

• Recommendation comment period expired:
  – April 13, 2021

• Next step:
  – Post final decision
PRR 1332 – Adding attribute to support unique pricing for day ahead marginal cost of losses price in day ahead settlement

- **Reason for revision**
  - Currently the DA MCL has a non-unique price. The addition of the intertie ID/flowgate ID attribute will allow for a unique price for settlement if a node has a different price for an associated contract for DA Energy. This change is in Charge Code 6011 Day Ahead Energy, Congestion, Loss Settlement v5.6.
  - The effective date of the changes is 5/1/2021 and the anticipated implementation date is 4/28/2021, this is a prospective Settlements config change.

- **Recommendation comments:**
  - No comments submitted

- **Recommendation comment period expired:**
  - April 13, 2021

- **Next step:**
  - Post final decision
Reason for revision

- System Resources e-tags are curtailed in the middle of the trade hour it results in an incorrect Logical Meter Calculation (LMC) for CAISO Dynamic Resources. The solution is to enhance the LMC settlement calculation to multiply LMC Allocation Factor against the sum of the 12 hourly tagged quantities provided by the interchange transaction scheduling system (ITS) and then divide the end result by 12. PC System Resource Deemed Delivered Energy Quantity is directly impacted.
- The effective trade date of the change is 5/1/2021 and the anticipated implementation date is 4/28/2021.

Recommendation comments:
- No comments submitted

Recommendation comment period expired:
- April 13, 2021

Next step:
- Post final decision
PRR 1330 – Updated BPM configuration guide for CC 8835 annual resource adequacy availability incentive mechanism neutrality to accommodate adding a flexible formula stream

• Reason for revision
  – Settlements configured a Flexible allocation stream in order to allocate Flexible unallocated funds to the Flexible MW quantity that the Load Serving Entities (LSE) were required to show on each monthly Resource Adequacy (RA) plan. This is required in order to allocate Flexible unallocated funds from 2018 on the January 2019 T+33M monthly recalculation statement. A Flexible allocation stream has been added to the already existing Generic allocation stream. CC 8835 Annual Resource Adequacy Availability Incentive Mechanism Neutrality is directly impacted.
  – The effective trade date is 1/1/2019 and the anticipated implementation date is 4/28/2021.

• Recommendation comments:
  – No comments submitted

• Recommendation comment period expired:
  – April 13, 2021

• Next step:
  – Post final decision
PRR 1329 – Updated multiple BPM configuration guides to accommodate the real time settlement review - phase 1 initiative

• Reason for revision
  – This change is made to support the Real Time Settlement Review - Phase 1 initiative. This change is necessary to implement the CAISO proposed changes in the Tariff. More specifically, The changes for Real Time Settlements Review – Phase 1 are:
    • Eliminate the option for EIM entities to settle their base ETSR schedule deviations bilaterally. Deviations will be settled through the CAISO market at scheduling point intertie prices at a unique pricing location. (Impacted CCs: 64600, 64770, 64700, 6477, 6985, PC Real Time Congestion, PC Real Time Energy Quantity)
    • Change calculation for real-time bid cost recovery (BCR) transfer adjustment amount to be allocated based upon ETSR export over ETSR export plus load and exports (load and exports are equivalent to measured demand). (Impacted CCs: PC Real Time Energy Quantity)
  – This change will be deployed on 4/28/2021, and retroactive on 5/1/2021.

• Recommendation comments:
  – No comments submitted

• Recommendation comment period expired:
  – April 13, 2021

• Next step:
  – Post final decision
PRR 1328 – To support the hybrid resources phase 1 initiative, configuration changes are needed to settle hybrid resources for forecasting services

• Reason for revision
  – As part of the Hybrid Resources Phase 1 initiative, the ISO requires a way to assess forecast fees on hybrid resources that have a VER component.
  – 701 Forecasting Service Fee was modified to accommodate hybrid resources separately to account for this change.
  – The effective date of the changes is 12/1/2020 and the anticipated implementation date is 4/28/2021, this is a retroactive Settlements config change.

• Recommendation comments:
  – No comments submitted

• Recommendation comment period expired:
  – April 13, 2021

• Next step:
  – Post final decision
PRR 1323 – To eliminate double penalty settlement for intertie resources that switch between 15 minute economic bid and hourly bid option within a given trade date

• Reason for revision
  – An issue was identified through CIDI by a market participant wherein a resource was getting penalized in both the hourly and 15m category of IDS penalty settlement. After further research, it was determined that the resource switched between 15 minute economic bid and hourly bid option within the same trading day.
  – The solution is to update the settlements configuration to account for such behavior. The ISO anticipates implementation of the BPM changes on or about 2/17/2021, with a retroactive effective Trade Date of 2/1/2021.

• Recommendation comments:
  – No comments submitted

• Recommendation comment period expired:
  – April 13, 2021

• Next step:
  – Post final decision
PRR 1322 – Update settlements configuration guide for grid management charge bid segment fee in relation to day ahead nodal pricing model initiative to correct bid segment counts

• Reason for revision
  – As part of the DA Nodal initiative, NPM SCs were given advisory statements and the charge configuration was modified to allow this. There was a defect noted that changes from the DA Nodal initiative zeroed all bid count segments for NPM and existing market resources.
  – The proposed change to 4515 GMC Bid Transaction Fee v5.6.1 re-enables the normal bid segment count for market participants while preserving the advisory settlement for NPM SCs.
  – The ISO anticipates implementation of the BPM changes on or about 2/17/2021, with a retroactive effective Trade Date of 1/1/2021.

• Recommendation comments:
  – No comments submitted

• Recommendation comment period expired:
  – April 13, 2021

• Next step:
  – Post final decision
Direct Telemetry BPM

<table>
<thead>
<tr>
<th>PRR</th>
<th>PRR Title</th>
<th>Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1327</td>
<td>Pseudo ties for shared resources</td>
<td>Recommendation</td>
</tr>
</tbody>
</table>
PRR 1327 – Pseudo ties for shared resources

• Reason for revision
  – Section 6.1 has been updated to include requirements for Pseudo ties of Shared Resources.

• Recommendation comments:
  – No comments submitted

• Recommendation comment period expired:
  – April 13, 2021

• Next step:
  – Post final decision
# Metering BPM

<table>
<thead>
<tr>
<th>PRR</th>
<th>PRR Title</th>
<th>Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1326</td>
<td>Pseudo ties for shared resources</td>
<td>Recommendation</td>
</tr>
</tbody>
</table>
PRR 1326 – Pseudo ties for shared resources

• Reason for revision
  – Updated Section 3.4
    • Added requirement of backup meter for loss compensation schemes.
  – New Section 4.4
    • Pseudo-ties for shared resources.

• Recommendation comments:
  – No comments submitted

• Recommendation comment period expired:
  – April 13, 2021

• Next step:
  – Post final decision
<table>
<thead>
<tr>
<th>PRR</th>
<th>PRR Title</th>
<th>Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1337</td>
<td>FERC order 831 compliance for energy cost recovery penalty prices</td>
<td>Initial</td>
</tr>
<tr>
<td>1334</td>
<td>State of charge reservation for regulation</td>
<td>Initial</td>
</tr>
</tbody>
</table>
PRR 1337 – FERC order 831 compliance for energy cost recovery penalty prices

• Reason for revision
  – This is related to FERC Order 831 compliance filing. This phase is related to the penalty prices at which the CAISO market will relax market constraints under the increased energy bid cap.
  – Effective Date: 3/20/2021

• Initial comments:
  – No comments submitted

• Initial comment period expired:
  – April 13, 2021

• Next step:
  – Post recommendation
PRR 1334 – State of charge reservation for regulation

• Reason for revision
  – CAISO Tariff requires all resources awarded regulation are able to respond to automatic generator control (AGC) signals, the storage resources providing regulation must have sufficient state of charge to respond to automatic generator control signals.

• Initial comments:
  – WPTF; submitted 4/13/21

• Initial comment period expired:
  – April 13, 2021

• Next step:
  – Post recommendation
## Market Instruments BPM

<table>
<thead>
<tr>
<th>PRR</th>
<th>PRR Title</th>
<th>Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1336</td>
<td>FERC order 831 compliance for energy cost recovery price screening</td>
<td>Initial</td>
</tr>
</tbody>
</table>
PRR 1336 – FERC order 831 compliance for energy cost recovery price screening

- Reason for revision
  - This is related to FERC Order 831 compliance filing. This phase is related to the price-screening methodology for import bids greater than $1,000/MWh.
  - Effective Date: 3/20/2021

- Initial comments:
  - No comments submitted

- Initial comment period expired:
  - April 13, 2021

- Next step:
  - Post recommendation
Next BPM PRR Review Monthly Meeting:
May 25, 2021 @ 11 a.m.

BPM change management process questions:
Nicole Hines
BPM_CM@caiso.com