BPM Change Management Meeting

Isabella Nicosia
BPM Change Management Process Administrator

BPM_CM@caiso.com

September 29, 2020
# Agenda – BPM Change Management Meeting

**September 29, 2020**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction / Meeting Overview</td>
<td>Isabella Nicosia</td>
</tr>
<tr>
<td><strong>Discussion of active proposed changes:</strong></td>
<td></td>
</tr>
<tr>
<td>Demand Response BPM</td>
<td>Pia Sok</td>
</tr>
<tr>
<td>Settlements and Billing BPM</td>
<td>Brenda Corona</td>
</tr>
<tr>
<td>Generator Interconnection and Deliverability Allocation</td>
<td>Jason Foster</td>
</tr>
<tr>
<td>Procedures BPM</td>
<td></td>
</tr>
<tr>
<td>Metering BPM</td>
<td>Michael Ucol</td>
</tr>
<tr>
<td>Credit Management and Market Clearing BPM</td>
<td>Christina Billing</td>
</tr>
<tr>
<td>Managing Full Network Model BPM</td>
<td>Vivian Liang</td>
</tr>
<tr>
<td>Outage Management BPM</td>
<td>Abdul Mohammed-Ali</td>
</tr>
<tr>
<td>Reliability Requirements BPM</td>
<td>Abdul Mohammed-Ali</td>
</tr>
<tr>
<td>Market Instruments BPM</td>
<td>Jamal Batakji</td>
</tr>
<tr>
<td>Energy Imbalance Market BPM</td>
<td>Jamal Batakji</td>
</tr>
<tr>
<td>Market Operations BPM</td>
<td>Jamal Batakji</td>
</tr>
<tr>
<td>Wrap-Up and Next Steps</td>
<td>Isabella Nicosia</td>
</tr>
</tbody>
</table>

BPM Change Management Process  
916-608-5829 [BPM_CM@caiso.com](mailto:BPM_CM@caiso.com)

ISO PUBLIC – © 2020 CAISO
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 through 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.*
## Demand Response BPM

<table>
<thead>
<tr>
<th>PRR</th>
<th>PRR Title</th>
<th>Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1283</td>
<td>Update to section 5.7, and correction to Appendix B for ESDER 3B</td>
<td>Initial</td>
</tr>
<tr>
<td>1272</td>
<td>Demand response effective flexible capacity</td>
<td>Recommendation</td>
</tr>
</tbody>
</table>
PRR 1283 – Update to section 5.7, and correction to Appendix B for ESDER 3B

• Reason for revision
  – Add additional ISO tariff section reference to section 5.7, and correction to Appendix B, for PDR_LSR Consumption (CON) resource ID under "LOAD" measurement type for ESDER 3B.

• Initial comments:
  – No comments submitted

• Initial comment period expired:
  – October 13, 2020

• Next step:
  – Post recommendation
PRR 1272 – Demand response effective flexible capacity

• Reason for revision
  – Add section 10 for Effective Flexible Capacity (EFC) values for Resource Adequacy
  – Effective date 8/1/2020
• Recommendation comments:
  – No comments submitted
• Recommendation comment period expired:
  – September 16, 2020
• Next step:
  – Post final decision
## Settlements and Billing BPM

<table>
<thead>
<tr>
<th>PRR</th>
<th>PRR Title</th>
<th>Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1277</td>
<td>Configuration guide for pre-calc resource adequacy availability incentive mechanism to accommodate commitment cost enhancement tariff clarifications</td>
<td>Recommendation</td>
</tr>
<tr>
<td>1276</td>
<td>To support FERC 841 requested adjustments, configuration changes to exempt negative energy for storage resources settlement in cases where the associated utility distribution company or retail utility is unable/ unwilling to separate wholesale and retail</td>
<td>Recommendation</td>
</tr>
<tr>
<td>1275</td>
<td>Pre-calc residual unit commitment no pay quantity and pre-calc spin non-spin no pay quantity to accommodate incorporating proxy demand resource – load-shifting resource curtailment resources into residual unit commitment and spin/non-spin processes</td>
<td>Recommendation</td>
</tr>
</tbody>
</table>
PRR 1277 – Configuration guide for pre-calc resource adequacy availability incentive mechanism to accommodate commitment cost enhancement tariff clarifications

• Reason for revision
  – The Commitment Cost Enhancement (CCE3) initiative necessitated a change to the description of an existing primary bill determinant. The existing bill determinant has been remapped to accommodate an additional RAAIM exemption for run of river hydro resources.
  – The description for ResourceAcquiredRightsFlag will be updated to reflect that it grants exemptions for acquired rights and run of river (hydro) resources. Tariff language will be filed for 7/1/2020 effective date with the understanding the once the implementation is complete RAAIM charges will be re-settled and the anticipated implementation date is 9/29/2020.

• Recommendation comments:
  – No comments submitted

• Recommendation comment period expired:
  – September 16, 2020

• Next step:
  – Post final decision
PRR 1276 – To support FERC 841 requested adjustments, configuration changes to exempt negative energy for storage resources settlement in cases where the associated utility distribution company or retail utility is unable/unwilling to separate wholesale and retail

• Reason for revision
  – As part of FERC Order 841 "A Scheduling Coordinator (SC) representing an NGR resource associated with a UDC or Retail Utility that is unable or unwilling to separate wholesale and retail charges may request the CAISO to assign a special classification that will exempt the NGR from CAISO charges for negative energy. Such request by the SC must meet criteria and documentation requirements as specified by the CAISO in the Metering BPM."
  – To comply with the FERC Order, CAISO needs to zero out the settlement of this special classification where there is negative energy, which required modifying the Charge Codes listed in the BPM Section of this document.
  – The effective date of the changes is 10/1/2020 and the anticipated implementation date is 9/29/2020.

• Recommendation comments:
  – No comments submitted

• Recommendation comment period expired:
  – September 16, 2020

• Next step:
  – Post final decision
PRR 1275 – Pre-calc residual unit commitment no pay quantity and pre-calc spin non-spin no pay quantity to accommodate incorporating proxy demand resource – load-shifting resource curtailment resources into residual unit commitment and spin/non-spin processes

• Reason for revision
  – The ESDER Phase 3 Initiative introduces (PDR-LSR) curtailment and (PDR-LSR) consumption resources into the CAISO market. The changes are to incorporate curtailment resources into Residual Unit Commitment (RUC) and Spin/Non-Spin processes. Since a curtailment resource can provide RUC, Spin, and Non-Spin, existing equations in the PC RUC No Pay Quantity and PC Spin Non-Spin No Pay BPMs will be updated where curtailment specific inclusions are required.
  – The effective date of the changes is 10/1/2020 and the anticipated implementation date is 9/29/2020.

• Recommendation comments:
  – No comments submitted

• Recommendation comment period expired:
  – September 16, 2020

• Next step:
  – Post final decision
Generator Interconnection and Deliverability Allocation Procedures BPM

<table>
<thead>
<tr>
<th>PRR</th>
<th>PRR Title</th>
<th>Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1273</td>
<td>Generator interconnection and deliverability allocation procedures: FERC Order 845 final implementation</td>
<td>Recommendation</td>
</tr>
</tbody>
</table>
PRR 1273 – Generator interconnection and deliverability allocation procedures: FERC Order 845 final implementation

• Reason for revision
  – The final GIDAP BPM updates and implementation of the FERC Order 845.

• Recommendation comments:
  – No comments submitted

• Recommendation comment period expired:
  – September 16, 2020

• 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>1266</td>
<td>Settlement Timeline per the market settlements timeline transformation initiative and excess behind the meter production data</td>
<td>Recommendation</td>
</tr>
<tr>
<td>1260</td>
<td>Storage resource requirement per FERC Order 841</td>
<td>Recommendation</td>
</tr>
</tbody>
</table>
PRR 1266 – Settlement Timeline per the market settlements timeline transformation initiative and excess behind the meter production data

• Reason for revision
  – New BPM language has been added Settlement Timeline per the MSTT initiative and Excess Behind the Meter Production data.

• Recommendation comments:
  – No comments submitted

• Recommendation comment period expired:
  – September 16, 2020

• Next step:
  – Post final decision
PPR 1260 – Storage resource requirement per FERC Order 841

• Reason for revision
  – Storage resource requirement per FERC Order 841

• Recommendation comments:
  – No comments submitted

• Recommendation comment period expired:
  – September 16, 2020

• Next step:
  – Post final decision
<table>
<thead>
<tr>
<th>PRR</th>
<th>PRR Title</th>
<th>Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1264</td>
<td>Updates to the estimated aggregate liability calculation due to the market settlement timeline initiative</td>
<td>Recommendation</td>
</tr>
</tbody>
</table>
PRR 1264 – Updates to the estimated aggregate liability calculation due to the market settlement timeline initiative

• Reason for revision
  – Updates to the estimated aggregate liability calculation due to the market settlement timeline initiative.
  – The effective date will be January 1, 2021
• Recommendation comments:
  – No comments submitted
• Recommendation comment period expired:
  – September 16, 2020
• Next step:
  – Post final decision
## Managing Full Network Model BPM

<table>
<thead>
<tr>
<th>PRR</th>
<th>PRR Title</th>
<th>Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1262</td>
<td>Aliso Canyon gas-electric coordination Phase 5</td>
<td>Recommendation</td>
</tr>
</tbody>
</table>
PRR 1262 – Aliso Canyon gas-electric coordination Phase 5

• Reason for revision
  – This revision includes the changes in Section 4.2.7.1.2.3 to support Aliso Canyon gas-electric coordination Phase 5.
  – The effective date will be November 4, 2020.

• Recommendation comments:
  – No comments submitted

• Recommendation comment period expired:
  – September 16, 2020

• Next step:
  – Post final decision
# Outage Management BPM

<table>
<thead>
<tr>
<th>PRR</th>
<th>PRR Title</th>
<th>Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1254</td>
<td>Variable Energy Resources Off Peak Opportunity Outage</td>
<td>Recommendation</td>
</tr>
</tbody>
</table>
PRR 1254 – Variable Energy Resources Off Peak Opportunity Outage

• Reason for revision
  – The current POSO requirement is not aligned correctly for Solar VER resources and creates instances of Solar VERs being subject to POSO, strictly as a result of a calculation due to an outage submittal. The status of the solar resource after production hours has no impact on reliability as the resource could not generate once the sun goes down or "after production hours".
  – Currently, at 10pm, VERs can request an “Off Peak Opportunity Outage (OPOO)” that requires the resource’s return to service by 5:59 AM, the following day. A solar VER cannot produce during these hours. In spite of that, if the SC is short RA, the resource may get a Planned Outage Substitution Obligation (POSO). In order to mitigate superfluous POSO requirements, the creation of a "VER Off Peak Opportunity" selection on outage submittals would eliminate the inessential POSO once selected for Solar Resources (VER) performing overnight maintenance. The CAISO’s VER forecast itself will validate that the use of "VER Off Peak Opportunity" outage is correctly applied.

• Recommendation comments:
  – PG&E; submitted 7/14/2020
  – SCE; submitted 7/20/2020

• Recommendation comment period expires:
  – September 16, 2020

• Next step:
  – Post final decision
## Reliability Requirements BPM

<table>
<thead>
<tr>
<th>PRR</th>
<th>PRR Title</th>
<th>Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1280</td>
<td>Local regulatory authority resource adequacy adjustments</td>
<td>Initial</td>
</tr>
<tr>
<td>1265</td>
<td>Capacity procurement mechanism soft offer cap policy initiative</td>
<td>Recommendation</td>
</tr>
</tbody>
</table>
PRR 1280 – Local regulatory authority resource adequacy adjustments

• Reason for revision
  – Process for local regulatory authority resource adequacy (LRA RA) adjustments (credits) submission and when/how they can be applied

• Initial comments:
  – SCE; submitted 9/16/2020
  – PG&E; submitted 9/16/2020
  – SDG&E; submitted 9/16/2020
  – CPUC Energy Division; submitted 9/15/2020

• Initial comment period expired:
  – September 16, 2020

• Next step:
  – Post recommendation
PRR 1265 – Capacity procurement mechanism soft offer cap policy initiative

• Reason for revision
  – Updates for CPM Soft Offer Cap Policy Initiative.
• Recommendation comments:
  – No comments submitted
• Recommendation comment period expired:
  – September 16, 2020
• Next step:
  – Post final decision
# Market Instruments BPM

<table>
<thead>
<tr>
<th>PRR</th>
<th>PRR Title</th>
<th>Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1281</td>
<td>Energy imbalance market enhancements 2020</td>
<td>Initial</td>
</tr>
<tr>
<td>1268</td>
<td>Market instruments automated dispatch system dispatch operating target initiative</td>
<td>Recommendation</td>
</tr>
<tr>
<td>1267</td>
<td>Market instruments impacts due to market settlement timeline transformation</td>
<td>Recommendation</td>
</tr>
<tr>
<td>1263</td>
<td>Excess behind the meter production report</td>
<td>Recommendation</td>
</tr>
<tr>
<td>1261</td>
<td>Market instruments BPM changes due to FERC Order 841</td>
<td>Recommendation</td>
</tr>
<tr>
<td>1203</td>
<td>Commitment cost default energy bid enhancements BPM changes</td>
<td>Recommendation</td>
</tr>
</tbody>
</table>
PRR 1281 – Energy imbalance market enhancements 2020

• Reason for revision
  – Changes and enhancements are related to user display, new reports for added market transparency based on feedback from market participants in the Energy Imbalance Market

• Initial comments:
  – No comments submitted

• Initial comment period expired:
  – September 16, 2020

• Next step:
  – Post recommendation
PRR 1268 – Market instruments automated dispatch system dispatch operating target initiative

• Reason for revision
  – With the upgrade of the ADS platform, few enhancements that provide both operational and market efficiencies were added. The detailed enhancements are documented in the Business Requirement Specification, and the impacts to Market Instruments due to these enhancements are included in this PRR.
  – Effective Date: 10/1/2020

• Recommendation comments:
  – No comments submitted

• Recommendation comment period expired:
  – September 16, 2020

• Next step:
  – Post final decision
PRR 1267 – Market instruments impacts due to market settlement timeline transformation

• Reason for revision
  – This is due to the market settlement timeline initiative that will allow CAISO and Market Participants sufficient time to resolve disputes, reduce Market Participant financial exposure, and extend the flexibility in publishing settlement statements and weekly invoices.
  – Effective date: 10/1/2020

• Recommendation comments:
  – No comments submitted

• Recommendation comment period expired:
  – September 16, 2020

• Next step:
  – Post final decision
PRR 1263 – Excess behind the meter production report

- Reason for revision
  - This is due to the increase in behind the meter production, ISO added enhancements to include EBTMP along with gross metering submissions by the SC. ISO will publish, as aggregated by TAC Area at an hourly time interval, Excess Behind the Meter Production performance in an OASIS report for market participants.
    - Effective date: 10/1/2020

- Recommendation comments:
  - No comments submitted

- Recommendation comment period expired:
  - September 16, 2020

- Next step:
  - Post final decision
PRR 1261 – Market instruments BPM changes due to FERC Order 841

• Reason for revision
  – This is due to FERC order 841 where the ISO will do modification to ensure NGR resources do not incur charges for which the resource has a negative energy. So we added a new generator attribute for designating NGRs as eligible for exemption from the wholesale charges for negative energy.
    – Effective Date: 10/1/2020

• Recommendation comments:
  – No comments submitted

• Recommendation comment period expired:
  – September 16, 2020

• Next step:
  – Post final decision
PRR 1203 – Commitment cost default energy bid enhancements BPM changes

• Reason for revision
  – This update is for adding functionality to make Reference Level Change Requests and re-defines Proxy Costs and Default Bids through the Commitment Cost and Default Energy Bid initiative (CCDEBE).

• Recommendation comments:
  – No comments submitted

• Recommendation comment period expired:
  – September 16, 2020

• Next step:
  – Post final decision
# Energy Imbalance Market BPM

<table>
<thead>
<tr>
<th>PRR</th>
<th>PRR Title</th>
<th>Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1279</td>
<td>Clarification for greenhouse gas allocation for the energy imbalance market</td>
<td>Initial</td>
</tr>
<tr>
<td>1271</td>
<td>Energy imbalance market: market settlement timeline transformation</td>
<td>Recommendation</td>
</tr>
</tbody>
</table>
PRR 1279 – Clarification for greenhouse gas allocation for the energy imbalance market

• Reason for revision
  – To further clarify how the market processes Greenhouse Gas (GHG) Allocation when there is a market disruption.
  – Effective date: upon completion of the PRR process

• Initial comments:
  – No comments submitted

• Initial comment period expired:
  – September 16, 2020

• Next step:
  – Post recommendation
PRR 1271 – Energy imbalance market: market settlement timeline transformation

• Reason for revision
  – This is due to the market settlement timeline initiative that will allow CAISO and Market Participants sufficient time to resolve disputes, reduce Market Participant financial exposure, and extend the flexibility in publishing settlement statements and weekly invoices.
  – Effective Date: 10/1/2020

• Recommendation comments:
  – No comments submitted

• Recommendation comment period expired:
  – September 16, 2020

• Next step:
  – Post final decision
<table>
<thead>
<tr>
<th>PRR</th>
<th>PRR Title</th>
<th>Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1282</td>
<td>Scheduling of export resources in real time market</td>
<td>Initial</td>
</tr>
<tr>
<td>1278</td>
<td>Non-generator resource update</td>
<td>Initial</td>
</tr>
<tr>
<td>1274</td>
<td>Flexible ramping product buffer interval</td>
<td>Recommendation</td>
</tr>
<tr>
<td>1270</td>
<td>Market Operations automated dispatch system dispatch operating target initiative</td>
<td>Recommendation</td>
</tr>
<tr>
<td>1269</td>
<td>Market operations appendices automated dispatch system dispatch operating target initiative</td>
<td>Recommendation</td>
</tr>
</tbody>
</table>
PRR 1282 – Scheduling of export resources in real time market

• Reason for revision
  – These changes are to improve the scheduling of resources in the Residual Unit Commitment (RUC) and real-time process based on expected priorities for exports.
  – This PRR goes into effect on September 5, 2020.

• Initial comments:
  – No comments submitted

• Initial comment period expired:
  – October 13, 2020

• Next step:
  – Post recommendation
PRR 1278 – Non-generator resource update

• Reason for revision
  – The ISO has implemented several improvements to the Non-Generator Resource (NGR) Model in the day-ahead and real-time market. The PRR document provides detailed information regarding the changes applied to the market model.
  – Effective Date: 8/27/2020

• Initial comments:
  – SDG&E; submitted 9/16/2020
  – PG&E; submitted 9/16/2020

• Initial comment period expired:
  – September 16, 2020

• Next step:
  – Post recommendation
Reason for revision
  - This improvement is to address the flexible ramping product issues related to ramping capacity that can be dispatched in subsequent market runs to cover range in the forecasted net load.
  - Effective Date: 10/1/2020
Recommendation comments:
  - No comments submitted
Recommendation comment period expired:
  - September 16, 2020
Next step:
  - Post final decision
PRR 1270 – Market Operations automated dispatch system dispatch operating target initiative

• Reason for revision
  – With the upgrade of the ADS platform, few enhancements that provide both operational and market efficiencies were added. The detailed enhancements are documented in the Business Requirement Specification, and the impacts to Market Operation due to these enhancements are included in this PRR.
  – Effective Date: 10/1/2020

• Recommendation comments:
  – No comments submitted

• Recommendation comment period expired:
  – September 16, 2020

• Next step:
  – Post final decision
PRR 1269 – Market operations appendices automated dispatch system dispatch operating target initiative

• Reason for revision
  – With the upgrade of the ADS platform, few enhancements that provide both operational and market efficiencies were added. The detailed enhancements are documented in the Business Requirement Specification, and the impacts to Market Operation Appendices due to these enhancements are included in this PRR.
  – Effective Date: 10/1/2020
• Recommendation comments:
  – No comments submitted
• Recommendation comment period expired:
  – September 16, 2020
• Next step:
  – Post final decision
Next BPM PRR Review Monthly Meeting:
October 27, 2020 @ 11 a.m.

BPM change management process questions:
Isabella Nicosia
916-608-5829
BPM_CM@caiso.com