



BPM Change Management Meeting

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- Meeting is structured to stimulate honest dialogue and engage different perspectives.
- Please keep comments professional and respectful.

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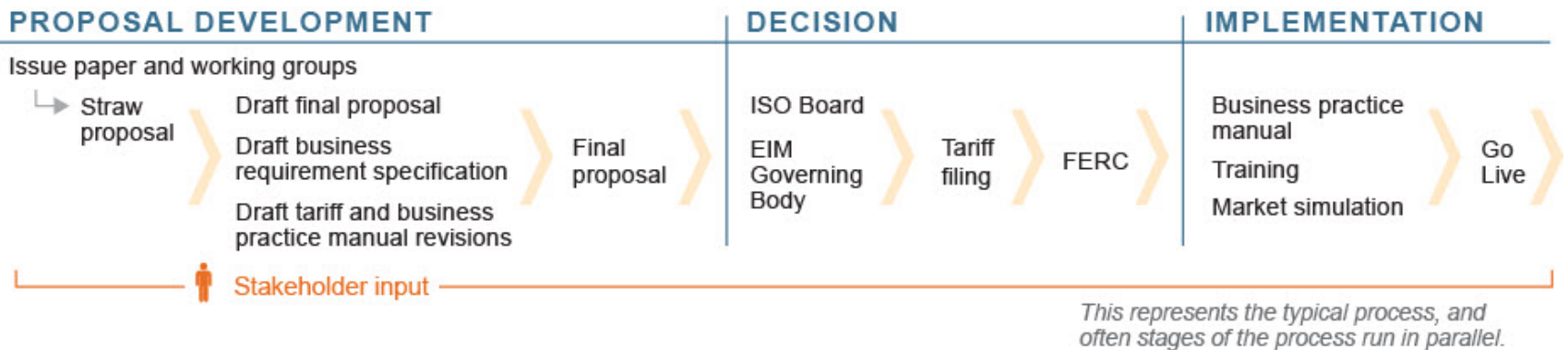
Agenda – BPM Change Management Meeting

October 26, 2021

Topic	Presenter
Introduction / Meeting Overview	Isabella Nicosia
Discussion of active proposed changes: Energy Imbalance Market BPM Market Operations BPM Market Instruments BPM Congestion Revenue Rights BPM Scheduling Coordinator Certification and Termination BPM Candidate CRR Holder Registration BPM Direct Telemetry BPM Transmission Planning Process BPM Settlements and Billing BPM Managing Full Network Model BPM	Jamal Batakji Jamal Batakji Jamal Batakji Jacob Fox Nicole Hines Nicole Hines Priyanka Namburi Riddhi Ray Brenda Corona Vivian Liang
Wrap-Up and Next Steps	Isabella Nicosia

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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.*

Energy Imbalance Market BPM

PRR	PRR Title	Stage
1389	Excluding outlier data from energy imbalance market uncertainty histograms	Initial
1368	Unaccounted for energy settlement election process	Recommendation

PRR 1389 – Excluding outlier data from energy imbalance market uncertainty histograms

- Reason for revision
 - This update is to establish a guideline to aid the EIM entities in determining when and how to request exclusion of outlier data.
- Initial comments:
 - No comments submitted to date
- Initial comment period expired:
 - October 19, 2021
- Next step:
 - Post recommendation

PRR 1368 – Unaccounted for energy settlement election process

- Reason for revision
 - This is a new process related to Unaccounted For Energy Settlement election. This is detailed in section 2.4 of the EIM BPM. The code delivery is on November 1st, 2021, but the election notice is due prior to the code delivery. For 2021 election year, the entities need to submit the UFE Election Letter by 9/30/21. For 2022 election year, the deadline is 10/31/21.
- Recommendation comments:
 - No comments submitted
- Recommendation comment period expired:
 - October 19, 2021
- Next step:
 - Post final decision

Market Operations BPM

PRR	PRR Title	Stage
1387	Hybrid resources phase 2 updates related to Market Operation BPM	Initial
1382	Energy storage and distributed resources phase 4 updates related to market operations BPM	Initial
1371	Persistence forecast enhancement	Recommendation

PRR 1387 – Hybrid resources phase 2 updates related to Market Operation BPM

- Reason for revision
 - Building on phase 1, this Hybrid resources is related to phase 2A of the initiative. The enhancement of this phase will focus on how hybrid generation resources can operate within the ISO markets. Targeted for Fall release 2021.
- Initial comments:
 - No comments submitted to date
- Initial comment period expired:
 - October 19, 2021
- Next step:
 - Post recommendation

PRR 1382 – Energy storage and distributed resources phase 4 updates related to market operations BPM

- Reason for revision
 - This is to enhance the ability of Energy Storage and Distributed Resources to participate in the ISO market. One document, we added a new paragraph describing the end of hour state of charge bid parameter in real time market. In the second document we provided some edits to section 6.5.4 and referenced all DEB related topics to attachment D in Market Instruments BPM.
 - Target Date: 11/1/21
- Initial comments:
 - No comments submitted to date
- Initial comment period expired:
 - October 19, 2021
- Next step:
 - Post recommendation

PRR 1371 – Persistence forecast enhancement

- Reason for revision
 - This is to address operational concerns during a time a renewable resource is onboarding.
- Recommendation comments:
 - No comments submitted
- Recommendation comment period expired:
 - October 19, 2021
- Next step:
 - Post final decision

Market Instruments BPM

PRR	PRR Title	Stage
1386	Hybrid resources phase 2 updates related to Market Instrument BPM	Initial
1381	Energy storage and distributed resources phase 4 updates related to market instrument BPM	Initial

PRR 1386 – Hybrid resources phase 2 updates related to Market Instrument BPM

- Reason for revision
 - Building on phase 1, this Hybrid resources is related to phase 2A of the initiative, the enhancement of this phase will focus on how hybrid generation resources can operate within the ISO markets. Targeted for Fall release 2021.
- Initial comments:
 - No comments submitted to date
- Initial comment period expired:
 - October 19, 2021
- Next step:
 - Post recommendation

PRR 1381 – Energy storage and distributed resources phase 4 updates related to market instrument BPM

- Reason for revision
 - This is to enhance the ability of Energy Storage and Distributed Resources to participate in the ISO market. This includes enhancement to the Default Energy Bids calculations for the storage resources related to energy costs, variable costs, and price based opportunity costs.
 - Target Date: 11/1/21
- Initial comments:
 - No comments submitted to date
- Initial comment period expired:
 - October 19, 2021
- Next step:
 - Post recommendation

Congestion Revenue Rights BPM

PRR	PRR Title	Stage
1388	Market data availability on market user interface	Initial

PRR 1388 – Market data availability on market user interface

- Reason for revision
 - New process addressing the time period after a market run that the public download files will be available on the market user interface.
- Initial comments:
 - No comments submitted to date
- Initial comment period expired:
 - October 19, 2021
- Next step:
 - Post recommendation

Scheduling Coordinator Certification and Termination

PRR	PRR Title	Stage
1385	Scheduling coordinator update for document submission process	Initial

PRR 1385 – Scheduling coordinator update for document submission process

- Reason for revision
 - The reason for revision is to add information on how to submit documentation through CIDI which started in July of 2021. Also updated minor wording and links for accuracy. Effective date will be 11/30/2021
- Initial comments:
 - No comments submitted to date
- Initial comment period expired:
 - October 19, 2021
- Next step:
 - Post recommendation

Candidate CRR Holder Registration BPM

PRR	PRR Title	Stage
1384	Additional information for congestion revenue rights holder self-termination	Initial
1365	Updating congestion revenue rights holder registration for document submission and formatting	Recommendation

PRR 1384 – Additional information for congestion revenue rights holder self-termination

- Reason for revision
 - The reason for this revision is to include additional information for CRR Holders wishing to self-terminate and clarifying that once letter is submitted, no additional CRR auction participation is allowed. Effective date is 11/30/21.
- Initial comments:
 - No comments submitted to date
- Initial comment period expired:
 - October 19, 2021
- Next step:
 - Post recommendation

PRR 1365 – Updating congestion revenue rights holder registration for document submission and formatting

- Reason for revision
 - Revisions were made for new CIDI submission process and correcting formatting to BPM.
- Recommendation comments:
 - No comments submitted
- Recommendation comment period expired:
 - October 19, 2021
- Next step:
 - Post final decision

Direct Telemetry BPM

PRR	PRR Title	Stage
1380	High sustainable limit	Initial
1369	Update to the maximum continuous energy limit battery point definition	Recommendation

PRR 1380 – High sustainable limit

- Reason for revision
 - Sections 6.1, 8.4.2 and 14.1 have been updated to include new Telemetry requirements related to the Hybrid Resources initiative.
- Initial comments:
 - No comments submitted to date
- Initial comment period expired:
 - October 19, 2021
- Next step:
 - Post recommendation

PRR 1369 – Update to the maximum continuous energy limit battery point definition

- Reason for revision
 - The Maximum Continuous Energy Limit is a telemetered value which is not used in the market, and therefore should not be bound by the limit in the ISO Master File.
- Recommendation comments:
 - No comments submitted
- Recommendation comment period expired:
 - October 19, 2021
- Next step:
 - Reject the PRR

Transmission Planning Process BPM

PRR	PRR Title	Stage
1379	Changes to section 10.4.5 schedule of request/deadline	Recommendation

PRR 1379 – Changes to section 10.4.5 schedule of request/deadline

- Reason for revision
 - Need to delay schedule for generator modeling of phase 6 and subsequent phases.
- Recommendation comments:
 - No comments submitted
- Recommendation comment period expired:
 - October 19, 2021
- Next step:
 - Post final decision

Settlements and Billing BPM

PRR	PRR Title	Stage
1383	Update regulation no pay pre-calculation to change data source for dispatch operating target calculation quantity	Initial
1378	Updated CC 64770 real time imbalance energy offset energy imbalance market to accurately and properly align with non-California balancing authority areas will get greenhouse gas adjustments	Recommendation
1377	Update configuration guides to reflect settlement of exceptional dispatches designated as TMODEL8 and TMODEL9	Recommendation
1376	Update configuration guides to reflect Western Area Power Administration transmission exchange agreement treatment	Recommendation

Settlements and Billing BPM

PRR	PRR Title	Stage
1374	Updated multiple BPM configuration guides to accommodate the inertia shadow pricing resolution initiative	Recommendation
1373	Updated multiple BPM configuration guides to accommodate the real time settlement review - phase 2 initiative	Recommendation
1372	To support the energy storage distributed energy resources phase 4 initiative, configuration changes are needed to update the settlement of bid cost recovery for non-regulation energy management limited energy resources to align with the initiative	Recommendation
1366	Updated charge code 6456 inertia deviation settlement to exempt hour ahead scheduling process market disruption intervals from inertia deviation settlement penalty assessment and properly align with current Tariff language	Recommendation

PRR 1383 – Update regulation no pay pre-calculation to change data source for dispatch operating target calculation quantity

- Reason for revision
 - Based on the couple of disputes received, calculation of DOT Calculation Flag in EMS PI system is inaccurate and not aligned with settlement requirement. We have better source data to get similar information.
 - Configuration guide for PC Regulation No Pay Quantity has been updated to for the new data source and related configuration change were included.
 - The fix will be deployed on or about October 27, 2021. The effective date will be Trade Date 12/1/2021.
- Recommendation comments:
 - No comments submitted
- Recommendation comment period expired:
 - October 19, 2021
- Next step:
 - Post final decision

PRR 1378 – Updated CC 64770 real time imbalance energy offset energy imbalance market to accurately and properly align with non-California balancing authority areas will get greenhouse gas adjustments

- Reason for revision
 - Configuration change modifying the GHG price used to calculate the OA portion of the GHG adjustment within the EIM real time imbalance energy offset charge code 64770. This update ensures that only non-CA BAAs will get GHG adjustments.
 - The effective date of the changes is 8/1/2019 and the anticipated implementation date is 10/27/21.
- Recommendation comments:
 - No comments submitted
- Recommendation comment period expired:
 - October 19, 2021
- Next step:
 - Post final decision

PRR 1377 – Update configuration guides to reflect settlement of exceptional dispatches designated as TMODEL8 and TMODEL9

- Reason for revision
 - New exceptional dispatches designations TMODEL8 (competitive group) and TMODEL9 (non-competitive group) have been created. Currently, this will be used for dispatches that involve transmission lines impacting Valley Electric Association (VEA) and Gridliance. This new exceptional dispatch (ED) type designations will be used for the settlement and cost allocations involving these companies.
 - Configuration guides as listed above have been updated to reflect the changes.
 - The changes are to be deployed around October 27, 2021. The effective date will be Trade Date 11/1/2021.
- Recommendation comments:
 - No comments submitted
- Recommendation comment period expired:
 - October 19, 2021
- Next step:
 - Post final decision

PRR 1376 – Update configuration guides to reflect Western Area Power Administration transmission exchange agreement treatment

- Reason for revision
 - There is a need to resolve ongoing settlement disputes from Western Area Power Administration (WAPA) regarding its Transmission Exchange Agreement with CAISO and PG&E. This treatment is specific to the mentioned agreement, which exempts certain WAPA schedules from a range of settlement charges that would otherwise apply. There will be an update to WAPA's transmission contract entitlement in relation to transmission contract use after the Day-Ahead market. Further, specific exemption (neither charged nor paid) for flexible ramp product is also applied, in relation to the mentioned agreement.
 - System changes are not required for market participants aside from WAPA.
 - Configuration guides as listed above have been updated for documentation to reflect the changes.
 - The changes are to be deployed around October 27, 2021. The effective date will be Trade Date 11/1/2021.
- Recommendation comments:
 - No comments submitted
- Recommendation comment period expired:
 - October 19, 2021
- Next step:
 - Post final decision

PRR 1374 – Updated multiple BPM configuration guides to accommodate the intertie shadow pricing resolution initiative

- Reason for revision
 - This change is made to support the Intertie Shadow Pricing Resolution initiative. More specifically, the changes are:
 - To resolve the issues related to intertie shadow pricing including labeling and mapping of the intertie shadow prices.
 - This change will be deployed on 10/27/2021, and effective on 11/1/2021.
- Recommendation comments:
 - No comments submitted
- Recommendation comment period expired:
 - October 19, 2021
- Next step:
 - Post final decision

PRR 1373 – Updated multiple BPM configuration guides to accommodate the real time settlement review - phase 2 initiative

- Reason for revision
 - This change is made to support the Real Time Settlement Review - Phase 2 initiative. This change is necessary to implement the CAISO proposed changes in the Tariff. More specifically, The changes for Real Time Settlements Review – Phase 2 are:
 - To allow EIM entities using a load derivation approach the option not to settle unaccounted for energy (UFE).
 - This change will be deployed on 10/27/2021, and effective on 11/1/2021.
- Recommendation comments:
 - No comments submitted
- Recommendation comment period expired:
 - October 19, 2021
- Next step:
 - Post final decision

PRR 1372 – To support the energy storage distributed energy resources phase 4 initiative, configuration changes are needed to update the settlement of bid cost recovery for non- regulation energy management limited energy resources to align with the initiative

- Reason for revision
 - As part of the ESDER 4 initiative, NREM LESRs that utilize the new End of Hour State of Charge biddable parameter or Real Time Self Schedules will be ineligible for RTM Bid Cost Shortfall in the hour of the parameter or schedule, as well as the hour preceding the parameter or schedule.
 - This requires changes to the RTM Net Amount Pre-Calculation configuration guide to identify the impacted hours for the calculation of Bid Cost Recovery.
 - The planned production deployment date is 10/27/2021 with an 11/1/2021 effective date.
- Recommendation comments:
 - No comments submitted
- Recommendation comment period expired:
 - October 19, 2021
- Next step:
 - Post final decision

PRR 1366 – Updated charge code 6456 intertie deviation settlement to exempt hour ahead scheduling process market disruption intervals from intertie deviation settlement penalty assessment and properly align with current Tariff language

- Reason for revision
 - Through the dispute process, an issue was identified where during HASP market disruption intervals, the IDS charge code was calculating penalties based on 0 HASP schedules. The 0 values does not accurately represent the actual instructions followed by market participants. The solution is to exempt HASP market disruption intervals from IDS penalty assessment.
 - Inconsistencies between Tariff language and Settlement Configuration were identified. The IDS quantity calculation for HB resources needed to be adjusted for it to be strictly the difference between HASP schedule and after-the-fact energy profile tag. The IDS pricing logic of 75% of the greater between FMM and RTD LMP for when a resource accepts their award but does not deliver the energy is adjusted to only apply to under delivery. Reliability Curtailment exemption is adjusted to only be applied to under delivery.
 - The effective date of the changes is 2/1/2021 and the anticipated implementation date is 10/27/21.
- Recommendation comments:
 - No comments submitted
- Recommendation comment period expired:
 - October 19, 2021
- Next step:
 - Post final decision

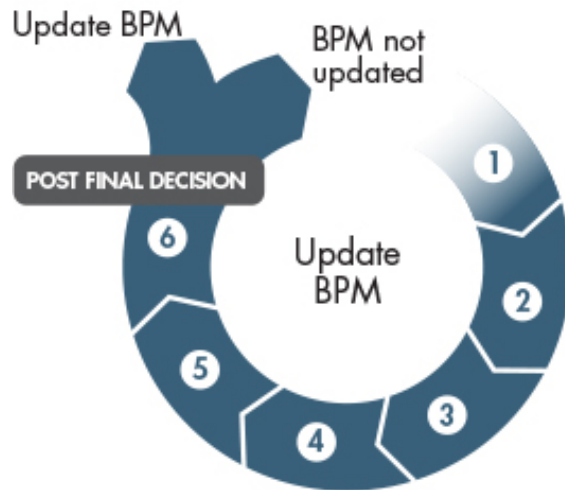
Managing Full Network Model BPM

PRR	PRR Title	Stage
1370	Utilize a nomogram to manage unscheduled flow events in real-time dispatch	Recommendation

PRR 1370 – Utilize a nomogram to manage unscheduled flow events in real-time dispatch

- Reason for revision
 - This revision includes the change in Section 2.1.1.2 to align the BPM with updated contract obligations under the COI Path Operator Agreement and inform market participants that a flow constraint will be enforced on the California-Oregon Intertie (COI) during a Unscheduled Flow (USF) event in Real-Time Dispatch (RTD). The change will allow RTD to support the relief obtained by the regional USF procedure.
 - The effective date will be 9/1/2021.
- Recommendation comments:
 - No comments submitted
- Recommendation comment period expired:
 - October 19, 2021
- Next step:
 - Post final decision

Next BPM PRR Review Monthly Meeting: November 16, 2021 @ 11 a.m.



- 1 SUBMIT PRR**
Proposed Revision Request (PRR) submitted to the ISO
- 2 COMMENTS PERIOD**
Upon ISO acceptance, PRR becomes public and 10-business day comment period starts
- 3 STAKEHOLDER MEETING**
PRR details and comments reviewed and discussed
- 4 RECOMMENDATION**
ISO recommendation issued on PRR
- 5 COMMENTS ON RECOMMENDATION**
10-business day comment period open on recommendation
- 6 STAKEHOLDER MEETING ON RECOMMENDATION**
PRR recommendation and comments reviewed

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process questions:
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