



BPM Change Management Meeting

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September 26, 2023

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Agenda – BPM Change Management Meeting September 26, 2023

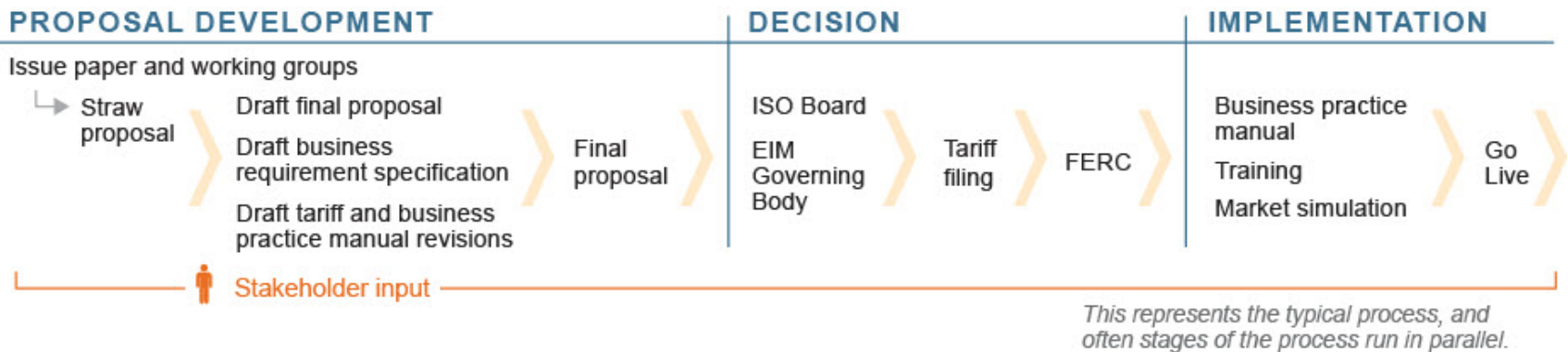
Topic	Presenter
Introduction / Meeting Overview	Nicole Hines
Discussion of active proposed changes:	
Managing Full Network Model	Vivian Liang
Reliability Requirements	Melanie Schimschal
Market Instruments	Michael Martin, Jacob Fox
Market Operations	Michael Martin, Michael Rugh
Congestion Revenue Rights	Mengjia Xiao
Settlements and Billing	Massih Ahmadi
Energy Imbalance Market	Michael Martin, Jacob Fox
Wrap-Up and Next Steps	Nicole Hines

BPM Change Management Process

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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.*

Managing Full Network Model BPM

PRR	PRR Title	Stage
1519	Utilize North to South and South to North nomograms in all real-time markets to manage physical and market flows with all lines in service and/or outage conditions	Recommendation

PRR 1519: Utilize North to South and South to North nomograms in all real-time markets to manage physical and market flows with all lines in service and/or outage conditions

- 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 N-S & S-N flow constraint will be enforced on the California-Oregon Intertie (COI) to manage physical and market flows in all Real-Time Markets (RTD, RTPD, STUC, RTBS).
 - Emergency PRR, The effective date will be 8/1/2023.
- Recommendation Comments: None
- Recommendation comment period expired: September 13, 2023
- Next step: Final Decision

Reliability Requirements BPM

PRR	PRR Title	Stage
1523	Maximum import capability enhancements policy changes	Recommendation

PRR 1523: Maximum import capability enhancements policy changes

- Reason for revision
 - BPM changes to reflect the remaining items from the Maximum Import Capability (MIC) Enhancements policy initiative.
- Recommendation Comments: None
- Recommendation comment period expired: September 13, 2023
- Next step: Final Decision

Congestion Revenue Rights BPM

PRR	PRR Title	Stage
1520	Process for handling disconnected PNodes for congestion revenue rights purposes	Recommendation

PRR 1520: Process for handling disconnected PNodes for congestion revenue rights purposes

- Reason for revision
 - Due to the DAM software parameter update which increases the node replacement layer for disconnected node which eliminate the manual workaround in CRR and price correction
- Recommendation Comments: None
- Recommendation comment period expired: September 13, 2023
- Next step: Final Decision

Market Instruments BPM

PRR	PRR Title	Stage
1524	Maximum import capability enhancements	Recommendation
1531	Two new customer market results interface reports that display market priority types	Initial
1534	Western energy imbalance market Washington greenhouse gas enhancements	Initial
1537	New customer market results interface report that displays Hold state-of-charge exceptional dispatch data	Initial

PRR 1524: Maximum import capability enhancements

- Reason for revision
 - Provide information on new OASIS reports created by the MIC enhancements project.
- Recommendation Comments: None
- Recommendation comment period expired: September 13, 2023
- Next step: Final Decision

PRR 1531: Two new customer market results interface reports that display market priority types

- Reason for revision
 - Addition of Day Ahead and Real Time reports that display the Market Priority Types including ETC/TOR, DAPT, DALPT, RTPP, RTLPT, and RTECON as part to the RSEE Phase 2 Enhancement Project
- Initial Comments: None
- Initial comment period expired: September 13, 2023
- Next step: Post Recommendation

PRR 1534: Western Energy Imbalance market Washington Greenhouse Gas Enhancements

- Reason for revision
 - To update the BPMs for the deployment of the full functionality of the Washington WEIM greenhouse gas enhancements project. These changes undo the previous edits made related to the interim alternative solution implemented for this project and reflect the more permanent, full functionality
- Initial Comments: SRP
- Initial comment period expired: September 13, 2023
- Next step: Post Recommendation

PRR 1537: New customer market results interface report that displays Hold state-of-charge exceptional dispatch data

- Reason for revision
 - As part of the ESE Phase 2 effort, a new CMRI will display Exceptional Dispatch (ED) data pertaining to Hold State-of-Charge (SOC) EDs including ED Start Time, ED End Time, Resource ID, SOC Hold Instruction, Counterfactual Dispatch MW with Hold SOC and Counterfactual Dispatch MW without Hold SOC
- Initial Comments: None
- Initial comment period expired: September 13, 2023
- Next step: Post Recommendation

Market Operations BPM

PRR	PRR Title	Stage
1521	New process to automatically adjust day ahead electronic tags to the match the energy profile to the residual unit commitment final schedule	Recommendation
1526	Addition of a withdrawal limit for scheduling coordinators of battery resources	Initial
1527	Changes to automated dispatch system partial accept and T-minus 20 auto approval	Initial
1530	Changes to ancillary awards constraints and bidding requirements implemented in energy storage enhancements track 1	Initial
1533	Removal of day ahead economic market priority type	Initial
1536	New payment for exceptional dispatches holding state-of-charge	Initial

PRR 1521: New process to automatically adjust day ahead electronic tags to the match the energy profile to the residual unit commitment final schedule

- Reason for revision
 - Emergency PRR
 - The CAISO has implemented a process to automatically adjust Day Ahead E-Tags to the match the Energy Profile to the RUC Final Schedule, which executes every day at 15:30. Effective date is 6/15/2023.
- Recommendation Comments: None
- Recommendation comment period expired: September 13, 2023
- Next step: Final Decision

PRR 1526: Addition of a withdrawal limit for scheduling coordinators of battery resources

- Reason for revision
 - Addition of a withdrawal limit where Scheduling Coordinators of battery resources may limit their charging via an hourly biddable attribute available for either stand-alone or sub-ACCs.
- Initial Comments: NextEra
- Initial comment period expired: September 13, 2023
- Next step: Post Recommendation

PRR 1527: Changes to automated dispatch system partial accept and T-minus 20 auto approval

- Reason for revision
 - The CAISO will no longer auto-accept tag changes post T-20. Any post T-20 changes to e-Tag's will be auto-denied and may be reviewed by the ISO Scheduling desk on a case by case basis.
 - Partial-Acceptance of HASP Awards will be capped at the HASP cleared value. ISO Scheduling Desk will still have the ability to Partial-Accept on behalf of the Scheduling Coordinators, but only to a max value of what cleared HASP
- Initial Comments: None
- Initial comment period expired: September 13, 2023
- Next step: Post Recommendation

PRR 1530: Changes to ancillary awards constraints and bidding requirements implemented in energy storage enhancements track 1

- Reason for revision
 - Emergency PRR
 - Adds bidding requirement for energy storage resources award AS, clarifies AS constraint on SOC, and reorganizes various sections pertaining to energy storage resources.
- Initial Comments: None
- Initial comment period expired: September 13, 2023
- Next step: Post Recommendation

PRR 1533: Removal of day ahead economic market priority type

- Reason for revision
 - The market priority type of Day Ahead Economic (DAECON) indicates a Day Ahead award of lower priority determined economically in the Day Ahead market. Since the DAECON market type is replaced with either RTLPT or RTECON in HASP, it would require Scheduling Coordinators modify the E-tag market priority type after HASP. Removing the DAECON market priority type eliminates the need to re-tag.
- Initial Comments: SRP
- Initial comment period expired: September 13, 2023
- Next step: Post Recommendation

PRR 1536: New payment for exceptional dispatches holding state-of-charge

- Reason for revision
 - As part of the ESE Phase 2 enhancements, storage resources will be compensated for hold SOC EDs using a different methodology than traditional exceptional dispatch. The compensation will be based on an opportunity cost methodology and will capture the revenues that the resource would have received had it been optimally participating in the market, both during the exceptional dispatch and for a period of time after the exceptional dispatch
- Initial Comments: None
- Initial comment period expired: September 13, 2023
- Next step: Post Recommendation

Settlements and Billing BPM

PRR	PRR Title	Stage
1522	Documentation only updates to the real time energy quantity pre-calculation and metered energy adjustment factor pre-calculation for the BAResBaseScheduleEnergy variable. **NOTE: Changed Effective Start Date from 4/1/23 to 3/1/23 **	Recommendation
1528	Created and updated multiple BPM configuration guides to accommodate energy storage enhancements phase 1 track 2 initiative. **NOTE: BPM - CG PC RTM Net Amount_5.38 was updated on 9/7**	Initial
1529	Update configuration guide for intertie deviation settlement to resolve rounding issue	Initial

PRR and BPM Updates

PRR 1528 – Energy Storage Enhancement

- BPM CG PC RTM Net Amount_5.38 was update on 9/7/23
 - Reason: RTM Net Amount PC 5.38 updated to include changes made as part of Pre-Summer 2023 Market Simulation. This update does not change what was implemented as part of Pre-Summer 2023 Release, nor are there any changes to the proposed Fall 2023 Release.
 - Announcement comment added on 9/7/23
 - Discussed on SUG call on 9/13

PRR 1522 – DISPUTE : BASE schedule is not accounted the in settlement when the WEIM Pump Storage resources are in pumping mode.

- BPM - CG PC Real Time Energy Quantity_5.24.0a was update on 9/12/23
- BPM - PC Metered Energy Adjustment Factor_5.16.0a was updated on 9/12/23
 - Reason: The Effective Start Date was changed from 4/1/23 to 3/1/23 in both BPMs based on ImpactAnalysis CAISO provided WEIM Pump Storage resources
 - Announcement comment added on 9/12/23
 - Discussed on SUG call on 9/13

PRR 1522: Documentation only updates to the real time energy quantity pre-calculation and metered energy adjustment factor pre-calculation for the BAResBaseScheduleEnergy variable.

- Reason for revision
 - A participant dispute uncovered an issue in which pumped storage hydro resources located in the WEIM balancing authority area were being incorrectly designated as generating resources during intervals in which those resources were pumping as loads, as indicated by those resources having a negative base schedule. The code fix upstream to settlements will ensure that the input designates pumped storage hydro resources in the WEIM balancing authority area as load resources when they are in pumping mode.
 - The BPM configuration guides RT Energy Quantity PC v.5.24.0a and Metered Energy Adjustment Factor PC v.5.16.0a have been updated to reflect a revised definition for the BAResBaseScheduleEnergy variable. The updated description reflects that the data will be under resource type = “LOAD” during intervals in which a pumped storage hydro resource located in the WEIM Balancing Authority Area has a negative base schedule.
 - The upstream changes are to be deployed around 7/31/2023. The effective date of those changes will align to the BPM effective date of **3/1/2023**.
- Recommendation Comments: None
- Recommendation comment period expired: September 13, 2023
- Next step: Final Decision

PRR 1528: Created and updated multiple BPM configuration guides to accommodate energy storage enhancements phase 1 track 2 initiative.

- Reason for revision
 - Energy Storage Enhancements Phase 1 Track 2 introduces a new Exceptional Dispatch to allow grid operators to instruct an energy storage resource to Hold SOC. This required the creation of a new settlement charge code to correctly settle this new Exceptional Dispatch type. Additionally, uplift will count in the calculation of Real Time Bid Cost Recovery. The new Charge Code is: 6485 Exceptional Dispatch Hold SOC Uplift Settlement 5.0. Updates made to RTM Net Amount Pre Calc 5.38 for RT Bid Cost Recovery and 6486 Real Time Excess Cost for Instructed Energy Allocation 5.7
 - And 6480 Excess Cost Neutrality Allocation 5.4 for a two-tier allocation. 4989 Daily Rounding Adjustment Allocation 5.10 through version 5.12a were updated for the creation of the new charge group to support Energy Storage Enhancements Phase 1 Track 2 as well as previous version updates to align with prior initiatives.
 - This is a prospective change, with production deployment expected 10/27/2023 and an effective date of 11/1/2023.
- Initial Comments: None
- Initial comment period expired: September 13, 2023
- Next step: Post Recommendation

PRR 1529: Update configuration guide for intertie deviation settlement to resolve rounding issue

- Reason for revision
 - A dispute for charge code 6456 (Intertie Deviation Settlement) revealed the calculation, and in particular, the price used for BA5MResourceHourlyBlockIntertieDeviationSettlementAmount (BA_5M_RSRC_HRLY_BLOCK_TIE_DEV_STLMT@AMOUNT) is incorrect in very specific and relatively rare case. The comparison condition check fails due to rounding of intermediate calculation to the 8th decimal place.
 - The proposed reformulation makes the calculation less sensitive to the global setting of rounding data to the 8th decimal place for Settlements calculation purposes. As far as impacted charge codes, CC 6456 Intertie Deviation Settlement will reflect settlement changes. The successor charge code CC 6458 (Intertie Deviation Settlement Allocation) can reflect settlement value changes as well.
 - The retroactive fix changes are to be deployed around 10/25/2023 and will impact retroactively settled charge codes for Trade Dates 6/1/2022.
- Initial Comments: None
- Initial comment period expired: September 13, 2023
- Next step: Post Recommendation

Energy Imbalance Market BPM

PRR	PRR Title	Stage
1525	Emergency Assistance Energy Transfer Opt-In Process	Initial
1532	Addition of exemption to failed-to-start rule for hydro resources	Initial
1535	Western energy imbalance market Washington greenhouse gas enhancements	Initial

PRR 1525: Emergency Assistance Energy Transfer Opt-In Process

- Reason for revision
 - Emergency PRR Effective 8/14/2023
 - Introduction of an Emergency AET Opt-In process should system conditions or uncertainty deviate and reliability necessitates, available to CAISO as well as WEIM entities.
- Initial Comments: None
- Initial comment period expired: September 13, 2023
- Next step: Post Recommendation

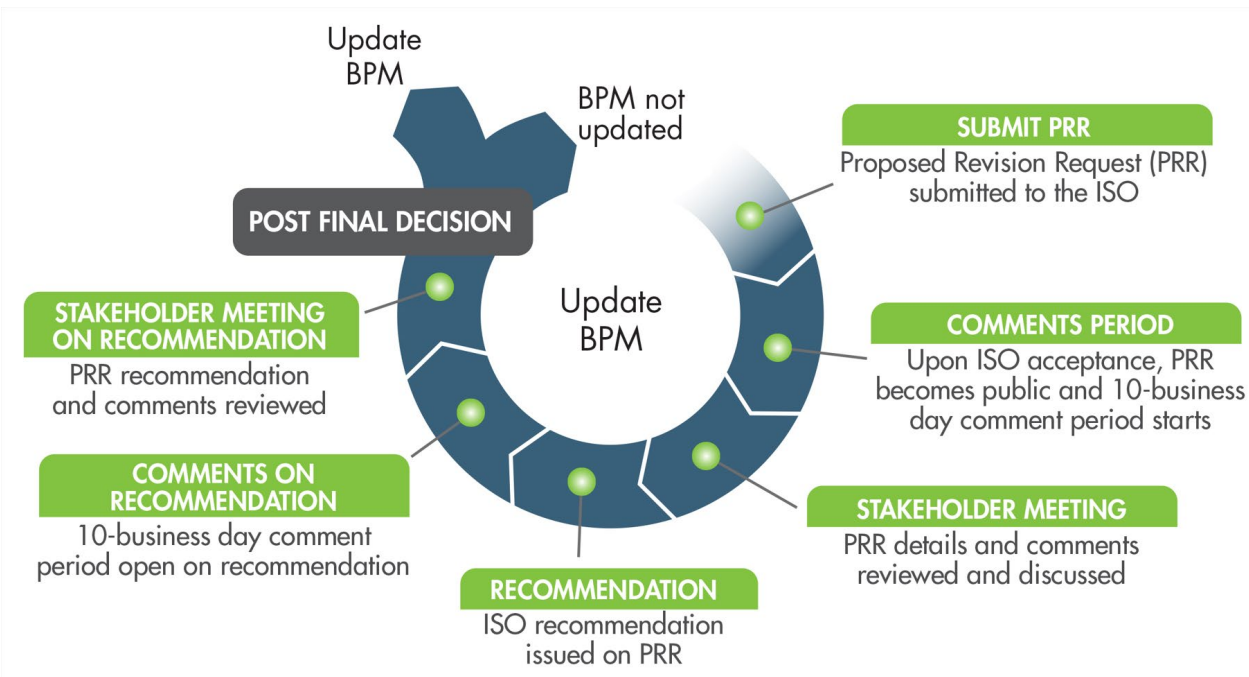
PRR 1532: Addition of exemption to failed-to-start rule for hydro resources

- Reason for revision
 - This exemption is provided as part of the RSEE Phase 2 project. The exemption is for resources that meet the stated requirements so that the RSE calculations more accurately account for the physical characteristics of certain resources.
- Initial Comments: SRP, NV Energy
- Initial comment period expired: September 13, 2023
- Next step: Post Recommendation

PRR 1535: Western Energy Imbalance Market Washington Greenhouse Gas Enhancements

- Reason for revision
 - To update the BPMs for the deployment of the full functionality of the Washington WEIM greenhouse gas enhancements project. These changes undo the previous edits made related to the interim alternative solution implemented for this project and reflect the more permanent, full functionality
- Initial Comments: None
- Initial comment period expired: September 13, 2023
- Next step: Post Recommendation

Next BPM PRR Review Monthly Meeting: October 24, 2023 @ 11 a.m.



BPM change management
process questions:

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