



BPM Change Management Meeting

Nicole Hines

Customer Onboarding Specialist and Trainer

BPM_CM@caiso.com


May 24, 2022

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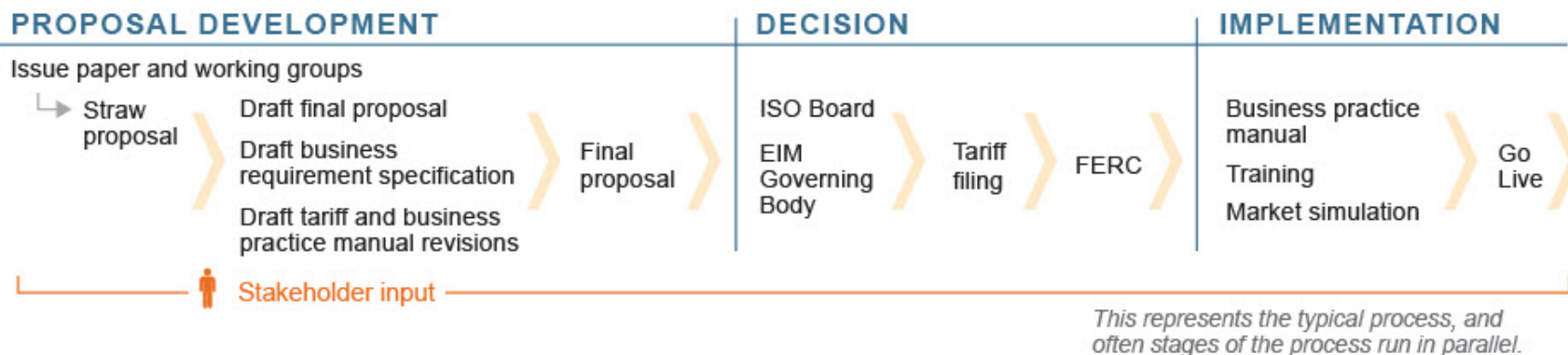
Agenda – BPM Change Management Meeting

May 24, 2022

Topic	Presenter
Introduction / Meeting Overview	Nicole Hines
Discussion of active proposed changes: Demand Response Generator Management Generator Interconnection Procedures Generator Interconnection and Deliverability Allocation Procedures Reliability Requirements Energy Imbalance Market Market Operations Market Instruments Settlements and Billing	Elaine Siegel Jill Jordan Jill Jordan Daune Wilson Melanie Bogen Michael Martin Michael Martin Michael Martin Massih Ahmadi
Wrap-Up and Next Steps	Nicole Hines

BPM Change Management Process
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 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

PRR	PRR Title	Stage
1438	Resource sufficiency evaluation enhancements	Initial

PRR 1438: Resource sufficiency evaluation enhancements

- Reason for revision
 - Section 17 was added to account for non-participating Demand Response scheduling and to have references to the EIM BPM.
 - Section 18 was added to account for non participating Demand response in the (Automated Load Forecast System) ALFS forecasting and to have references to the EIM BPM
- Initial Comments: California Efficiency + Demand Management Council
- Initial comment period expired: May 17, 2022
- Next step: Post Recommendation

Generator Management

PRR	PRR Title	Stage
1430	2021 Contract management enhancements initiative updates	Recommendation

PRR 1430: 2021 Contract management enhancements initiative updates

- Reason for revision
 - Update language to reflected changes made in the 2021 Contract Management Enhancements initiative.
- Recommendation Comments: None
- Recommendation comment period expired: May 17, 2022
- Next step: Post Final Decision

Generator Interconnection Procedures

PRR	PRR Title	Stage
1428	Contract management enhancement updates for modifications and re-studies for serial projects	Recommendation

PRR 1428: Contract management enhancement updates for modifications and re-studies for serial projects

- Reason for revision
 - To align with updates made in the COMA initiative.
- Recommendation Comments: None
- Recommendation comment period expired: May 17, 2022
- Next step: Post Final Decision

Generator Interconnection and Deliverability Allocation Procedures

PRR	PRR Title	Stage
1420	Eliminate the use of the least squares methodology for allocating deliverability	Recommendation
1417	Updating section 6.1.5.1 title to "Notifying the CAISO and affected Participating TO(s) for a study" and adding process details and links to associated documents	Recommendation

PRR 1420: Eliminate the use of the least squares methodology for allocating deliverability

- Reason for revision
 - To remove the use of the least squares allocation methodology and to clarify what methods will be used in the Operational Deliverability Assessment and the Transmission Plan Deliverability Allocation.
- Recommendation Comments: None
- Recommendation comment period expired: May 17, 2022
- Next step: Post Final Decision

PRR 1417: Updating section 6.1.5.1 title to "Notifying the CAISO and affected Participating TO(s) for a study" and adding process details and links to associated documents

- Reason for revision
 - Updating section to include process details and links to associated documents.
- Recommendation Comments: None
- Recommendation comment period expired: May 17, 2022
- Next step: Post Final Decision

Reliability Requirements BPM

PRR	PRR Title	Stage
1424	Short-long start definitions update	Recommendation
1423	Contract management 2021 updates	Recommendation

PRR 1424 – Short-long start definitions update

- Reason for revision
 - Removing all references to medium start units in compliance with the revised tariff definitions of short and long start resources
- Recommendation Comments: None
- Recommendation comment period expired: May 17, 2022
- Next step: Post Final Decision

PRR 1423 – Contract management 2021 updates

- Reason for revision
 - To include the retention of interconnection service rights with the retention of deliverability rights due to COMA2021 updates
- Recommendation Comments: None
- Recommendation comment period expired: May 17, 2022
- Next step: Post Final Decision

Energy Imbalance Market BPM

PRR	PRR Title	Stage
1440	Enhancements to the resource sufficiency evaluation tests per the resource sufficiency evaluation enhancement phase 1 project	Initial

PRR 1440: Enhancements to the resource sufficiency evaluation tests per the resource sufficiency evaluation enhancement phase 1 project

- Reason for revision
 - Changes reflect numerous enhancements and improvements to the RSE tests per the project and stakeholder efforts of the RSE Enhancements Phase 1 project. Effective Date June 1, 2022
- Initial Comments: SRP
- Initial comment period expired: May 17, 2022
- Next step: Post Recommendation

Market Operations BPM

PRR	PRR Title	Stage
1441	Ramp rate limitation for certain inverter-based resources	Initial
1433	Enforcement of aggregate capability constraints	Initial
1432	Addition of 15 interval threshold to regulation service minimum performance testing	Initial
1429	Guidance for scheduling coordinators to register high priority wheels	Recommendation
1415	Change to short and long start definitions	Recommendation
1413	Small updates to align with CAISO move from alert, warning or emergency notice staged alerts to NERC EEA emergency language	Recommendation

PRR 1441: Ramp rate limitation for certain inverter-based resources

- Reason for revision
 - This change is designed to better handle inverter-based resources without a plan controller or without the capability to follow Dispatch Instructions
- Initial Comments: Southern California Edison
- Initial comment period expired: May 17, 2022
- Next step: Post Recommendation

PRR 1433: Enforcement of aggregate capability constraints

- Reason for revision
 - Added a new section on actions when co-located resources utilizing an aggregate capability constraint (ACC) exceed the Interconnection Service Capacity limits for their Generating Facility
- Initial Comments: Southern California Edison
- Initial comment period expired: May 17, 2022
- Next step: Post Recommendation

PRR 1432: Addition of 15 interval threshold to regulation service minimum performance testing

- Reason for revision
 - Process improvement for resources that do not provide at least 15 intervals of regulation service in one calendar month.
- Initial Comments: Morgan Lewis on behalf of Sentinel Energy Center
- Initial comment period expired: May 17, 2022
- Next step: Post Recommendation

PRR 1429: Guidance for scheduling coordinators to register high priority wheels

- Reason for revision
 - These changes are intended provide Scheduling Coordinators with a more uniform process by which to register their high priority wheels in our systems. The guidance itself closely follows the Tariff language that was implemented as part of the Summer 2021 Readiness efforts and provides more structured process steps for SCs to follow to ensure timely and efficient review
- Recommendation Comments: None
- Recommendation comment period expired: May 17, 2022
- Next step: Post Final Decision

PRR 1415: Change to short and long start definitions

- Reason for revision
 - This is to activate a minimum constraint in the real-time dispatch (five minute) market. Currently, this constraint is used only in the fifteen minute market and with this activation, the RTD market will consistently have the same constraint. This constraint ensures that CAISO balancing area has a minimum requirement to procure flexible ramping capacity in the real-time markets
- Recommendation Comments: SRP
- Recommendation comment period expired: May 17, 2022
- Next step: Post Final Decision

PRR 1413: Small updates to align with CAISO move from alert, warning or emergency notice staged alerts to NERC EEA emergency language

- Reason for revision
 - Starting May 1, 2022, the CAISO will use EEA 1,2 and 3 definitions for system emergencies and will not longer refer to as AWE (alerts/warnings/emergency) definitions. This better aligns the CAISO with NERC EEA standards
- Recommendation Comments: None
- Recommendation comment period expired: May 17, 2022
- Next step: Post Final Decision

Market Instruments BPM

PRR	PRR Title	Stage
1439	New CAISO market results interface, and open access same time information system reports for resource sufficiency evaluation and transmission service and market scheduling priorities project	Initial
1434	Proxy demand response resource bidding above \$1000 energy bid cap	Initial
1414	Change to short and long start definitions	Recommendation
1402	Updates to after-market cost recovery and reference level calculator change requests for Extremely Long Start resources	Recommendation

PRR 1439: New CAISO market results interface, and open access same time information system reports for resource sufficiency evaluation and transmission service and market scheduling priorities project

- Reason for revision
 - New OASIS and CMRI reports and additions for the RSE and TSMSP projects. Specifically for the RSE project, a new CMRI report for Resource Bid Range Capacity and new field additions to the existing Flex Ramp Capacity and Bid Capacity Test Data reports. For TSMSP, new OASIS reports for Load Adjustments and Schedule Reductions. This are to be effective June 1 2022.
- Initial Comments: None
- Initial comment period expired: May 17, 2022
- Next step: Post Recommendation

PRR 1434: Proxy demand response resource bidding above \$1000 energy bid cap

- Reason for revision
 - Described details on RDRR ability to submit bids (in the RTM only) above the \$1,000/MWh energy bid cap when conditions are satisfied.
- Initial Comments: None
- Initial comment period expired: May 17, 2022
- Next step: Post Recommendation

PRR 1414 – Change to short and long start definitions

- Reason for revision
 - Clean-up edits related to ESDER4 initiative that was implemented few months ago. The scope of the edits are as follow: Revising language to remove the criteria of a resource’s ultimate parent company being a net buyer from the “safe harbor” mitigation exemption for small storage resources (under 5 MW)
- Recommendation Comments: None
- Recommendation comment period expired: May 17, 2022
- Next step: Post Final Decision

PRR 1402 – Updates to after-market cost recovery and reference level calculator change requests for Extremely Long Start resources

- Reason for revision
 - Updates Attachment O to clarify aspects of the after-market cost recovery process and reference level change requests for Extremely Long Start resources. Also includes numerous minor editorial changes
- Recommendation comments: SRP from previous month, no new comments
- Extended Recommendation comment period: May 17, 2022
- Next step: Post Final Decision

Settlements and Billing BPM

PRR	PRR Title	Stage
1437	Updates to BPM for new settlement timeline	Initial
1436	Updated BPM configuration guide for charge code 4575 to clarify business rule 4.1 exclusions covering flexible ramping	Initial
1435	Update configuration guide to match settlements BPM formula on virtual bid adjustment for western energy imbalance market balancing authority areas as configured	Initial
1431	Updated CC 6046 over and under scheduling western energy imbalance market allocation to accommodate resource sufficiency evaluation enhancements phase 1	Initial

Settlements and Billing BPM

PRR	PRR Title	Stage
1427	Updated BPM for settlements and billing to accommodate aligning with annual FERC settlement process defined in charge codes 550 and 551 FERC fee settlement	Recommendation
1426	Update configuration guides to support short-long start unit definitions update initiative	Recommendation
1425	Updated charge code pre calc metered subsystem deviation quantity to capture spin/non-spin instructed imbalance energy under scenarios where the resource was exceptionally dispatched in a non-contingency interval	Recommendation
1422	Updated multiple BPM configuration guides for charge code 6045 over and under scheduling western energy imbalance market settlement and 6046 over and under scheduling western energy imbalance market allocation to accommodate MIAF 2021-100	Recommendation
1421	Updated multiple BPM configuration guides to accommodate invoicing issues discovered during functional testing of shortfall charge codes that have never been run in settlements production since their inception	Recommendation
1419	Updated charge code 6456 to implement changes related to the Tariff clarification filing	Recommendation

PRR 1437: Updates to BPM for new settlement timeline

- Submitted by SRP
- Reason for revision
 - The current BPM needs to reflect the current Settlement Timeline to allow entities to properly validate relevant settlements.
- Initial Comments: None
- Initial comment period expired: May 17, 2022
- Next step: Extend Initial commenting period to allow CAISO additional time to review submission

PRR 1436: Updated BPM configuration guide for charge code 4575 to clarify business rule 4.1 exclusions covering flexible ramping

- Reason for revision
 - When researching IMS ticket 247820, flexible ramping was incorrectly triggering the GMC 4575 scheduling coordinator ID charge code. This impacts CC 4575 by updating Business Rule 4.1 to also exclude; Flex Ramp Uncertainty Up/Down (CC7071, CC7077, CC7078, CC7081, CC7087, CC7088) and Flex Ramp Forecasted Movement (CC7070, CC7076) from triggering 4575.
 - This is retroactive to 1/1/2022 as it is a documentation only clarification, and is anticipated by 5/31/2022.
- Initial Comments: None
- Initial comment period expired: May 17, 2022
- Next step: Post Recommendation

PRR 1435: Update configuration guide to match settlements BPM formula on virtual bid adjustment for western energy imbalance market balancing authority areas as configured

- Reason for revision
 - Research into CIDI ticket #249262 uncovered a single formula discrepancy between the BPM and as-is configuration. The allocation of congestion revenue from Virtual Bid adjustment to EIM BAAs via `BAASettlementIntervalTotalRTEnergyCongestionAmount` where `RTCongRevenueVirtualBidAdjAmount` is subtracted is incorrect. The system as configured is adding `RTCongRevenueVirtualBidAdjAmount` and this is the correct treatment since the adjustment is intended to be a credit to EIM BAA.
 - The calculation is done in Real Time Congestion Pre-calc feeds CC 6774 (RT Congestion Offset, only pass through, and no error exists for CAISO BAA) and then ultimately settled into CC 67740 (RT Cong Offset EIM) for EIM BAAs. For reference, the associated impacted variables and bill determinant names are as follows:
 - `BAASettlementIntervalTotalRTEnergyCongestionAmount`
(`BAA_5M_RT_ENGY_CONG@AMOUNT`)
 - `RTCongRevenueVirtualBidAdjAmount`
(`VIRTUAL_BID_5M_RTD_ADJ_CONG_REV@AMOUNT`).
 - Documentation edits only have been made to versions of RT Congestion Precalc Configuration guide as listed above in order match the system configured calculations starting Trade Date 11/1/2021 and beyond.
- Initial Comments: None
- Initial comment period expired: May 17, 2022
- Next step: Post Recommendation

PRR 1431: Updated CC 6046 over and under scheduling western energy imbalance market allocation to accommodate resource sufficiency evaluation enhancements phase 1

- Reason for revision
 - To accommodate the Resource Sufficiency Evaluation Enhancements Phase 1 initiative, changes were required to 6046 Over and Under Scheduling EIM Allocation 5.4 to remove the CAISO from allocation eligibility. This change is prospective from 6/1/2022 and expected implementation is 5/29/2022.
- Initial Comments: None
- Initial comment period expired: May 17, 2022
- Next step: Post Recommendation

PRR 1427: Updated BPM for settlements and billing to accommodate aligning with annual FERC settlement process defined in charge codes 550 and 551 FERC fee settlement

- Reason for revision
 - Market Settlement Production (MSP) discovered that Section 4.2.2 Annual FERC Fee Invoice in the Settlements and Billing BPM did not align with Annual FERC Fee Invoice process details in CC 550 551 which MSP has been adhering to over the years. Business Rule 5.3 language which details the invoice process replaces the incorrect invoice process language in the Settlements and Billing BPM. Settlements and Billing BPM is impacted. The effective trade date is 2/1/2022 and anticipated implementation date is 5/25/2022
- Recommendation Comments: None
- Recommendation comment period expired: May 17, 2022
- Next step: Post Final Decision

PRR 1426: Update configuration guides to support short-long start unit definitions update initiative

- Reason for revision
 - There are inconsistencies in the use of short, medium, and long start resource definitions in the Tariff, BPMs, in the market as used for optimization, and in Settlements. This change is to align all these documents and related processes when referring to resource start definitions, and support the short-long start unit definitions update initiative.
- Recommendation Comments: None
- Recommendation comment period expired: May 17, 2022
- Next step: Post Final Decision

PRR 1425: Updated charge code pre calc metered subsystem deviation quantity to capture spin/non-spin instructed imbalance energy under scenarios where the resource was exceptionally dispatched in a non-contingency interval

- Reason for revision
 - A Market Participant Identified through a dispute a scenario in which an MSS resource was dispatched Spin IIE in a non-contingency interval. This is a rare yet valid case where the resource has been exceptionally dispatched into their Spin/NSpin Capacity. The portion of energy dispatched as Spin/NSpin IIE should be captured in the MSS LF Penalty calculation
- Recommendation Comments: None
- Recommendation comment period expired: May 17, 2022
- Next step: Post Final Decision

PRR 1422: Updated multiple BPM configuration guides for charge code 6045 over and under scheduling western energy imbalance market settlement and 6046 over and under scheduling western energy imbalance market allocation to accommodate MIAF 2021-100

- Reason for revision
 - To accommodate the MIAF 2021-100, changes were required to 6045 Over and Under Scheduling EIM Settlement 5.3 and 6046 Over and Under Scheduling EIM Allocation 5.1.1 & 5.3 to correctly calculate OUS Quantity based on ELAP excluding previously included pump storage load. This change is retroactive to 4/1/2020 and expected implementation is 5/27/2022.
- Recommendation Comments: None
- Recommendation comment period expired: May 17, 2022
- Next step: Post Final Decision

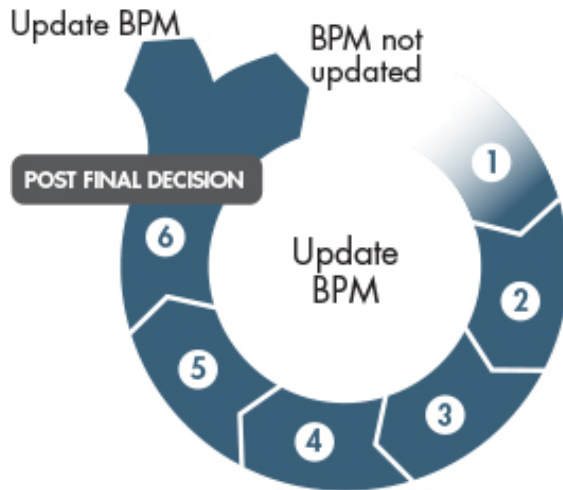
PRR 1421: Updated multiple BPM configuration guides to accommodate invoicing issues discovered during functional testing of shortfall charge codes that have never been run in settlements production since their inception

- Reason for revision
 - Market Services Production (MSP) tested the functionality of Shortfall related charge codes in Map Test that have never been run in Settlements Production since their inception. The change is required to ensure that CAISO Internal BAIDs are not invoiced and to address issues in billing and invoicing related templates that kept Default Loss Invoice from generating expected results. The BPM changes are documentation only updates as the fixes are associated with design template invoice related charge types not visible to market participants. The impacted charge codes are CG CC 5901 Shortfall Allocation Reversal, CG CC 5910 Shortfall Allocation, and CG CC 5912 Default Loss Allocation. The effective trade date of the change is 4/1/2011 and the anticipated implementation date is 4/27/2022
- Recommendation Comments: None
- Recommendation comment period expired: May 17, 2022
- Next step: Post Final Decision

PRR 1419: Updated charge code 6456 to implement changes related to the Tariff clarification filing

- Reason for revision
 - The CAISO has identified three ways the tariff rules related to the enhanced 75 percent penalty do not implement the policies underlying the under/over delivery charge. The CAISO now proposes targeted tariff amendments to address these three issues.
- Recommendation Comments: None
- Recommendation comment period expired: May 17, 2022
- Next step: Post Final Decision

Next BPM PRR Review Monthly Meeting: June 28, 2022 @ 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

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