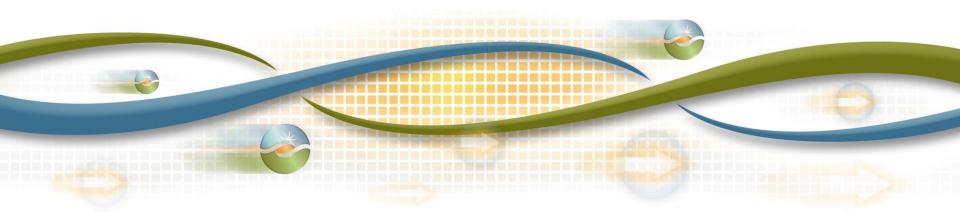


BPM Change Management Meeting

February 28, 2017

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Agenda — BPM Change Management Meeting, February 28, 2017

Topic	Presenter
Introduction/meeting overview	Julia Payton
Discussion of current PRRs:	
Generator Interconnection and	Phelim Tavares
Deliverability Allocation Procedures	
Settlements and Billing	Elizabeth Caldwell
Reliability Requirements	Gautham Katta
Outage Management	Gautham Katta
Metering	Julie McCallion
Energy Imbalance Market	Vivian Liang
Generator Management	Raeann Quadro
Market Instruments	Jamal Batakji
Market Operations	Jamal Batakji
Wrap up and next steps	Julia Payton



PRRs for Discussion – Initial Phase Generator Interconnection and Deliverability Allocation Procedures BPM

PRR	PRR Title
966	Clarifying requirements for selecting a project name

PRR 966 – Clarifying requirements for selecting a project name

- Reason for revision:
 - Clarifying the process for selecting project names on the interconnection requests. The link to the list of previously used names will be updated in the BPM when the list is posted on the ISO website.
- Initial stakeholder comments:
 - No comments submitted
- ISO response/position:
 - ISO submitted the PRR.
- Initial comment period expiration:
 - February 17, 2017
- Next step: Post recommendation

PRRs for Discussion – Recommendation Phase Settlements and Billing BPM

PRR	PRR Title
956	Update configuration guides in accordance with administrative pricing initiative to settle congestion revenue rights at the average hourly fifteen minute market price when specific conditions are triggered
959	Emergency: Updated calculation of day ahead and real time self-scheduled bids for resource adequacy availability incentive mechanism
960	Emergency: Updated calculations and business rules for resource adequacy availability incentive mechanism settlement



PRRs for Discussion – Recommendation Phase

PRR	CC/ PC	Comment Expiration / Next Step	ISO Position / Reason for Revision
956	Real Time Energy Price (doc only update) CC 6473 – Convergence Bidding Real Time Energy, Congestion, and Loss Settlement (doc only update) CG CC 6700 – CRR Hourly Settlement	No recommendation comments submitted. Recommendation comment period extended due to additional edits; expired 2/13/17; Next Step: Post final decision	No changes since the last meeting Based upon administrative pricing initiative filed at FERC as of November 23, 2016, if the ISO has declared a suspension of the day ahead market results for a given trade date and rely solely upon real-time market results, then congestion revenue rights will settle at the average hourly fifteen minute market prices. Configuration changes presented in charge code 6700 support this principle based on inputs from 6473 and real-time energy price calculations. The ISO anticipates implementation on or about 1/30/17 in support of a 2/1/17 production effective trade date. Changes from initial phase meeting: Updated guides posted 1/20; configuration of 6700 revised to create Administrative Pricing flag by materialized view. Details within the guide and associated output file. Effective date for all guides changed to 4/1/17 Implementation date changed to 1/24/17

PRRs for Discussion – Initial Phase Settlements and Billing BPM

PRR	CC/ PC	Comment Expiration / Next Step	ISO Position / Reason for Revision
959	PC RA Availability Incentive Mechanism	No recommendation comments submitted. Comment period expired 2/15/17; Next Step: Post final decision	No changes since the last meeting A scheduling coordinator may submit self schedules on a resource under several self schedule types (e.g. ETC, TOR, RMT). The current configuration determines the max value among the self schedules, and uses that value to count towards a resource meeting its RA obligation. However, the max value logic can exclude some self schedules from being counted towards a resource meeting its RA obligation. Under RAAIM, this can lead the resource to not being fully available, exposing it to non-availability charges. The revisions will be to replace the max value logic with an alternative logic such that all self schedules are included in the RAAIM calculations. Configuration changes will be effective retroactive to 11/1/2016 and have an anticipated deployment date of 1/24/2017.

PRRs for Discussion – Initial Phase Settlements and Billing BPM

PRR	CC/ PC	Comment Expiration / Next Step	ISO Position / Reason for Revision
960	PC RA Availability Incentive Mechanism CC 8830 CC 8831	No recommendation comments submitted to date. Comment period expires 2/15/17; Next Step: Post final decision	No changes since the last meeting A recent CIDI ticket raised a concern with the BPM business rule, "Use limited resources that have reached their use limitation shall have their bids capped at zero" within the RA Availability Incentive Mechanism pre-calculation. Under this rule, when a use limited resource reaches its use limitation as submitted in its use plan, it would be exposed to RAAIM non-availability charges even as it continues to bid. As a result of cross-functional internal analysis, it has been determined that a fix to this rule is needed. The proposed fix is to remove the business rule such that when a use limited resource reaches its use limitation as submitted in its use plan, its bids would be eligible towards RAAIM availability. This rule and associated formula changes are anticipated for implementation on 1/24/2017 with a 11/1/2016 effective date. **Configuration guide version will include changes detailed under PRR 959 Additionally, a recent extension of the advisory period under RAAIM requires the removal of BPM language referencing that only the first two months of RAAM will be advisory; no impact to configuration - documentation only change impacting 8830 and 8831.

PRRs for Discussion – Initial Phase Settlements and Billing BPM

PRR	PRR Title
968	Clarification updates to BPM for resource adequacy availability incentive mechanism precalc
969	Update BPM for charge code 6045 configuration formula to remove dispatchable demand resource from the over and under scheduling assessment
970	Update pre-calculation real time market net amount to resolve two issues that relate to (1) the application of the Persistent Deviation Metric (PDM) and (2) the determination of bid cost recovery bid cost for a net-settled metered subsystem



PRRs for Discussion - Initial Phase

PRR	CC/ PC	Comment Expiration / Next Step	ISO Position / Reason for Revision
968	PC RA Availability Incentive Mechanism (doc only update)	No initial comments submitted. Comment period expired 2/27/17; Next Step: Post recommendation	In the current BPM, Business Rule 1.5 defines the trade hours for flexible resource adequacy categories 2 and 3. The proposed revision removes the defined hours, and replaces with references to the ISO flexible capacity needs assessment which determines the five-hour period in alignment with tariff Section 40.10.6.1(a). The proposed revisions ensures that when there is an update to the five-hour period as determined in the ISO flexible capacity needs assessment. This is a documentation only change as updates to the configuration are not required.
969	CC 6045 - Over and Under Scheduling EIM Settlement	No initial comments submitted. Comment period expired 2/27/17; Next Step: Post recommendation	Under the current assessment of the over and under scheduling settlement, the settlement system is comparing the hourly base load schedule to the hourly metered demand quantity. The hourly metered demand quantity is calculated as the sum of the hourly metered load plus hourly metered dispatchable demand resource. The inclusion of the hourly metered dispatchable demand resource is resulting in inaccurate assessment of over and under scheduling settlement for those balancing authority areas which have dispatchable demand resource in their supply portfolio. The proposed solution is to remove the inclusion of dispatchable demand resource from the over and under scheduling assessment by comparing the hourly base load schedule to the hourly metered load quantity. The ISO anticipates implementation on or about 3/27/2017 in support of a 10/1/2014 production effective trade date.



PRRs for Discussion – Initial Phase

PRR	CC/ PC	Comment Expiration / Next Step	ISO Position / Reason for Revision
970	RTM Net Amount PC	No recommendation comments submitted. Initial comment period expired 2/27/17; Next Step: Post recommendation	Proposed update is to resolve two issues that relate to: (1) The application of the Persistent Deviation Metric (PDM) — The current Settlement configuration is incorrectly calculating the BCR-applicable energy bid cost for a given Settlement Interval, where a resource is detected by means of the PDM to have been persistently deviating from its dispatch instructions over the 24 Settlement Intervals of the two-hour PDM evaluation window for the given Settlement Interval. For a deviating resource the configuration should determine and apply the energy bid cost as the minimum of the 3 energy bid costs based on the Final Bid price, Default Energy Bid (DEB) price and the Locational Marginal Price (LMP). The configuration is overstating the LMP-based energy bid cost. The reason is that the configuration is not excluding the Minimum Load Energy in determining the LMP-based cost that is associated with the bid energy. → Retroactively, effective starting with Trade Date May 1, 2014 to capture all Trading Days over which the defect applies. (2) The determination of BCR bid cost for a net-settled MSS — An issue is found with the pricing of energy from a resource belonging to a net-settled MSS entity (i.e., a MSS that has selected the net settlement option) for a case where the bid price is missing for the energy. The configuration software is leaving the bid price as missing, effectively using a default value of zero (0) for bid cost calculations in which the bid price is applied. However, under certain conditions the MSS LMP should be used instead of 0. → Retroactively, effective starting with Trade Date November 1, 2016 to only correct configuration software that becomes effective on/after Trade Date November 1, 2016. The ISO anticipates implementation of the BPM changes on or about March 27, 2017. Changes during initial phase comments period: Updated guides posted 2/21; PC RTM Net Amount V5.27-5.31 are updated to ensure MSS Load following overlapped energy are excluded from BCR when computing the DEB cost.

PRRs for Discussion – Initial Phase Reliability Requirements BPM

PRR	PRR Title
961	PG&E Submitted: Reflect seasonal RAAIM assessment hours for flexible RA



PRR 961 – Reflect seasonal RAAIM assessment hours for flexible RA

- Reason for revision:
 - Reflect seasonal resource adequacy availability incentive mechanism assessment hours for flexible resource adequacy.
- Initial stakeholder comments:
 - San Diego Gas & Electric Company, 1/23/17
- ISO response/position:
 - ISO is working on validating the accuracy of the assessment hours and will provide more details on the methodology after the assessment is complete.
- Initial comment period expiration:
 - February 6, 2017
- Next step: This PRR will be on hold until ISO completes the assessment. Tentative timeline for completion is May 2017.



PRRs for Discussion – Initial Phase Outage Management BPM

PRR	PRR Title
967	Interconnection reliability operations and coordination standard 17

PRR 967 – Interconnection reliability operations and coordination standard 17

- Reason for revision:
 - The Interconnection Reliability Operations and Coordination standard 17 (IRO-17) is a new NERC standard and Peak is making necessary changes to their outage process due to this NERC standard. As a result, the ISO and PTOs/SCs need to make necessary changes to their outage management processes to align with reliability coordinator's new process.
- Initial stakeholder comments:
 - No comments submitted
- ISO response/position:
 - ISO submitted the PRR.
- Initial comment period expiration:
 - February 27, 2017
- Next step: Post recommendation



PRRs for Discussion – Initial Phase Generator Management BPM

PRR	PRR Title
962	Clarifying changes to generator retirement process
965	Moving project naming guidelines to the Generator Interconnection and Deliverability Allocation Procedures BPM

PRR 962 – Clarifying changes to generator retirement process

- Reason for revision:
 - The ISO submits these changes to clarify the process for retiring generators. Specifically, the changes clarify that generators do not need to submit outage cards for retirement, and provide greater detail regarding relinquishing the generator's resource ID(s) and needed changes to various regulatory contracts.
- Initial stakeholder comments:
 - No comments submitted
- ISO response/position:
 - ISO submitted the PRR.
- Initial comment period expiration:
 - February 6, 2017
- Next step: Post recommendation



PRR 965 – Moving project naming guidelines to the GIDAP BPM

- Reason for revision:
 - Moving the examples to the BPM for Generator Interconnection and Deliverability Allocation Procedures.
- Initial stakeholder comments:
 - No comments submitted
- ISO response/position:
 - ISO submitted the PRR.
- Initial comment period expiration:
 - February 17, 2017
- Next step: Post recommendation

PRRs for Discussion – Initial Phase Metering BPM

PRR	PRR Title
963	Updates to Metering BPM for metering rules enhancements stakeholder initiative



PRR 963 – Updates to Metering BPM for metering rules enhancements stakeholder initiative

- Reason for revision:
 - The revision includes language changes required to support the metering rules enhancements stakeholder initiative enhancements
- Initial stakeholder comments:
 - No comments submitted
- ISO response/position:
 - ISO submitted the PRR.
- Initial comment period expiration:
 - February 16, 2017
- Next step: Post recommendation

PRRs for Discussion – Initial Phase Energy Imbalance Market BPM

PRR	PRR Title
964	Updates to Energy Imbalance Market BPM for metering rules enhancements stakeholder initiative



PRR 964 – Updates to Energy Imbalance Market for metering rules enhancements stakeholder initiative

- Reason for revision:
 - The revision includes language changes required to support the metering rules enhancements stakeholder initiative enhancements
- Initial stakeholder comments:
 - No comments submitted
- ISO response/position:
 - ISO submitted the PRR.
- Initial comment period expiration:
 - February 16, 2017
- Next step: Post recommendation

PRRs for Discussion – Initial Phase Market Instruments BPM

PRR	PRR Title
971	Attachment B revision

PRR 971 – Attachment B revision

- Reason for revision:
 - To comply with the GRDT and IRDT data definitions. The changes are to incorporate data from the "GRDT and IRDT Data Definitions" (that is currently posted on the CAISO website as an Excel spreadsheet) into the BPM. The changes to Attachment B do not represent new information, rather consolidating existing information into the BPM and provide clarification.
- Initial stakeholder comments:
 - Pacific Gas and Electric Company 2/21/17
- ISO response/position:
 - ISO will provide response to comments during 2/28 meeting, and will post response within the PRR after the meeting.
- Initial comment period expiration:
 - March 1, 2017
- Next step: Post recommendation



PRRs for Discussion – Initial Phase Market Operations BPM

PRR	PRR Title
972	Congestion revenue rights settlement rule

PRR 972 – Congestion revenue rights settlement rule

- Reason for revision:
 - Modifications to the congestion revenue rights settlement rule based on the Tariff amendment submitted on January 25, 2017.
 Effective date is April 1, 2017
- Initial stakeholder comments:
 - No comments submitted
- ISO response/position:
 - ISO submitted the PRR.
- Initial comment period expiration:
 - March 1, 2017
- Next step: Post recommendation

Next Steps

Next Meeting:

March 28, 2017

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