




Central Procurement Entity Implementation and RAAIM Settlement Modification - Draft Final Proposal

Stakeholder Meeting
January 6, 2022

Housekeeping reminders

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- Meeting is structured to stimulate dialogue and engage different perspectives.
- Please keep comments professional and respectful.
- Please try and be brief and refrain from repeating what has already been said so that we can manage the time efficiently.

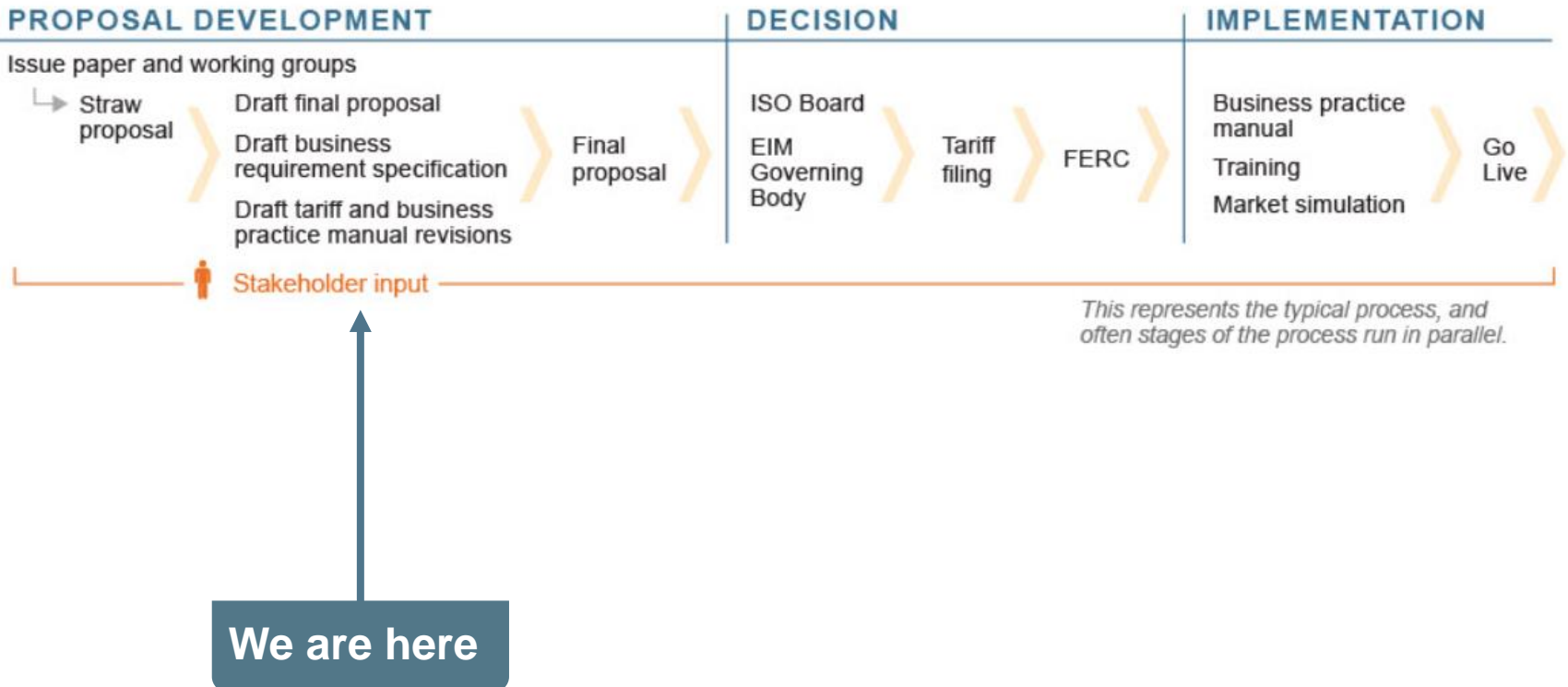
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- Please remember to state your name and affiliation before making your comment.
- You may also send your question via chat to either James Bishara or all panelists.

Agenda

Time	Topic	Presenter
1:00-1:10	Welcome and Introduction	James Bishara
1:10-2:30	Central Procurement Entity Proposal	Bridget Sparks, Ph.D.
2:30-3:40	RAAIM Settlement Modification Proposal	James Lynn
3:40-3:50	EIM Governing Body Role	Bridget Sparks, Ph.D.
3:50-4:00	Next Steps	James Bishara

Stakeholder Process



Central Procurement Entity Implementation Policy Development Schedule

Date	Milestone
December 22, 2021	Publish Draft Final Proposal and Draft Tariff
January 6, 2022	Stakeholder call on draft final proposal
January 6, 2022	Comments due on draft tariff language
January 13, 2022	Stakeholder call on draft tariff language
January 20, 2022	Stakeholder comments due on draft final proposal
February 2022	Final Proposal and Revised Draft Tariff
February 2022	Stakeholder meeting and comments on Final Proposal and Revised Draft Tariff
March 16-17, 2022	Present proposal to CAISO Board
October 2022	Implementation for RA Year 2023

* Dates are tentative and subject to change

CENTRAL PROCUREMENT ENTITY BACKGROUND

Background: CPUC adoption of CPE

- In D. 20-06-002, the CPUC adopted a central procurement entity framework that ordered SCE and PG&E to form a separate Central Procurement Entity (CPE) for their respective TAC areas and make multi-year showings starting in RAY 2023
- CPUC would no longer assign LSEs a local RA obligation, but instead would assign the entire local RA obligation to the CPE
- Adopted a hybrid procurement framework where individual LSEs that procured a local resource could either 1) bid the resource into the CPE solicitation; 2) retain the system and flex attributes of the resource; 3) agree to self show the resource, which would reduce the CPE's overall procurement requirement and allocated to all LSEs
- Allows the CPE to use the CAISO's backstop as a check against market power in the local RA market
- Orders that CAM credits be used to allocate the system and flexible RA attributes on any local resource to all LSEs under the CPE

Additional modifications to the CPE under consideration at the CPUC

- In R.21-10-002, the scope includes consideration of potential “modifications to the CPE structure and process, including implementation details of the ‘shown’ resource component of the hybrid framework and changes to the CPE timeline”
- CAISO has identified areas of flexibility and proposes to built these into its tariff and software to accommodate some changes that may result from an order issued in the R. 21-10-002 proceeding
- CAISO is an active participant in this proceeding to ensure that programs stay aligned to the best extant possible

Alignment between CPUC and CAISO stakeholder processes

- The CPUC is expected to publish a proposed decision on February 1, 2022 and a final decision on March 1, 2022
- The CAISO needs to conduct this stakeholder process in parallel with the CPUC's process to ensure it can get any necessary tariff changes approved by its board and FERC, and systems implemented in advance of the October 31st showings deadline for the RA Year 2023 annual process

CPE IMPLEMENTATION PROPOSAL

Local Resource Adequacy: Existing Process

- CAISO conducts annual local capacity technical studies to determine
 - 1) minimum MWs of Local Capacity Area resources needed within each local area and sub-area
 - 2) identify the generating units within each local capacity area

Local Resource Adequacy: Existing Process cont.

- CAISO allocates these local requirements to direct procurement of local resources:
 - For non-CPUC jurisdiction LSEs, the CAISO directly allocates the local obligations pro-rata based on LSE's load in each TAC area
 - For CPUC jurisdictional LSEs, the CAISO sums the total need in each TAC area for each LSE and sends this to the CPUC, who can reallocate the requirements using a method of their choice.
 - CPUC submits the reallocated local obligations among their jurisdictional entities back to the CAISO for inclusion in the CAISO systems. If the CPUC reallocated obligations are below those previously submitted by the CAISO to CPUC than any remaining requirement, will be assigned to LSEs using the CAISO default methodology.

Local Resource Adequacy: Existing Process cont.

- Procured local resources that satisfy the generation capacity requirements for Local Capacity Areas are put on annual and monthly Resource Adequacy Plan(s)
- CAISO then validates the resulting portfolio of all shown RA resources covers the identified needs in the local capacity technical study
- LSEs are notified and offered a cure period if any deficiencies are identified

Local Resource Adequacy: Existing Process cont.

- If deficiencies remain, the CAISO can issue a local CPM to procure additional capacity that may be needed to ensure reliability in the local areas and sub-areas
- Costs are first allocated to any individual deficient entities
- If local deficiencies still remain after all individual deficient LSEs have met their local allocation, than any collective local deficiencies are allocated pro-rata to all LSEs in the TAC Area

Recognizing a Central Procurement Entity

- The CPE will be defined as a market participant and will be represented by a scheduling coordinator
 - CAISO will execute a pro-forma SC agreement with CPE
 - A new pro-forma agreement is under development, and more details will be provided with the final proposal
 - CAISO will add a new sub-section in tariff (4.18) to define the scope of the CPE
 - The CPE will be subject to the Scheduling Coordinator ID GMC Charge

Recognizing a Central Procurement Entity cont.

- The CPE will be responsible for submitting annual and monthly RA plans to the CAISO following existing RA plan submission timelines
- The CPE will be subject to late or missing submission penalties
- Although the CPUC ordered multi-year procurement for local RA, the CAISO will maintain its annual showing process
 - the CPE should plan to make annual showings with the CAISO

Recognizing a Central Procurement Entity: Local RA obligation allocation for CPUC jurisdictional LSEs

- The CAISO will continue to calculate the total local capacity area resource obligations of CPUC jurisdictional LSEs and transmit these to the CPUC
- The CPUC may allocate these local obligations to its LSEs using its own methodology, and if the CPUC does not allocate the total sum, the CAISO will allocate any remaining local obligation to relevant LSEs using the default methodology outlined in Section 40.3.2
- The CAISO proposes to modify Tariff section 40.3.2(a) to allow an LSE or CPE to be assigned a local RA obligation

Recognizing a Central Procurement Entity: Local RA obligation allocation for non-CPUC jurisdictional LSEs

- For non-CPUC jurisdictional LSEs, they will continue to be assigned a local obligation using the allocation methodology described in Section 40.3.2(a)
- CAISO proposes adding opportunities in which LRAs may choose to shift all or part of their LSEs' local RA obligation to the CPE
 - CAISO will also allow multiple LRAs to utilize/designate the same CPE

Stakeholder Comments

- All commenting parties (CALCCA, CDWR, CPUC, MRP, PG&E, and SCE) were generally supportive of the CAISO's effort to recognize and incorporate the CPE into its tariff and systems
- MRP supported requiring the CPE to be represented by a Scheduling Coordinator, which would also allow the CPE to be the SC for any resource over which it also secured dispatch rights
- CDWR supported retention of the CAISO's annual RA showings process; and the option to shift local obligations to a CPE, but continuing to directly allocate local requirements directly to non-CPUC jurisdictional entities

Stakeholder Comments cont.

- PG&E asked for more details on the new sub-section 4 of the tariff and the pro forma agreement
 - The draft tariff language was posted with the draft final proposals
 - CAISO is still working with its Regulatory Contracts team to develop the pro forma language, and will make this available with the final proposal.
- PG&E asked if the CPE would be able to net any credit requirements for establishing the new SC ID with that of the Utility it operates under, since they are the same financial and legal entity
 - CAISO is continuing internal discussions on this request, and will have a final answer in the next paper

System and Local obligation of a CPE

- Since the CPE is a procurement entity it will not be assigned a load share
- Section 40.2.3(a) states that an LSE will not be assigned a local obligation in excess of their system obligation for the applicable month
- The CAISO proposes to exempt CPEs or LSEs without load share in a TAC area from this provision of the tariff and develop software enhancements to support this exemption
 - If not exempt, an entities local obligation would be capped at 0 MWs, and thus would not be committed to show capacity to meet its assigned local obligation

System and Local obligation for LSEs with Load in multiple TAC areas

- For LSEs that serve load in multiple TAC areas they will be allocated a local obligation in each TAC area
 - under the existing tariff provision these local obligations would be capped at their entire system obligation
 - this could lead to higher local CPM cost allocation as compared to an LSE with load in a single TAC area

System and Local obligation for LSEs with Load in multiple TAC areas cont.

- The CAISO proposes to modify Section 40.3.2(a) and develop software enhancements to allow for LSEs with load in multiple TAC areas to cap an LSE's local obligation at their applicable Demand and Reserve Margin requirements in each TAC area for the applicable month
 - This should reduce the local CPM cost allocation to be on par with LSEs who have load in a single TAC area

Stakeholder comments

- Stakeholders were generally supportive of this proposal, but asked several clarifying questions
- CDWR asked whether the proposal to cap local at system in each TAC area for LSE's with load in multiple TAC areas would apply to annual or monthly RA showings
 - CAISO clarifies that the existing tariff provision only applies to monthly showings process
- PG&E was concerned that these tariff provisions could have provide a loop hole that would allow the LSE to get out of their assigned local obligation
 - CAISO has modified the proposal to exempt any entity without load share in a TAC area that their local obligation could not exceed their system obligation in each TAC area

Allocation of System Attributes of Local RA Resources

- The system and local attributes of RA resources cannot be unbundled
- In recognition of this, the CPUC ordered the CPE to buy the bundled attributes of the resource and use CAM credits to allocate the system and flexible attributes of the resources to LSEs to help meet their own system and flexible RA obligations
- The CAISO proposes to implement separate fields in the LRA Credit templates in CIRA to accept and validate system CPE credits (similar to existing system CAM credits)
- The CAISO will require that all CPE system credits allocated to LSEs must match the exact quantity of local RA resources shown by the CPE (or that the LRA expects the CPE to show)

Allocation of Flexible Attributes of Local RA Resources

- The CAISO currently does not have the functionality to accept and validate flexible RA CAM credits
- The CAISO proposes to build and implement separate fields in the LRA Credit templates in CIRA to accept and validate the CPE flexible credits (similar to existing system CAM credits)
- The CAISO will require that all flexible credits allocated to LSEs match the exact quantity of flexible RA capacity shown by the CPE (or that the LRA expects the CPE to show)

Stakeholder comments

- Stakeholders did not offer any objections or modifications to these proposed changes
- CDWR supported that RA attributes of resources remain bundled and use of credits to assign attributes
- CPUC supported this proposal and efforts to keep programs aligned
- PG&E also supported this approach, and believed this supported the hybrid procurement framework adopted by the CPUC

Clarification of CPM Process and Cost Allocations

- The CAISO proposes to modify the tariff to apply the existing Capacity Procurement Mechanism (CPM) process and cost allocation methodology to a CPE as outlined in Tariff Section 43A
- While the CAISO expects minor changes to this tariff section to recognize a CPE in these processes, CAISO will likely need to update its settlement systems to be able to allocate costs to a CPE in addition to individual LSEs in each TAC area

Clarification of CPM Process and Cost Allocations cont.

- After the annual and monthly showings deadline, the CAISO will look at the entire portfolio of shown RA resources to validate that the procured portfolio satisfies the capacity and energy requirements identified in the LCR study
- If a deficiency is identified, the CAISO will offer a CPE and its LSEs an opportunity to cure the deficiency per Section 40.7

Clarification of CPM Process and Cost Allocations cont.

- The CAISO will then have discretion to determine if additional capacity is needed to fulfill any remaining identified need
- The CAISO will first designate an individual deficiency in Local Capacity Area Resources and allocate cost proportionally to all deficient LSEs and CPEs vis-à-vis their obligation in the TAC area that includes the deficient area and/or sub-area
- Any remaining local capacity deficiency in the year ahead timeframe will be filled through a collective local CPM and allocated pro-rata to all LSEs with load in that respective TAC area

Clarification of CPM Process and Cost Allocations cont.

- Since under the current construct, a CPE is not assigned a load share, it would not be allocated CPM costs associated with a Collective Local CPM, System CPM, Significant Event CPM or Exceptional Dispatch CPM
- In the future, were an LRA to assign a CPE a system or flexible RA obligation, the CAISO would have to open a separate stakeholder process to consider additional tariff modifications

RA credits from CPM designations

- Currently, only LSEs can receive RA credits from applicable CPM procured resources, and LRA are allowed to determine whether these credits should be allowed to count towards the RA requirements adopted by the LRA
- The CAISO proposes to modify this rule to allow CPEs to receive RA credits from CPM procured resources associated with the LSEs they are representing
- The CAISO proposes to allow LRAs to reallocate these credits as they see fit amongst its CPE(s) and LSE(s) in the same way they can reallocate RMR credits among their jurisdictional entities today

CPM Cost Allocation under the CPUC's Hybrid Procurement Framework

- As a general principle, the CPM cost allocation for an individual local RA deficiency will follow the entity assigned the local obligation by the LRA
 - CPM backstop costs will be allocated according to how the LRA apportioned the local capacity obligation
 - If the CPUC assigns the entire local obligation to the CPEs, as specified in D.20-06-002, then the CPEs will carry the entire risk for backstop costs related to individual local CPM designations.

CPM Cost Allocation under the CPUC's Hybrid Procurement Framework cont.

- CAISO will continue to evaluate the entire portfolio of shown RA resources in its CPM determination, and will pick up any voluntary showings made by LSEs who agreed with the CPE to self-show resources
- However, if LSEs fail to show their resources, and/or a deficiency is identified, CPM costs will first be allocated to individual deficient LSEs or the CPE, as applicable
- The CPE will likely have the largest local obligation since it will be allocated a proportionate share of the CPM costs
- It will be up to the CPE to decide how it re-allocates any CPM costs to its LSEs

CPM Cost Allocation under the CPUC's Hybrid Procurement Framework cont.

- If the CPUC and parties would like to change this, they will need to submit proposals in CPUC proceeding R.21-10-002 to modify the original CPUC decision that prohibits the CPUC from allocating local obligations to individual LSEs
- Modifying the decision would allow the CPUC to re-allocate the local obligation to those LSEs that agreed to self-show their resources
- This would allow the CAISO to allocate CPM costs directly to those LSEs if they fail to show their resources to the CAISO and a deficiency is identified and the CAISO CPMs additional capacity

Stakeholder Comments

- The CAISO received mixed feedback on its proposal to include the CPE into existing CPM processes
- CDWR agreed that the CPE should be allocated CPM costs for individual local RA deficiencies, and receive RA credits after the cost allocation
- CPUC supports proposal, and agrees with characterization of how CPM would be applied based on the current CPUC order
- CALCCA did not object to the CAISO proposal, but rather raised concern that there needs to be more transparency in the CPE's procurement process and better documentation/explanation as to why they did not procure their full allocation of local RA or deferred it to CAISO's CPM process

Stakeholder comments cont.

- CMUA argued there should be no significant changes to the character of the CPM and that there should be greater data transparency and tracking of cost causation
 - CAISO has not modified its CPM process, but rather incorporated the CPE into these existing processes
- CMUA was concerned that the increased reliance on CPM due to the CPE deferring procurement to the CAISO's CPM process could lead to additional costs to non-CPUC entities, and that CPM wasn't designed to cover front stop requirements
 - CAISO believes impacts to non-CPUC entities should be minimal, but has included a separate CPM process enhancements initiative as part of the policy roadmap, and could consider CMUA's concerns within the scope of that initiative to facilitate the broader discussion requested

Stakeholder comments cont.

- SCE was generally supportive, but wanted additional clarity on the curing process for the CPE and LSEs in the event of a deficiency
 - The CAISO is not proposing any additional changes the curing process, other than to allow the CPE to be allowed to show additional capacity during the cure period
 - CAISO will maintain its notification process, and entities will have 30 days to cure in the annual timeframe, and 15 days to cure in the monthly
 - The obligation to show the capacity will remain with the entity assigned the local obligation by the LRA, but all LSEs and CPEs will be allowed to show additional capacity to cure the deficiency
 - CAISO would also allow any LSE inside or outside of the CPE's territory to show capacity that could be used to cure the deficiency

Stakeholder comments cont.

- PG&E offered an alternate proposal for CPM cost allocation of local RA deficiencies
- They suggested the CAISO modify its tariff to allow LRA's to determine their own cost allocation methodology for individual local deficiencies and the CAISO would have default provisions
 - The CAISO does not support this proposed alternative because it could break cost causation principles - in that the CPUC could assign costs to an entity that was not responsible up front for meeting the local RA obligation
 - If the CPUC wants the cost assigned to a different entity other than the CPE, then they need to allocate the local requirement to that entity prior to showings being submitted and the CAISO's CPM process running, not after the fact

RMR cost allocation and credits

- For resources that the CAISO deems as Reliability Must Run units, the CAISO allocates the cost of these resources to LSEs proportional to their load in each applicable TAC area(s)
- The CAISO does not propose any modifications of the cost allocation methodology for RMR to account for the CPE, and will continue to allocate costs directly to LSEs
- The CAISO will continue to give the CPUC the RMR credits to allocate to its jurisdictional LSEs or CPEs, and the CPUC can decide if it would like to allocate the local attributes of the resource to the CPEs and system and flex attributes to LSEs, and the CAISO will accept this allocation

Stakeholder Comments

- CPUC supports allowing LRAs to allocate RMR credits amongst CPEs or LSEs
- MRP commented that the CAISO's proposal to only include the CPE in two out of the six CPM cost allocations but not RMR cost allocation seems to have little benefit
 - The CAISO designates RMR units based on reliability needs, and they are not a backstop to the RA program
 - Because the CPE does not have a load share, and is simply a RA procurement agent on behalf of LSEs, the CAISO believes it is justified in maintaining the status quo on how it allocates cost of RMR units directly to LSEs based on their load share in each TAC area

RAAIM SETTLEMENT MODIFICATION PROPOSAL

Background on RAIM Settlement Process

- RAIM consists of a system of non-availability charges and availability incentive payments to scheduling coordinators of RA resources
- These charges and credits are determined for each individual RA resource based on an assessment of how often during the each calendar month that capacity was bid into the CAISO's real-time market
 - If a resource falls below 94.5 percent of its must offer obligation, the CAISO assess a non-availability charge for the month
 - If the resource's availability exceeds 98.5 percent of its must offer obligation, it is eligible for an availability incentive payment for the month
 - If the resource falls between 94.5-98.5 percent, it does not receive a charge or payment

Background on RAIM Settlement Process cont.

- There is a limit placed on the amount of availability incentive payments that can be allocated in any month but not on the amount of non-availability charges collected
- Any excess non-availability penalties above this limit are carried forward from month to month and distributed as incentive payments if applicable
- At the end of the year, any remaining unallocated RAIM penalties are distributed to metered demand (Generic) or LSE obligations (Flex)

RAAIM Settlement Process Challenges

- This mechanism has created several challenges that were discussed in a CAISO waiver request filed at FERC:
 - The carry-forward mechanism creates a financial issue when a settlement recalculation determines that an RA resource is due a refund or reduction of RAAIM charges
 - The only possible source for the refund is from the pool of RAAIM penalties distributed in subsequent months or at year end to metered demand or LSE obligation

RAAIM Settlement Modification Proposal

- The CAISO proposes to modify the current RAAIM settlement processes to eliminate the rule that unavailability charges assessed in excess of the monthly cap will roll-over to fund allocations in future months
- Rather than rolling excess funds into the next month, the CAISO proposes to allocate the excess based on activity in that trading month according to the allocation formula that currently applies to the year-end allocation
- The CAISO will allocate any excess RAAIM charges for Generic RA or Flexible RA to metered demand

RAAIM Settlement Modification Proposal Benefits

- Eliminating the monthly roll-over ensures that the resettlement issues that necessitated the CAISO's April 10, 2020 waiver filing will not recur
- Allocating excess funds based on metered demand will simplify the calculation
- Allocating the excess funds to metered demand, LSEs will be compensated for resources that did not perform in accordance to their RA contract obligations
- This will address the burden on the CAISO's reserve account by ensuring that RAAIM settlements charges and credits all take place within the month in which they are incurred

Stakeholder Comments

- The CAISO received supportive comments from CPUC, PG&E, and SCE on these proposed changes
- CPUC supports this proposal, and agrees that these changes will make RAIM more effective
- PG&E strongly supports the elimination of the RAIM carry-forward mechanism, and believes the CAISO is well-justified to move to a more simplified and fair process to distribute the excess RAIM charges
- CALCCA did not offer comments on this proposal, and CDWR did not object

Stakeholder comments cont.

- MWD raised concern with the CAISO's proposal original proposal to exclude market participants that have Transmission Ownership Rights (TOR) from the metered demand calculations for both Generic and Flex RA
- They argued that as a market participant with TORs, their generation that participates in the CAISO market will be subject to RAIM penalties, but MWD would no longer be eligible to be allocated excess RAIM penalties, which they argue does not appear fair and asks the CAISO to reconsider this policy
- The CAISO agrees with these concerns, and has modified its policy to allow market participants with TORs to be included in the metered demand calculations for Generic RA and Flex RA, and thus will be eligible for allocation of any excess funds

Stakeholder comments cont.

- Middle River Power opposed this policy change for many reasons
- MRP objected to its inclusion in the CPE implementation initiative rather than RA Enhancements or its own stand-alone initiative
 - In the April 2020 wavier at FERC, the CAISO committed to seeking longer term solutions to avoid the need to request further waivers, and the current timeline of RA Enhancements put the CAISO at greater risk of needing additional waivers
 - The CAISO has renamed this initiative to better highlight the inclusion of the RAIM settlement modification proposal in the scope of this initiative
- MRP argued that the proposal would not address the underlying issue because the unallocated RAIM charge may not be sufficient to pay a refund on a monthly basis
 - CAISO disagrees with this assertion, and argues that the proposed solution to eliminate the monthly roll over would reduce the exposure and burden on the CAISO's reserve accounts

Stakeholder comments cont.

- MRP argue that RAAIM is already asymmetrically biased and that incentive payments will only be paid out if there are charges assessed in the month
- MRP argued that we should also lower the availability targets and 2% dead band to be centered on 92.5% to reflect a more reasonable forced outage rate
- MRP proposed that metered demand should be charged to fund RAAIM incentive payments if not enough penalties are collected
 - In response, the CAISO argues that generators are already receiving RA capacity payments that should cover their costs to be available, and therefore are not entitled to any additional payments if there are no RAAIM charges assessed in that month
 - If the resource's bidding falls below the 94.5% availability target agreed upon by parties, the CAISO believes it is reasonable to distribute any excess penalties to load who had paid for these resources to be available to the CAISO
 - Charging load again to fund additional incentive payments could be viewed as a double penalty/charge

Stakeholder comments cont.

- MRP argued that if the CAISO believes a resource that is penalized in one month should not be eligible for RAIM payments in a later month, then the CAISO should have structured RAIM to apply over a longer period of time
 - The CAISO clarifies that the elimination of the monthly roll over would not prevent a resource from getting payments in future months if it was assessed penalties in the current month, but rather would modify the pool of money that it can be paid from
 - Additionally assessing RAIM over a longer period of time would also exacerbate the settlement issues this policy is trying to address

EIM GOVERNING BODY ROLE

Initiative scope falls outside of the EIM Governing Body joint authority

- None of the tariff rule changes currently contemplated in this initiative would be “applicable to EIM Entity balancing authority areas, EIM Entities, or other market participants within EIM Entity balancing authority areas, in their capacity as participants in EIM”
- The proposed tariff rules would be applicable “only to the CAISO balancing authority area or to the CAISO-controlled grid”
 - The scope of this initiative falls outside the scope of joint authority

Initiative scope falls outside of the EIM Governing Body advisory role

- The “EIM Governing Body may provide advisory input over proposals to change or establish tariff rules that would apply to the real-time market but are not within the scope of joint authority”
- No aspects of this initiative would apply or impact the real time market, therefore this initiative also falls outside of the EIM Governing Body advisory role
- PG&E and CALCCA submitted comments in support of this EIM classification. Stakeholders are encouraged to submit any additional comments or questions in support or opposition of this EIM classification

NEXT STEPS

Comments

- Stakeholders are asked to submit written comments by January 20, 2022 through the commenting tool.
- A comment template will be posted on the CAISO's initiative webpage here:
<https://stakeholdercenter.caiso.com/StakeholderInitiatives/Central-procurement-entity-implementation>