

# Comments of Pacific Gas and Electric Company

## *Reliability Services Initiative – Draft Final Proposal*

Submitted by	Company	Date Submitted
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Pacific Gas and Electric Company (PG&E) offers the following comments on the California Independent System Operator's (CAISO) Reliability Services Initiative (RSI) January 22, 2015 Draft Final Proposal.

1. Part 1: Minimum eligibility criteria and must-offer rules

**a. PG&E supports the CAISO's proposal to exempt NGR resources from bid insertion rules.**

PG&E has maintained throughout this initiative that we have serious economic and operational concerns with bid insertion for NGRs. For instance, PG&E has pointed out that because the CAISO does not manage the state of charge (SOC) for all NGRs, bid insertion by CAISO software could result in an inefficient dispatch of NGRs, create infeasible schedules, or worse, damage to the resource if such infeasible schedules were to be followed. It is also unclear to PG&E what bid insertion would look like for the full cycle of charging and discharging and how that would be optimized in the market. Therefore, PG&E supports the CAISO's proposal in the Draft Final Proposal to exempt NGR resources from bid insertion provisions.

PG&E continues to believe that most non-generator resources (NGRs) will have some use limitations in order to limit system degradation, such as total energy throughput and charge/discharge cycles, and thus should be classified as use-limited.

**b. PG&E supports the CAISO's proposal to maintain the bid insertion and RUC participation exemptions for resources previously exempt under the previous use-limited definition.**

PG&E recommended in the Commitment Cost Enhancements (CCE) Phase 2 initiative that the CAISO should put in place generated bid and RUC exemptions prior to implementing the changes in the definition of use-limited resources. PG&E noted in its comments that declassifying certain resources as use-limited would subject non-dispatchable resource adequacy (RA) resources including variable energy resources, regulatory must-take resources, and biomass resources to generated bid and RUC requirements and could result in infeasible dispatch instructions in real-time that do not reflect a unit's dispatch limitations. PG&E supports the CAISO's proposal to maintain the bid insertion and RUC participation exemptions for resources previously

exempt under the previous use-limited definition and again recommends that these exemptions are in place before the change in the use-limited definition is implemented.

In order to ensure the exemptions occur before the use-limited definition is changed, the CAISO should assure that the RSI Proposal's changes are in effect before the CCE Phase 2 Proposal changes. To accomplish this PG&E believes that the CAISO should break out the issue of maintaining bid insertion and RUC participation exemptions from the RSI proposal and put it into the CCE initiative. Including this issue in the same filing at FERC would ensure that the uncertainties of FERC review times and potential delays in the process don't create a situation where the CCE definition change is implemented before exemptions are in place.

**c. The CAISO should prioritize the reassessment of block dispatchable pumping load in Phase 2 of the RSI.**

In the CAISO's Flexible Resource Adequacy Criteria and Must Offer Obligation (FRAC-MOO) initiative, the CAISO recognized the benefits that flexible hydro resources can provide, but did not determine whether or how to count the pumping capabilities of a pump hydro resource for flexibility. PG&E believes that pumping load with a transition time of 45 minutes or less should count as flexible capacity, and has filed a proposal in the CPUC's current RA proceeding (Rulemaking 14-10-010) to change the Effective Flexible Capacity (EFC) counting rules for flexible RA accordingly. PG&E's Helms units can routinely reduce the CAISO's flexibility needs both through its generation and pumping functions.

The recent FERC ruling conditionally approving the ISO's FRAC-MOO tariff instructed the ISO to continue to examine how resources like Helms would be able to provide flexible capacity. PG&E appreciates that the CAISO remains committed to conduct the reliability assessment instructed by FERC and to resolve this issue. PG&E has maintained throughout this initiative that timely resolution of this issue is important – it should be a Phase 1 issue - so that the CAISO's market recognizes the appropriate value that all storage resources can provide and so that parties can properly value different technology types in the upcoming procurement of storage resources. Given where the CAISO is at in the current RSI timeline, PG&E recommends that the CAISO commit to prioritizing this issue in Phase 2.

**d. The CAISO should comprehensively examine the requirements placed on all storage technologies in receiving RA credits.**

PG&E supports the CAISO conducting a comprehensive analysis not only of deliverability for all storage technologies, e.g. hydro pumped storage, but also of how variable loading, transition time, and state of charge management impact a storage resource's ability to deliver flexibility to the grid, in both charging and discharging modes. The results of CAISO's analysis should inform revisions to the CAISO's counting criteria for storage resources. Revised counting criteria for storage resources should ensure that the value that flexible storage resources is properly accounted for on an equal basis with other technologies. Timely resolution of this issue is important

so that the CAISO's market recognizes the appropriate value that all storage resources can provide and so that parties can properly value different technology types in the upcoming procurement of storage resources.

2. Part 2: Availability Incentive Mechanism

- a. PG&E supports the CAISO's proposal to link the RAAIM price to the CPM soft offer cap but remains concerned that the proposed RAAIM price at 60 percent of the CPM soft offer cap is too low and could result in reliability issues.**

PG&E has maintained throughout this initiative that the RA availability incentive mechanism (RAAIM) price should be linked to the Capacity Procurement Mechanism (CPM) soft offer cap price and that the RAAIM price should not be set so low as to incent generators to accept the penalty rather than go to the bilateral market for replacement RA. PG&E supports the CAISO's new proposal to link the RAAIM price to the CPM soft offer cap so that each time the soft offer cap is updated the prices don't become further misaligned. However, PG&E is still concerned that the proposed RAAIM price at 60 percent of the CPM soft offer cap is too low and could result in reliability issues and higher customer costs due to increased CPM designations.

If the RAAIM is the tool that the CAISO will use to maintain reliability related to outages, it needs to be high enough to incent resource performance and replacement. A higher RAAIM penalty will incent generators who may be receiving a high bilateral price for their RA to nonetheless provide replacement RA. The CAISO should also keep in mind that it is possible that bilateral prices for replacement RA for time periods shorter than one month may be higher than the standard month-long product seen in the CPUC RA Report, due to the need to recoup transaction costs. This would also suggest that a higher RAAIM price would provide an appropriate incentive to generators to procure replacement RA for their shorter outages.

Thus, PG&E continues to recommend that the RAAIM price is set at the CPM soft offer cap price. If the CAISO moves forward with the proposed RAAIM price at 60 percent of the CPM soft offer cap, PG&E proposes that to accommodate the lower RAAIM price the CAISO implement a two-tiered RAAIM price structure that penalizes resources that don't provide substitution during a CPM designation at a higher RAAIM rate equal to the CPM soft offer cap price. This would provide a more accurate reflection of the value of capacity during a reliability event. It would also increase the incentive for resources to provide substitute capacity because they would potentially be subject to a higher RAAIM penalty if a CPM event is called.

- b. PG&E recommends that the proposed advisory period for the RAAIM is extended to two months.**

The CAISO proposes in the RSI Draft Final Proposal to have a three month advisory period for the RAAIM that will begin with the implementation date and during this

time all RAIM penalties and payments will be advisory. At the January 29, 2015 RSI Stakeholder Call, the CAISO indicated that this will be changed to a one month advisory period. The CAISO indicated that the reason for an advisory period is to allow resource owners to assess how their behavior will impact their RAIM assessment. PG&E understands that RAIM charges and payments will not be known until three days after the operating month and therefore PG&E has concern that a one month advisory period would not allow for a full monthly settlement cycle to more effectively understand how a resource's behavior is treated under the new RAIM construct. It seems better to provide the protection of an advisory period over a two month timeframe in order to include the monthly statements issued 12 days after the operating month in the participant's analysis.

The CAISO also indicated that there will be no Standard Capacity Product (SCP) incentive mechanism during the advisory period for the RAIM. Therefore, there will be a period of time where resources are not subject to any availability measures. While PG&E supports an advisory period for the RAIM, we do have some concern with having a time period where resources are not subject to any availability measure. PG&E recommends that resources are still subject to the SCP during the advisory period. If it is not possible for the CAISO's system to have both incentive mechanism structures in place simultaneously, it is imperative that the CAISO implement the RAIM construct in months where there is less reliability concern (i.e. January and February).

**c. PG&E recommends that the CAISO's proposal to establish a monthly roll-over account for RAIM payments is moved to Phase 2 of the RSI.**

Under the current SCP process, if the pool of funds collected from incentive penalties exceeds the total pool needed for incentive payments, the funds are allocated back to LSEs through a monthly payment based on load ratio share. In the current RSI, the CAISO proposes to create a roll-over account for any monthly AIM penalties that exceed the total pool needed for AIM payments in that month to be used in AIM payments to high-performers for the following month. Any excess funds in the roll-over account at the end of the year would then be paid to LSEs based on load ratio share.

PG&E believes that the proposed monthly roll-over account creates unequal incentives across months, whereas currently there are consistent incentives across months. For example, under the proposed monthly roll-over account a generator that did nothing to help one month when there were a lot of outages and strains on the system could get rewarded in the following month for performing well when there were no outages. This would remove the link between impact and benefit that is currently incorporated into SCP and would seem to be unfair for high-performing resources in the early months of a year.

PG&E is concerned that alternative proposals to the monthly roll-over account have not been considered and recommends that the CAISO move this issue to Phase 2 of

the RSI where further consideration can be given to proposals that would maintain consistent incentives across all months.

**d. PG&E requests more information on why the CAISO proposes to require that each resource only has a single flexible must-offer obligation for purposes of availability assessment.**

The CAISO proposes for availability incentive purposes that each resource only has a single flexible must-offer obligation for purposes of the availability assessment. The CAISO reasons that this policy reduces implementation complexity. PG&E would like to understand more details on why the CAISO is making this proposal and requests an example of the implementation complexity associated with how a single resource shown in multiple flexible categories would be assessed under the RAIM. It seems that the CAISO's proposal would eliminate the point of allowing a resource to be shown in multiple flexible categories.

**e. PG&E requests that the CAISO should revisit in RSI Phase 2 whether all wind, solar, and CHP resources ought to be exempt from RAIM for generic RA.**

In its response to San Diego Gas and Electric's (SDG&E's) comments on RAIM exemptions for wind, solar, and CHP resources, the CAISO states that it proposes to exempt wind, solar, and CHP resources from the generic must-offer obligation. PG&E does not understand this statement and requests further explanation. As noted elsewhere in the RSI, tariff section 40.6.1 requires Scheduling Coordinators of all Resource Adequacy Resources to submit economic bids or self-schedules for all operationally available RA capacity.

Further, while PG&E understands the challenges the CAISO faces with applying RAIM to these types of resources, we are concerned that this proposal would exempt a larger pool of resources from an availability assessment than are currently exempt (i.e. grandfathered) from SCP. Fewer resources would have incentives and penalties for availability and there would be no incentive to provide substitution, which could impact reliability. Therefore, PG&E recommends the CAISO revisit the RAIM exemption rules within RSI Phase 2 to determine if there is an appropriate way to assess availability for these resource categories.

PG&E would also like a clarification to this current proposal. The CAISO proposes that most Qualified Facilities (QFs) would be exempt from the RAIM. PG&E would like to further understand which QFs would not be exempt from the RAIM.

**f. PG&E does not believe the term acquired resources is an appropriate term for resources currently named grandfathered resources.**

PG&E does not believe the term acquired resources is an appropriate term for resources currently named grandfathered resources. The term creates confusion rather than clarity and is not associated with anything in the CAISO tariff. PG&E suggests that the CAISO instead use the term "RAIM exempt" and also notes that a change

to the term will necessitate a change to the tariff to cover this change. If the change in terminology would result in any change in policy or would have other implications, PG&E would appreciate a further understanding of the matter.

3. Part 3: Replacement and Substitution

**a. PG&E has concerns with the CAISO's proposal to cap the local RA requirement at the system requirement and recommends addressing the proposal in Phase 2 of the RSI.**

PG&E is concerned that the CAISO's proposal to cap the local RA requirement at the system requirement could unfairly relax local RA requirements for some LSEs and not others, leading to unequal treatment of LSEs. Further, the CAISO hasn't demonstrated that reliability wouldn't be compromised under the proposal. The CAISO has also proposed this change in the CPUC RA process (Rulemaking 14-10-010) and at the February 9, 2015 CPUC RA workshop, the CAISO presented this proposal. Given the discussion at the workshop, it is not entirely clear to PG&E what the CAISO's proposal actually is, and whether the local RA requirement would be capped at the LSE level or the Transmission Access Charge (TAC) level. The CAISO's proposal requires further articulation and stakeholders would benefit from more examples under the proposal. Therefore, the CAISO's proposal should be addressed in Phase 2 of the RSI where stakeholders can fully consider the proposal and other alternatives, such as allocating the benefits of a reduced local RA obligation to all LSEs in a TAC or establishing local RA requirements on a monthly basis. The issue was first introduced in the RSI Draft Final Proposal and there has not been sufficient time for stakeholders to understand and develop the proposal.

**b. PG&E remains concerned with the proposed requirement that the supplier will be responsible for all outage replacement starting in the 2017 RA Year.**

The CAISO has proposed that suppliers of RA will be responsible for providing replacement RA for all outages, including outages scheduled prior to T-45. Not all suppliers have a portfolio of resources for providing replacement capacity. Therefore, they are less able to assess the costs of replacement capacity versus an LSE that can use its portfolio of resources. Suppliers with small portfolios could be exposed to high prices and a limited number of sellers for replacement capacity.

In addition, while CAISO's proposed process would simplify the process within CAISO's CIRA system, it would not simplify the coordination for replacement between an LSE and the supplier. If the contractual obligation to replace remains with the LSE, the proposed process could increase the amount of steps and coordination between the LSE and the supplier. The LSE would have to communicate the new resource to the Scheduling Coordinators of both the designated RA resource and replacement RA resource before any information is uploaded to CAISO's CIRA system. This additional coordination outside of CIRA could lead to more complexity and errors.

Finally, it is possible that capacity prices seen in the RA bilateral market could increase due to the added outage replacement risk and coordination responsibility taken on by suppliers, particularly for small suppliers that are not accustomed to coordinating outages with the CAISO. This secondary impact on the overall bilateral RA market would then lead to higher customer costs.

**c. The CAISO should correct the proposed timeline in Figure 19.**

At the January 29, 2015 RSI Stakeholder Call, the CAISO indicated that Figure 19 in the CAISO's RSI Draft Final Proposal does not accurately reflect the timing included in the CAISO's proposal. Specifically, the day when the validation results are given to the LRA, LSE, and supplier (T-40), the day when the replacement requirement is assigned to suppliers (T-20), and the time when the CAISO repeats the RA outage impact report for final supplier obligation (T-11) in Figure 19 do not match the corresponding dates within Figure 18. The CAISO should correct Figure 19 to be consistent with the proposal.