



**Comments of Pacific Gas and Electric Company on
Commitment Costs and Default Energy Bid Enhancements
Revised Draft Final Proposal**

Submitted by	Company	Date Submitted
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Pacific Gas and Electric Company (PG&E) appreciates the opportunity to comment on CAISO’s Commitment Costs and Default Energy Bid Enhancements (CCDEBE) Revised Draft Final Proposal.

While CAISO has made some significant strides in filling previous gaps (particularly in regard to its dynamic mitigation proposal for commitment costs) and PG&E appreciates CAISO releasing Business Rules concurrently with a Revised Draft Final Proposal, PG&E believes there are many key aspects of the proposal CAISO still needs to clarify and it would be beneficial for CAISO to extend the stakeholder process on discretionary elements of the initiative to alleviate concerns raised by the Department of Market Monitoring (DMM) and market participants.

Specifically, PG&E suggests that CAISO only take elements to the Board that require immediate attention to meet compliance with FERC Order 831 or to prevent key Aliso Canyon provisions from expiring. These include:

1. bid and reference design enhancements necessary to comply with FERC Order 831 (allowing for verified cost-based energy bids up to \$2000/MWh)
2. continuing to use the next day gas commodity price index published the morning of the day-ahead market in its day-ahead market
3. continuing to send scheduling coordinators the D+2 residual unit commitment advisory schedules report

At this time, PG&E opposes CAISO taking the following discretionary elements of the proposal to the Board on the grounds that CAISO has yet to prove the effectiveness of the policy, provided detailed analysis of pros and cons, and answered key questions raised by stakeholders:

1. development of market-based commitment costs
2. allowing hourly bidding of minimum load costs
3. related market power mitigation enhancements

PG&E’s position is bolstered by the realization that on the implementation front, CAISO is limited in the scope of CCDEBE it can reasonably deploy this year. Given CAISO will need to implement CCDEBE in a phased approach, there is no need to bring discretionary elements of its scope to the Board with the same urgency as that needed to comply with FERC Order 831. PG&E expands upon these points in the

comments below, which are organized by the sections of the Revised Draft Final Proposal¹ and allude to some of the clarifications still needed to solidify the proposal (many of which are also echoed by concerns raised by the DMM):

Comments

Section 5.1: Market-based commitment costs and hourly minimum load

1. **PG&E continues to share concerns about committing to move forward with a dynamic mitigation and market-based commitment cost offer design while questions remain regarding design details and feasibility. CAISO can pursue bid and reference design enhancements first and fully comply with FERC Order 831 without these design components.**

Given the recent evolution of certain components of this proposal coupled with the fact that only a small subset of the scope of this initiative is actually needed to satisfy FERC Order 831, PG&E feels it prudent for CAISO to take a much narrower scope to its Board for approval at this time and extend the stakeholder process for the remaining, more complex provisions. Furthermore, the Department of Market Monitoring (DMM) has voiced opposition to this initiative in its current form citing concerns that CAISO has not clarified key provisions and that the initiative will likely be ineffective (for reasons including those listed later in these comments) in achieving its intended goals. In particular, PG&E feels CAISO can separate out the bid and reference enhancements allowing for cost-based energy bids above \$1000/MWh as well as the more immediate extension of temporary Aliso Canyon provisions that would otherwise expire. In the meantime, CAISO can continue to vet the design for the dynamic mitigation and market-based commitment cost offers pieces within the context of other related forthcoming initiatives such as Real-Time Market Enhancements and allow for more stakeholder feedback.

2. **PG&E's request for CAISO to postpone taking these discretionary components to the Board at this time is further supported by realities on the implementation front that, even if approved in its entirety, CAISO would almost definitely end up implementing CCDEBE in phases.**

CAISO has committed to having discretionary initiatives slated for a Fall release be approved by its Board prior to the end of the previous calendar-year; this is coupled by an already ambitious Fall 2018 implementation release plan. The earliest CAISO would be able to achieve Board approval is late-March, well beyond the year-end cutoff; thus, it makes sense for CAISO to focus foremost on the non-discretionary elements of this initiative giving these pieces the utmost chance for success and continuing dialogue on the other, more involved elements. Ideally, this would also allow CAISO to perform testing and evaluation of its dynamic mitigation proposal before Go-Live. Though testing would not fully incorporate changes in market participant bidding behavior due to the design change, results would allow market participants to understand if the new design would subject resources to more or less frequent mitigation and allow CAISO to fine-tune the proposed design if necessary.

¹ <http://www.aiso.com/Documents/RevisedDraftFinalProposal-CommitmentCosts-DefaultEnergyBidEnhancements.pdf>



Furthermore, CAISO is currently targeting to publish its draft Business Requirements Specifications (BRS) document just days prior to its Board of Governors meeting. While PG&E appreciates CAISO's effort to use CCDEBE as a trial initiative to get out draft technical documentation in the Policy Phase (including the high-level Business Rules already published), the current target date for BRS publishing does not give market participants any time to review prior to CAISO seeking formal approval from the Board. Continuing the stakeholder process for the discretionary elements of the proposal would afford market participants additional time to review and provide input/feedback on implementation requirements and feasibility.

3. PG&E opposes CAISO's automatic 18-month trigger to changing the proxy cost scalars in reference levels from 125% to 110% and commitment cost circuit-breaker caps from 200% to 300%. Alternatively, PG&E proposes CAISO frame potential changes as "opt-in" subject to analysis and evaluation of mitigation performance during the first year post-Go-Live.

In the Revised Draft Final Proposal, CAISO has already recognized the need to carefully analyze the market data from the first twelve months post-Go-Live (particularly regarding its dynamic market power mitigation of commitment cost enhancements) and stated, should design issues arise, would file with FERC to delay these automatic changes. Given CAISO has already committed to analyzing this data either way, PG&E feels it is more prudent to instead, after the results of this analysis are shared with market participants, determine at that time if these changes are warranted. Thus, in essence, CAISO would be reserving the right to "opt-in" to these changes via filing with FERC rather than defaulting to "opt-out". This approach is further bolstered by concerns from the DMM in previous comments that CAISO has not defined the study to be conducted after twelve months and maintaining an automatic trigger could result in an inadequately designed study to meet the 18-month deadline. DMM has also stated in comments that the need for a 300% cap has never been substantiated; PG&E shares this concern and seeks to ensure this increase is ultimately justified.

4. PG&E shares concerns raised by the DMM that a 110-125% scalar for commitment costs "double counts" as the reasonable threshold already scales fuel costs and having both creates excessive headroom.

PG&E shares the opinion of the DMM that CAISO has not justified the need for a 125% scalar, especially in context that commitment cost reference levels already include a 110% scalar on fuel costs, which are the most volatile components of commitment costs and, as a result, the best case for needing additional headroom in the first place. Allowing an overall 125% scalar on top of the fuel cost scalar seems to be "double-counting" and it seems out of place to allow so much headroom for additional "incidental" costs. PG&E does not believe scaling the gas price index by 110% or 125% then by another 125% would necessarily constitute a "reasonable" cost.

With this in mind, PG&E proposes CAISO further explore the appropriate scalar to apply to use for commitment costs, potentially aligning it with that for energy cost reference levels at 110% from the get-go (CAISO could then choose to "opt-in" to a scalar that differs from that used for energy cost references if justified by twelve months of data post Go-Live). Overall, PG&E is



interested in further hearing out DMM's feedback on this issue and ensuring the ultimate solution does not impose unjust costs on the market.

5. PG&E supports eventually allowing hourly Min Load Cost variation and appreciates CAISO's efforts to promote settlement and mitigation rules that effectively mitigate potential Bid Cost Recovery (BCR) gaming issues

PG&E feels CAISO has made significant strides in alleviating BCR gaming issue concerns with the latest clarifications on its proposed mitigation design. In its ultimate proposal, PG&E feels CAISO should continue to pay particular attention to potential seams issues associated with Min Load Costs such as for resources with commitments that bridge across trade dates.

Section 5.2: Market power mitigation enhancements

1. PG&E believes potential market benefits and feasibility of introducing dynamic commitment cost mitigation have not been full demonstrated at this point; CAISO never formally shared intended assessment on feasibility (including run times) and cost/benefit analysis. CAISO should ensure these changes are coordinated with other forthcoming initiatives such as Real-Time Market Enhancements and take this component to the Board at a later date once more fully vetted.

Reiterating comments above, PG&E feels it is premature for CAISO to take its market power mitigation enhancements for commitment costs to its Board for approval at this time. These design elements have been in flux throughout the stakeholder process with CAISO only solidifying key components (i.e., applying mitigation separately to energy and commitment cost bids, mitigating commitment costs if effective to any non-competitive non-binding constraint if resource could bid commitment costs to inflate uplift) in this Revised Draft Final Proposal. Furthermore, dating back to the initial Straw Proposal, CAISO indicated that these market power mitigation enhancements were contingent upon:

"completion of its evaluation of the feasibility and capital costs associated with enhancements relative to the benefits. CAISO will finalize this assessment and provide information in its draft final proposal. If cost benefit analysis indicates feasibility and stakeholder comments continue to support this direction, the CAISO would consider phasing the implementation of this initiative so that the mitigation enhancements are implemented either simultaneously with the planned Real-time Market Enhancements initiative or shortly after".

Although CAISO has indicated that it internally has determined feasibility, it has never shared these results and/or cost/benefit analyses with stakeholders via formal report out. Furthermore, in reference to CAISO's original intent to implement these changes in tandem with its Real-time Market Enhancements initiative, while PG&E recognizes this initiative can be implemented prior, we feel CAISO should continue to clarify the impacts of these mitigation enhancements via analyses shared with stakeholders (including in the context of other upcoming initiatives) before sending these provisions to the Board for approval. Rather than CAISO's proposal to review



twelve months of Production mitigation data via stakeholder initiative, PG&E proposes CAISO instead thoroughly test prior to Board approval and share pro/con analysis supporting current dynamic mitigation design over alternative proposals (and the existing market structure).

Section 5.3: Reference levels

1. **While PG&E supports CAISO’s proposal to permanently update day-ahead gas price indices with ICE information prior to the day-ahead market run, PG&E shares concerns raised by the DMM regarding the ineffectiveness of the real-time adders (to proxy commitment costs and default energy bids) CAISO is authorized to allow for Southern California resources during constrained gas conditions and feels this issue should be explored further as part of this proposal.**

While PG&E is generally supportive of CAISO making permanent the Aliso Canyon provisions associated with CCDEBE (including updating day-ahead gas price indices with ICE information prior to the day-ahead market run), PG&E is concerned that CAISO has not spent enough time addressing the DMM’s concern that Aliso Canyon gas price scalars in the real-time market have been ineffective. As presented during the recent February 2018 Market Performance and Planning Forum, the DMM has provided evidence that suggests these scalars have done very little to change the merit order of commitment and have for the most part simply imposed higher prices on the market. Furthermore, in previous comments on CAISO’s 12/21/2018 Web Conference, DMM articulates the multi-directional shortcoming of using stale gas index data in the real-time market:

“The gas price multipliers proposed for the threshold will be routinely too high, and occasionally too low. High transaction prices on many days are well below 110% of the next day price. When prices do go up significantly, they tend to reach beyond 110%, and often beyond 125%. When it is too high, this will impose unnecessary costs on the market. When it is too low, the market will not be able to achieve efficient dispatch. Dispatching inefficiently on days when fuel prices are high or fuel is scarce can have adverse consequences for reliability of both the electric and gas systems. Avoiding these inefficiencies should be a primary reason to pursue the CC DEB policy. If the ISO cannot construct a policy that is able to respond to those kinds of conditions, the ISO should delay taking the policy to the Board.”

PG&E agrees with DMM’s position and feels CAISO should further explore ways to incorporate observed prices on ICE the morning of each operating day into the gas prices used in the real-time market default energy bid and commitment cost caps as part of its long-term solution.

2. **PG&E supports CAISO making permanent the practice of sending scheduling coordinators the D+2 residual unit commitment advisory schedules report to assist in planning gas procurement**



- 3. PG&E continues to pose the following question: does CAISO believe relaxation of the power balance constraint should warrant \$2,000/MWh prices if there are no offers that exceed \$1,000/MWh on any given day? Given CAISO considers \$2,000/MWh to be the “cost-based offer cap”, is a \$2,000/MWh power balance constraint relaxation penalty price the right price to set if there are no cost-based offers to support that price or fall near the “cost-based offer cap”?**

PG&E continues to have concerns about the potential for substantial increases in price volatility associated with the proposed scaling of penalty pricing parameters (especially in context of recent realized increases in real-time price volatility, especially in the 15-minute market), the true impact of which are not known and hard to predict at this point. PG&E has raised in past comments that CAISO should explore the possibility of making the penalty price parameters contingent on whether there are actually offers exceeding \$1000/MWh for that trade date. At a minimum, CAISO should provide analysis and arguments alleviating or countering these concerns. Given that this design element likely would need to be included in the package necessary to comply with FERC Order 831, there is urgency for CAISO to address this concern as soon as possible.

Section 5.4: Supplier submitted reference level adjustments

- 1. PG&E supports and pushed for CAISO to stress that reference level adjustments should only include actual costs that do not include risk-related adders above cost. Furthermore, PG&E appreciates CAISO’s emphasis in the latest proposal that scalars used in reasonable thresholds are not “safe harbor” to strategically bid close to threshold above actual costs as well as asserting CAISO’s audit authority to verify frequently made adjustments. These help alleviate concerns PG&E had regarding abusing the predictability of reasonableness thresholds if CAISO applies a consistent scalar on gas price indices.**
- 2. Finally, in past comments PG&E has raised a variety of questions including those listed below that to our knowledge have not been fully answered to this point. These additional clarifications needed (as well as those raised by other stakeholders) suggest that CAISO’s CCDEBE proposal is incomplete at this point and could benefit from additional stakeholder engagement. This reiterates PG&E’s ask that CAISO only take those urgent elements of the proposal necessary to comply with FERC Order 831 or prevent Aliso Canyon provisions from expiring to the Board for approval at this time. CAISO should leverage the implementation timeline limitations to extend the stakeholder process to better solidify the other discretionary elements of the proposal regarding the development of market-based commitment costs and the related market power mitigation enhancements.**

PG&E’s open questions include:

- a) For ex ante default energy bid (DEB) adjustments, will SCs have to submit an adjustment that represents all steps of the bid curve? Will the reasonableness threshold evaluate each segment of a submitted reference adjustment bid curve? Will



the DEB adjustment request be required to mirror the number of segments in the default reference curve?

- b) While CAISO added additional language on documentation requirements for supporting reference adjustments (and clarified “at least three” gas quotes were needed), the latest proposal does not appear to have addressed the following question: could the quote requirement for ex ante reference adjustments be met by a single supply curve from a single counterparty at a point in time? Or is the requirement intended to capture different quotes from the same counterparty at different times of the day for the same volume?
- c) PG&E continues to request more detail on the use of the “feedback loop” term which CAISO proposes will be used to capture costs in reasonableness thresholds that have been verified in the ex post verification processes. How frequently will this term be updated? What length of ex post cost verification is required before incorporating this term in the thresholds calculations? Does this only apply to fuel costs or are other costs also eligible to be included in the feedback loop?