



Comments of Pacific Gas & Electric Company Resource Adequacy Enhancements – Revised Straw 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 Corporation’s (CAISO) Resource Adequacy (RA) Enhancements revised straw proposal, published July 1, 2019, and discussed in the stakeholder meeting on July 8th and 9th.

PG&E shares the CAISO’s belief that the RA program requires substantial reform to assure a durable framework that ensures the reliability of the CAISO system. PG&E appreciates the CAISO’s ambition and thoughtfulness in developing and proposing the holistic approach in the revised straw proposal. However, PG&E is concerned that the proposal, as it stands, (1) creates new barriers and adds unnecessary complexity to many areas of the program in order to streamline others, (2) promotes a divergence from the California Public Utilities Commission’s (CPUC) RA requirements, and (3) is too broad in scope to be effectively implemented in the timeframe proposed.

PG&E requests that reform to the CAISO’s implementation the RA program be guided by the following principles:

- Simplicity – for reasons of compliance, staffing, and alignment with the CPUC
- Focused scope and clearly defined rules to support compliance, operation, and forward sales
- Reflect physical reality – the reliability need and resource capability
- Achieve reliability fairly – avoid leaning, cost shifting, and over procurement
- Provide the proper incentives for RA to offer and at reasonable prices

PG&E’s comments can be summarized as follows:

1. PG&E supports the use of a single counting methodology for both system and local RA.
2. PG&E opposes the CAISO’s must-offer obligation and bid insertion requirements that reflect neither operational capabilities nor capacity counting values.
3. PG&E recommends that Planned Outage Process Enhancements be moved into its own initiative for focused development and expedited implementation.
4. PG&E requests clarity on the CAISO’s understanding and intended implementation of CPUC Import RA rules.
5. PG&E recommends that Flexible RA counting rules, requirements and sufficiency testing, as well as remaining portions of the proposal, be descoped from this initiative and delayed.

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1. PG&E supports the use of a single counting methodology for both system and local RA.

PG&E opposes the current path the CAISO has chosen that would effectively create two system RA values - one used for CPUC compliance (Net Qualifying Capacity (NQC)) and one used for CAISO compliance (Unforced Capacity (UCAP)). The CAISO should instead make the case to the CPUC and other Local Regulatory Authorities that UCAP should be the basis of reliability planning. If unable to do so successfully, the CAISO should keep and modify the existing NQC methodology and/or adjust the Planning Reserve Margin (PRM).

The CAISO proposes that a UCAP counting methodology and requirement for system RA sit alongside the existing NQC counting methodology and requirement, which would remain for local RA.¹ PG&E acknowledges and understands the rationale presented by the CAISO which frames the UCAP requirement as a subset of the NQC requirement. However, PG&E disagrees. While conceptually plausible, the many ramifications of implementing a dual regime – outlined below – make this approach inviable.

PG&E believes that it is indispensable that there be a single capacity counting methodology for both system and local RA, establishing the basis for aligned system and local RA showings requirements. This single metric should be used by both the CAISO and the CPUC. With the CAISO's proposed two sets of diverging capacity counting methodologies and showings requirements, Load Serving Entities (LSEs) face a multiplicity of risks and issues, including compliance risks, contracting issues related to the transacted 'basket' of products and their variable value over the term of the contract, cost allocation issues, a greatly increased administrative burden, and so on. Given the present reality of fragmented load-serving in California – with the accompanying sale, re-sale, and cost-allocation of reliability and RA products – a dual regime will stress LSEs and will almost certainly be unworkable. Single-metric simplicity is more than a convenience; it is indispensable.

Sufficiency Tests

The CAISO proposes to conduct a system portfolio UCAP sufficiency test and to backstop for any collective deficiency.² The sufficiency test would be based on the ability of the aggregate portfolio – modeled in an hourly production simulation – to address a series of different load variations throughout the month. It would appear possible that even if an LSE, or all LSEs were sufficient in their showings, a collective deficiency could still present based on the makeup of the portfolio, with the resulting backstop cost allocation. This approach does not provide clearly defined rules to support LSE planning for compliance and optimization of its position. It does not appear to achieve reliability fairly, but opens the door for further leaning, cost-shifting and possible over procurement.

Additionally, it could be inferred from the proposal that it is the CAISO's interpretation of California Public Utilities Code 380 that LSEs must meet their load requirements in every hour.³ Naturally, it would be unrealistic to expect LSEs – particularly small LSEs – to sign RA contracts with market participating generators to match the exact shape of their load, particularly as the aggregate portfolio

¹ RA Enhancements revised straw proposal, 10.

² Ibid., 26.

³ Ibid., 8.

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approaches 100% GHG-free generation. LSEs do not have, nor should they be required to have, knowledge of the operational characteristics of the resources signed under RA contracts necessary to conduct this type of an assessment on their own.

2. PG&E opposes the CAISO's must-offer obligation and bid insertion requirements that reflect neither operational capabilities nor capacity counting values.

PG&E urges the CAISO to clearly define the relationship between the planning requirements for RA and the operational requirements (must-offer obligations (MOOs)). The CAISO should develop MOOs that are consistent with capacity counting values and provide certainty for forward planning yet are consistent with and reflect the operational capabilities of resources, particularly use-limited hydroelectric resources.

PG&E recommends a more realistic approach, whereby MOOs vary with expected resource availability across the hours of the day and also reflect changing load requirements. An approach along these lines would better achieve the CAISO's goals and reflect the actual operational constraints of these resources.

Instead, the CAISO proposes to maintain as standard the existing 24/7 MOO on RA resources while introducing a series of exemptions.⁴ The CAISO argues that this is done to avoid the complexity of multiple MOOs. However, what the CAISO has achieved is a proposal that sets a standard MOO with so many exemptions that the result is multiple MOOs that still fail to address the existing problems of an unrealistic and unnecessary 24/7 requirement. This approach fails to reflect the physical reality of resources and fails to provide the proper incentives for RA to offer and at reasonable prices.

PG&E also opposes the CAISO's proposed introduction of bid insertion on use-limited resources with biddable opportunity cost adders until the CAISO clarifies the definition and applicability of use-limited and conditionally available resources (CARs).⁵ As it is, a Scheduling Coordinator may refrain from showing a use-limited resource in their RA plan because of the associated 24/7 MOO and possible bid insertion. The CAISO has yet to fully implement the requirements associated with CARs but continues to change requirements for these and other use-limited resources.

PG&E suggests the CAISO is attempting to bridge an unresolvable tension between two diametrically opposed design approaches: peak needs vs. energy sufficiency. In the past and present, peak capacity planning paired with a 24/7 obligation on a generally committable fleet provided an indirect means of obtaining energy sufficiency. The 24/7 MOO is a vestige of this construct. As the CAISO moves, per its proposal, to explicitly considering hourly energy sufficiency – in acknowledgement of the growing fleet of availability-limited resources – this vestige becomes an unworkable, redundant anachronism.

⁴ Ibid., 27.

⁵ Ibid., 28.

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3. PG&E asks that the Planned Outage Process Enhancements section be moved into its own initiative for focused development and expedited implementation.

PG&E strongly recommends that the Planned Outage Process Enhancement be removed and taken up in its own stakeholder initiative. Further, PG&E opposes the current proposal. Rather than creating strict comparability rules, the CAISO should use the Competitive Solicitation Process (CSP) to procure adequate substitute capacity, then give LSEs the option to either pay the CSP price, find alternative capacity, or cancel the outage.

The current planned outage process is complex and requires more attention than can be allocated in the context of RA Enhancements, given the broad range of topics covered herein.⁶ It appears that planned outage treatment can be developed independently and would benefit from focused development. Given that there are many existing issues in the current planned outage process requiring urgent attention, expedited policy development and implementation is justified.

Taking the opportunity to provide comment on the CAISO's current thinking with respect to the planned outage substitution obligation, PG&E appreciates that the CAISO is attempting to provide more clarity and options to LSEs looking to secure substitute capacity.⁷ However, PG&E offers the following comments on its position and concerns:

- PG&E opposes the requirement of comparable substitute resources, certainly to the extent the CAISO proposes. How often might this kind of “comparable” substitute capacity simply not exist? Will the planned outage then simply be denied? Rather than creating strict comparability rules, the CAISO should use the CSP to procure adequate substitute capacity, then give LSEs the option to either pay the CSP price, find alternative capacity, or cancel the outage.
- Comparable substitution requirements may incentivize LSEs to hold onto a reserve of comparable or “better” capacity instead of committing it in their RA showings.
- With the local disaggregation, this comparable resource substitution requirement may lead to more cancellations of planned outages on local resources, particularly in areas where the supply is deficient, given that there will be a lack of substitute capacity available in the market; planned maintenance outages that are likely critical to maintaining the reliability of a resource.
- A substitution capacity bulletin board may require resource owners to divulge potentially confidential information with respect to use-limitations and ancillary service certifications. Due to the desire to limit sharing potentially market-sensitive information, using the CSP tool would be a better approach.
- PG&E is concerned that the substitution availability calendar could be used for determining whether to increase bids during certain days.
- The CAISO should assess whether the Listed Local structure is needed under this proposal.

⁶ Please see PG&E's comments in the policy initiatives catalog: <http://www.aiso.com/Documents/PG-ESubmission2-2020DraftPolicyInitiativesCatalog.pdf>

⁷ RA Enhancements revised straw proposal, 32.

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4. PG&E requests clarity on the CAISO's understanding and intended implementation of CPUC Import RA rules.

The CAISO proposes to incorporate CPUC RA import rules and regulations, specifically that import RA be supported by firm energy and operating reserves.⁸ PG&E supports the CAISO's efforts to clarify and assure the value of import RA. It is important that import RA have clear obligations such that when called upon, including in times of WECC-wide stress, they are dependable and provide a known value to the CAISO system.

The CPUC and the CAISO appear to be trying to solve multiple issues through the revised import RA rules, including (1) Reliability: ensuring energy deliveries, particularly when the system is tight; (2) Economic energy: ensuring the CAISO market has access to the energy at reasonable prices; and (3) Bidding flexibility: ensuring the CAISO can address overgeneration and meet ramping needs. Various proposals have been made at the CPUC to meet these objectives. For example, Southern California Edison and PG&E have both suggested requiring that import RA specify a max energy bid price (or call option) along with requirements that it be backed by firm energy. PG&E requests that the CAISO provide its view on whether these are the right objectives and what it considers to be the tradeoffs of the various proposals to meeting these objectives related to import RA.

PG&E also states in its comments to the CPUC Commissioner's Ruling seeking comment on clarification to RA import rules that it believes the features of Western Systems Power Pool (WSPP) Schedule C (or contractually equivalent) firm energy (e.g., firm energy delivery with a stipulated damages provision against Seller upon failure to deliver, with limited exemptions due to force majeure or a requirement to meet public utility or statutory obligations) are sufficiently robust.⁹

The CAISO, for its part, states in its comments to the CPUC that import RA contracts should (1) provide "firm energy", in that they identify physical resource(s) and/or the source balancing area; (2) require firm transmission capacity be secured prior to bidding into the CAISO day-ahead market (and so, the CAISO understands, cannot be recalled); and (3) include energy hedging provisions, such as contract-for-differences.¹⁰

Frequent reference has been made to the recallability of import energy by its source Balancing Authority. PG&E asks that there be a clarifying discussion on firm transmission and the conditions and terms of such a recall, and what impacts it has on the value of import RA, particularly vis-à-vis internal generation which is not subject to that possibility.

Also, under the CAISO's current rules, sub-set-of-hours contracts are not recognized because the CAISO does not require demonstration of firm energy delivery. Now that the CAISO proposes to require firm energy delivery, the CAISO should assess the impact of allowing sub-set of hours

⁸ Ibid., 45.

⁹ California Public Utilities Commission Rulemaking 17-09-020, *Comments of Pacific Gas and Electric Company (U 39 E) on Assigned Commissioner's Ruling Seeking Comment on Clarification to Resource Adequacy Import Rules*, dated July 19, 2019.

¹⁰ California Public Utilities Commission Rulemaking 17-09-020, *Comments of the California Independent System Operator Corporation*, dated July 19, 2019.

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contracts to count for RA and consider how this would impact the CAISO's determination of energy sufficiency.

5. PG&E recommends that Flexible RA counting rules, requirements and sufficiency testing, as well as remaining portions of proposal, be descoped from this initiative and delayed.

PG&E recommends the CAISO defer development of new Flexible RA counting rules, requirements, sufficiency tests. These, as well as the other remaining portions of the proposal (e.g., slow demand response for local capacity needs, import capability provisions, etc.), should be descoped, studied further and developed in future phases, as appropriate. For the sufficiency tests in particular, PG&E suggests that the CAISO develop these assessments without enforcement and without significant stakeholder involvement, and use the data collected to later engage stakeholders in the development of those proposals, when inputs and consequences of deficiencies can be discussed in more detail with stakeholders having a greater appreciation of the likely results of the assessments.

PG&E recommends the CAISO focus on the development of RA counting rules, Import RA rules, and the must-offer obligations tied to RA showings. This approach should significantly increase the likelihood of the CAISO and stakeholders successfully developing a cogent, durable RA framework, with timely implementation in 2021.