



## Comments of Pacific Gas & Electric Company

### Flexible Resource Adequacy Criteria and Must Offer Obligation Phase 2 – Revised Flexible Capacity Framework

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) Flexible Resource Adequacy Criteria & Must Offer Obligation Phase 2 (FRACMOO2) Revised Flexible Capacity Framework

Considering CAISO’s recently announced day-ahead market enhancement (DAME) stakeholder process, PG&E continues to recommend that CAISO pause the FRACMOO2 initiative until the day-ahead market enhancements are near market implementation. While PG&E agrees that the FRACMOO2 initiative is dependent on the DAME initiative, the details of the DAME initiative are in no way impacted by the details of the FRACMOO2 proposal. The impact of the Imbalance Reserve Product will significantly shape how Flexible RA resources will need to participate in the CAISO markets. PG&E greatly supports the development of the Imbalance Reserve Product, and is concerned that RA policy will slow down the development of this much-needed day-ahead product.

1. PG&E does not support requiring LSEs to file 100% of their monthly Flexible RA requirement in the Year Ahead RA Filing at this time.

In the CAISO’s Revised Draft Flexible Capacity Framework Proposal, the ISO proposes that 100% of the monthly needs be procured for year ahead showings. While the proposal did not state the reason why Flexible RA requirements should be changed to be completely addressed in the Year Ahead RA Filing, the CAISO explained in the February 7<sup>th</sup> FRACMOO2 Stakeholder Meeting that the benefit of ISO certainty justifies this change. PG&E does not agree. The CAISO has not presented a reasonable argument for why LSEs must procure 100% of their monthly Flexible RA requirements in the Year Ahead RA Filing. As CAISO has shown, there is not an immediate concern of a scarcity of Flexible RA capacity<sup>1</sup>, and the changes associated with this proposal are likely to decrease the concern of scarcity with the inclusion of Flexible RA from intertie resources. Therefore, the CAISO should not need the certainty of the additional 10% of the Flexible RA requirement in the Year Ahead RA Filing. Furthermore, the difference between the monthly Flexible RA requirements are not so large as to expect that resources needed in December would not be under contract for other months of the year. This, in addition to the fact that the January Monthly RA Filing is less than a month after the Year Ahead RA Filing, shows that there is an extremely small likelihood of several thousand of MWs that

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<sup>1</sup> Table 4 in the FRACMOO2 Revised Flexible Capacity Framework

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are needed for Flexible RA could retire or become unavailable in the intervening year while the LSEs balance their monthly RA positions. On the other hand, the risks associated with intra-year load migration are significant for LSEs. In recent months, both the current Year Ahead Local RA framework and the existing Year Ahead CPM allocation methodology have become significantly more scrutinized due to the inability of regulators to ensure ratepayer cost indifference when new entrants start serving load after the Year Ahead RA Filings have completed.<sup>2</sup> PG&E believes existing CAISO processes are insufficient to address these load migration issues and cannot support any rule changes that might make load migration flaws even more harmful.

2. PG&E does not support the CAISO's restriction on limiting the quantity of solar capacity to 25% for the Day Ahead Load Shaping product and asks the CAISO to provide more justification as to why the limit should be set at 25 percent for the real-time products designed to address unplanned variations.

In Section 5.4.3 of the CAISO's proposal, the ISO argues that since a substantial amount of the ISO's uncertainty can occur at any time, the quantity of solar capacity providing any single flexible product should be limited to 25 percent. In response to a PG&E question during the February 7<sup>th</sup> FRACMOO2 Stakeholder Meeting, the CAISO clarified that the limitation includes the Day Ahead Load Shaping product, in addition to the real-time flexible RA products designed to address unplanned variation. PG&E does not agree with this restriction. Since the justification for this restriction is due to unplanned variation, PG&E believes that the limitation should be strictly applied solely to the real-time flexible RA products. PG&E asks the CAISO to provide more justification for why the limit should be set at 25 percent for real-time flexible RA products designed to address unplanned variation. The ISO should create a methodology to study the level of capacity intermittent resources can provide to address unplanned variation in this stakeholder process so that the percentage can be more easily re-evaluated in future years.

3. PG&E's simple intermittent EFC methodology is preferable to the CAISO's exceedance or ELCC like methodology.

The CAISO states in its Revised Draft Flexible Capacity Framework Proposal that it is considering several effective flexible capacity methodologies for wind and solar resources. PG&E appreciates that the CAISO is considering PG&E's simple approach as a potential option. In addition to PG&E's simple approach, the CAISO is also considering an ELCC-like assessment of only ramping hours and an exceedance methodology for only ramping hours. PG&E believes neither of the CAISO's additional approaches are necessary and could create unnecessary complications. For example, in the CAISO's methodology, a definition of ramping hours is required. PG&E's methodology does not require a definition of relevant hours due to its close link with the contribution to the forecasted monthly requirement. Based on the difficulty of revising the availability assessment hours associated with generic RA, which includes an annual study and the potential mismatches between the CAISO

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<sup>2</sup> CPUC Resolution E-4907 (found at <http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M200/K492/200492306.PDF>) and Review of RMR and CPM Issue Paper and Straw Proposal (found at: <http://www.caiso.com/Documents/IssuePaperandStrawProposal-ReviewReliabilityMustRunandCapacityProcurementMechanism.pdf>)

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and CPUC processes, PG&E recommends the CAISO not use a methodology that requires specific hours if avoidable.

Furthermore, considering the real-time flexible RA products for unplanned variation are seemingly needed for all hours of the month, it does not seem like focusing on specific hours would be an appropriate measurement. Second, PG&E's methodology creates a strong link between the counting rules and the allocation of flexible RA requirements, which PG&E views as very important for VERs, since they will be accounted for on both the supply and demand side in Flexible RA requirements. By maintaining a strong link, negotiating for unlimited curtailment rights in renewable contracts is strongly encouraged because the curtailment will directly reduce flexible RA requirement on a 1 for 1 basis for the Day Ahead Load Shaping product.

4. PG&E asks the CAISO to justify why internal resources that provide Day Ahead Load Shaping are required to bid uncommitted EFC capacity in real-time but external resources providing the same service do not have the same requirement.

In Section 5.4.2.2 of the CAISO's proposal, the Must Offer Obligation associated with internal resources that provide Day Ahead Load Shaping requires that any resources that were not committed in the day-ahead market but can be committed in the real-time market must make its shown flexible RA capacity available in the real-time market. However, any purely external resources not committed in the day-ahead market will have met its must offer obligation and will not be required to rebid into the real-time markets. and should be changed. The CAISO should provide a clear justification as to why this seemingly inconsistent treatment is appropriate.

5. The CAISO should provide its assessment of why the current RA showings are leading to insufficient 15-minute unplanned variation from the shown Flexible RA fleet.

Towards the end of the Revised Draft Flexible Capacity Framework Proposal, the CAISO provides a high-level assessment of historic Flexible RA using proposed Flexible RA requirements and counting rules. PG&E appreciates the CAISO's work to include this assessment. The assessment shows that the MW available for all three products are sufficient to meet the current need. Additionally, it appears that the currently filed RA resources also meet the Day Ahead Load Shaping and the 5-minute requirement is only deficient by a few hundred MWs in March and June 2017. The 15-minute product shows significant deficiencies when compared to the currently filed RA resources. PG&E would appreciate further clarification and more analysis of Flexible RA showings to understand whether trends or patterns consistent across LSEs can be provided broadly to all stakeholders. Particularly, which resources that are currently being shown are not contributing to the 15-minute need? In order to better understand whether the driver of the 15-minute deficiency is due to market interval granularity differences between the Day Ahead Market and the Fifteen Minute Market, PG&E asks the CAISO to linearize the DA-FMM variation to provide an assessment on whether existing filed RA resources can approximately meeting the remaining unplanned variation.