**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Application of Pacific Gas and Electric Company (U39E) for Approval of Demand Response Programs, Pilots and Budgets for Program Years 2018-2022 U 39 E	Application 17-01-012 (Filed January 17, 2017)
And Related Matters	Application 17-01-018 Application 17-01-019

PACIFIC GAS AND ELECTRIC COMPANY RESPONSES TO ADMINISTRATIVE LAW JUDGE'S RULING DIRECTING RESPONSES TO QUESTIONS AND FILING OF PREVIOUS DEMAND RESPONSE BASELINE DEVELOPMENT AND IMPLEMENTATION COSTS

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I. INTRODUCTION

Pacific Gas and Electric Company (PG&E) respectfully submits its response to Ordering Paragraphs (OP) 1 and 2 of the April 8, 2019 ADMINISTRATIVE LAW JUDGE'S RULING DIRECTING RESPONSES TO QUESTIONS AND FILING OF PREVIOUS DEMAND RESPONSE BASELINE DEVELOPMENT AND IMPLEMENTATION COSTS. Questions are in bold font. PG&E's responses are in normal font.

II. RESPONSE TO POST WORKSHOP QUESTIONS (OP 1)

<u>Question Set 1.</u>

Through the 2018 demand response season, the wholesale baseline used by the CAISO was a 10-in-10 w/ Day of Adjustment with a 20 percent cap. The FERC recently-adopted wholesale settlement methods include: a) a day matching customer load 10-in-10 baseline with a 20 percent cap; b) a weather matching baseline with a 40 percent cap; and c) the use of control groups. The effective date of these new methods was November 2018. As noted in the Utilities presentation, these three options will begin to be used by the

CAISO for settlement purposes for customers bidding demand response into the [CAISO] wholesale [market] through the demand response auction mechanism.

As a point of clarification, the Demand Response Providers (DRPs) and their Scheduling Coordinators (SC) are the ones who would potentially use the three baseline options, as the CAISO no longer undertakes computing baseline performance on behalf of the DRPs. The responsibility for baseline performance calculations was transitioned to the DRPs and their Scheduling Coordinators via CAISO's ESDER 2.

The CPUC has authorized a Day Matching 10-in-10 baseline (10-in-10) with a day of adjustment +/– 40% adjustment.[1/] The CPUC has not approved any other baseline for retail use. Therefore, until the CPUC approves other retail baseline options, PG&E does not believe DRAM providers can use other baselines for retail purposes.

A. Explain whether you agree with the Utilities that the interaction between these new wholesale baseline methods and the current retail baseline creates issues for calculating performance.

PG&E clarifies that besides the implications on differing performance calculations between wholesale and retail baselines, there is a very real issue with the accuracy of incentive payments including Resource Adequacy for DRAM contracts.

B. Explain whether the Commission should adopt or limit adoption of these methods for settlement purposes in the Auction Mechanism.

Currently, only the 10-in-10 methodology is approved by the CPUC for retail use to settle capacity payment. Therefore, it is reasonable that all DRPs, including DRAM providers, are limited to this methodology at this time for capacity payment.

If and when the CPUC approves additional baseline options for retail capacity settlement that mirror the new wholesale energy baselines approved by CAISO for use by all DRPs, then the DRAM program would be able to utilize these other options. However, the flexibility to switch among different baselines may need to be different for retail purposes than the frequency permitted by the CAISO.

1/ D.12-04-045 adopted a +/-40% adjustment at the individual level for the 10-in-10 baseline.

Another consideration that should be made with respect to all DR programs, not just for DRAM, pertains to the symmetry of baseline applications. That is, if a program uses one baseline option for energy (CAISO jurisdiction) {e.g., 10 in 10} then it would be reasonable to apply the same methodology for the capacity baseline (CPUC jurisdiction) {e.g., 10 in 10}. Otherwise, there could very well be material differences in the performance outcome between energy and capacity settlements.

Question Set 2.

A meter generator output is a performance evaluation method, used when a generation asset is located behind the resource's revenue meter, in which the demand reduction value is based on the output of the generation asset. In its presentation, the Utilities contend that there may be consequences resulting from introducing this method.

A. Explain whether the Commission should address the issue in this proceeding or another proceeding.

PG&E's Prehearing Conference (PHC) statement dated January 3, 2019 suggested that the Meter Generator Output (MGO) framework would realistically be addressed outside of the immediate DR Application proceeding (A. 17-01-012). Specifically, PG&E recommended that MGO issues be bifurcated into Policy and Infrastructure tracks with the former potentially addressed in a future New Models of DR proceeding and the latter in a separate Rulemaking. PG&E believes the Infrastructure track would reside outside of the DR space because it would potentially apply to all Distributed Energy Resources -- not just DR.[2/]

B. What should be the timing for determining solutions to the issues related to the meter generator output?

While PG&E did not set forth a specific timeframe for resolving MGO issues, consistent with the company's prior PHC statement, PG&E estimated that MGO Policy issues could take 1.5-2.5 years with Infrastructure issues taking at least 2.5 - 5 years, after policy, standards, roles

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2/ PG&E's PHC Statement at p. 5 (Table, Line B, Column Titled "Forum").

and responsibilities are decided.[3/] Again, these are very rough estimates, and could change when more is known. That being said, PG&E emphasizes that the Policy track needs to be addressed first as it would inform the Infrastructure track.[4/]

Both policy and infrastructure questions would need to address issues, without limitation, such as the required accuracy of the MGO equipment, communication equipment and protocol, and responsibility for its maintenance. Who will be responsible for the quality and verification (VEE) of the data, its collection, validation, warehousing, and access to it. Who will be responsible for synchronization of the MGO data with other data that may be impacted or otherwise relevant for MGO-related calculations? Who will be responsible for how the data will be used, and for the related settlement process? What dual participation rules should be adopted? Who will be responsible for building and maintaining the various IT systems and communications systems?

Question Set 3.

The Utilities contend that retail energy baseline influences retail capacity payment in the Capacity Bidding Program.

A. Explain whether you agree with the Utilities.

Only PG&E's CBP program relies on the current 10 in 10 baseline methodology for both wholesale energy and retail capacity settlements. PG&E's SmartAC program does not utilize a baseline for capacity and there is no energy payment, as there is only a one-time enrollment incentive. Likewise, PG&E's BIP program utilizes a Firm Service Level for measuring performance.

B. Explain whether the Commission should revise the current energy retail baseline and what the revisions should entail.

PG&E supports development of a limited number of baseline options for retail use at this

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3/ These estimates provide a broad range due to the uncertainty of the need for testimony and/or hearings.

4/ PG&E's PHC Statement at p. 5 (Table, Lines B and C, Column Titled "Duration Estimate").

time. In particular, it would be reasonable to at least consider expanding the current 10-in-10 to include a Day Matching 5-in-10, (5-in-10), which would better support residential participants. An incremental approach to rolling out additional baselines is preferably than trying to enable a multitude of options simultaneously. Separately, consideration should be given regarding individual versus aggregate baselines.

C. If a revision is necessary, what timeline should the Commission adopt for developing and approving any such revision and why?

PG&E's PHC statement estimated that it would take 6 months to 1.5 years to develop the framework for retail baseline issues.[5/] This timeframe is broad because it depends on the scope of issues, including the number of baselines to be developed and the complexity for interactions between wholesale and retail baselines. PG&E also cautions that it is unrealistic to expect it to implement all baseline options that the CAISO has approved through ESDER 2. Careful thought is needed to determine which one (or ones) should be implemented for retail purposes.

Question Set 4.

With respect to baselines for retail demand response programs, are there any other reasons the Commission should consider revising the current 10-in-10 baseline? What should any such revision entail and what timeline should the Commission adopt for developing and approving the revision?

Besides addressing the interaction between retail and wholesale for the 10-in-10 baseline methodology, the other considerations would be for providing additional baseline options (e.g., 5-in-10) as discussed in response to question 3b. Furthermore, it may be reasonable to assess whether the current adjustment cap of +/- 40% is still suitable for the retail 10 in 10 methodology when the adjustment cap at the wholesale level is limited to +/-20%. Lastly, as indicated in response to questions 3b, consideration should be given regarding individual versus aggregate baselines.

5/ PG&E's PHC Statement at p. 5 (Table, Line A, Column Titled "Duration Estimate").

III. COSTS FOR: A) DEVELOPING AND IMPLEMENTING THE 10-IN-10 BASELINE ADOPTED BY THE COMMISSION IN DECISION 09-08-027, AND B) REVISING THE 10-IN-10 BASELINE AS REQUIRED IN DECISION 12-04-045 (OP 2.)

PG&E was unable to identify the project costs associated with the development and implementation of the original 10 in 10 baseline per Decision 09-08-027 or the revision per Decision 12-04-045. PG&E believes this is due to certain functionality being embedded in systems that were outsourced for development. This functionality was part of a suite of services provided by a vendor, which were not cost itemized by function. Moreover, the DR platforms that previously supported DR programs have been superseded by newer systems, which would have very different cost profile than previous systems. Consequently, PG&E cautions against using legacy project data as a proxy for future work.

As part of a more recent projection, PG&E provided in its opening comments[6/] to the 2018-2022 Funding Proposed Decision (D. 17-12-003), an estimate of $690 thousand to support the following: update the Information Technology (IT) systems and services that calculate the current 10-in-10 baseline to support the alternative baselines for non-residential and residential customers; update the IT systems and services that handle data aggregation; update the IT services that interface with weather data; create/update the IT services that submit data to MRI-S; project delivery resources; and, hardware to capture baseline and necessary data for retention as the official system of record for CAISO audit purposes. Lastly, PG&E had requested an additional $70 thousand yearly for this program cycle to support ongoing Operations & Maintenance related to the implementation of the aforementioned items. These amounts were for updating IT systems and services. They were not for implementation of a system that did not yet exist. With this caveat, PG&E believes this estimate may be indicative of potential costs for a limited number of day matching baseline options such as 5-in-10.

6/ PG&E's Opening Comments dated November 29, 2017, at pages 12-13.

IV. CONCLUSION

PG&E appreciates the opportunity to provide responses to the ALJ's questions pertaining to baseline issues.

Respectfully Submitted,

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