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<td><strong>Docket Number:</strong></td>
<td>21-ESR-01</td>
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<td><strong>Project Title:</strong></td>
<td>Energy System Reliability</td>
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<td><strong>Document Title:</strong></td>
<td>PG&amp;E Comments - PG&amp;E Comments on Preliminary 2022 Summer Supply Stack Analysis</td>
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PG&E Comments on Preliminary 2022 Summer Supply Stack Analysis

Additional submitted attachment is included below.
August 20, 2021

California Energy Commission
Energy Assessment Division, Energy System Reliability
Docket Number 21-ESR-01
1516 9th Street
Sacramento, CA 95814

Re: Pacific Gas and Electric Company’s Comments on California Energy Commission Preliminary Summer 2022 Hourly Supply Stack Analysis (Docket Number 21-ESR-01)

Pacific Gas and Electric Company (PG&E) appreciates that the California Energy Commission (CEC) initiated an annual reliability outlook in early 2021 and the timely development of a Preliminary Summer 2022 Hourly Supply Stack Analysis, released on August 11, 2021, to consider the potential implications of the California drought and western extreme heat events in the summer of 2022.

PG&E welcomes the opportunity to provide feedback on the hourly stack analysis and offers the following comments regarding the use of this analysis, the underlying assumptions and release of the work papers supporting the analysis.

**PG&E requests that the CEC clarify how this analysis will be used to enable proper review from stakeholders.**

It is important to understand how the results of the hourly stack analysis will be used for stakeholders to be able to review it. For instance, several assumptions in this hourly stack analysis appear to be relatively conservative. PG&E would like to understand if the goal of the hourly stack analysis is to prescribe procurement targets for extreme weather events such as a 1-in-10 weather event. The CEC should be explicit about what this set of assumptions is intended to represent to avoid the unintended application of these results in other state agencies’ proceedings.
PG&E recommends that the CEC and other state agencies avoid the continued use of the 22.5 percent Planning Reserve Margin (PRM) without validating it through a comprehensive analysis.

The use of a 22.5 percent PRM assumption in the CEC hourly stack analysis (and by the California Public Utilities Commission (CPUC) in the integrated resource planning (IRP) proceeding) sets a precedent of completing system planning without sufficient analytical rigor. PG&E recognizes that there have been significant changes to the loads and resource mix since the establishment of the 15 percent PRM, and it may no longer be an appropriate planning standard for electric grid planning. However, the CPUC’s Proposed Decision requiring procurement to address mid-term reliability, under the section “findings of fact” number 1 in page 93,1 provides that “More analysis is needed before revising the planning reserve margin for long-term planning in the IRP proceeding on a permanent basis.” In light of that finding, a change in the PRM should only be made with a robust and comprehensive analysis as validated by using a Loss-of-Load-Expectation (LOLE) study. PG&E recommends that the joint agencies (CEC, the CPUC, and the California Independent System Operator (CAISO)) initiate this process with the stakeholders in 2021 to determine a new, if applicable, PRM.2

Recent analysis by the CPUC’s Energy Division staff3 provides evidence that enforcing a 22.5 percent PRM margin results in an LOLE much lower than a typical electric planning standard of 0.1 LOLE. Analysis of the Preferred System Portfolio within the proposed IRP showed that enforcing a 22.5 percent PRM in the RESOLVE model resulted in a portfolio that had a LOLE of 0.064 in 2026 and 0.054 in 2030, significantly below the industry standard of 0.1 LOLE3. This finding heightens the urgency for the California regulatory agencies to update the target LOLE for California consumers (and the resulting PRM) through a thorough process vetted by the stakeholders. This will ensure that procurement targets do not burden California ratepayers with excess costs.

The CEC should release the workpapers for stakeholders to review the assumptions.

PG&E requests that the CEC release the workpapers and analytical information used in the hourly stack analysis to be able to provide informed comments on the analytics behind the analysis. The summary of the assumptions released on August 11 in the draft preliminary stack analysis does not provide sufficient details to assess the assumptions used. PG&E provides the following examples where assumptions in the hourly stack analysis need additional detail:

- The hydroelectric system assumptions do not detail if the derates are from resource adequacy (RA) net qualifying capacity (NQC) values or are incremental derates based on

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1 CPUC Decision Requiring Procurement to Address Mid-term Reliability (2023-2026). Pg. 93
https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M389/K243/389243715.PDF

2 CPUC Decision 21-06-029, Pg. 19.

3 Administrative Law Judge’s Ruling Seeking Comments on Proposed Preferred System Plan. pg. 20.
https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M399/K450/399450008.PDF
another baseline. The CAISO, in its 2021 Summer Loads and Resources Assessment, used the 2013 hydroelectric generation profile after comparing it to recent hydroelectric generation data.\(^4\) Further, it is difficult to assess the right level of incremental hydroelectric derates (e.g., CEC’s use of an additional 500 megawatts) beyond 2021 levels without reviewing the National Oceanic and Atmospheric Administration (NOAA) data.

- The stack analysis includes new energy resources and appears to show these resources as being available for all six hours that were assessed. PG&E requests that the CEC detail the resource mix that is expected, any forecasted delays in online dates, and the availability and time of charge and discharge for any energy storage that is included in this mix.
- The stack analysis indicates that PLEXOS solar profiles were used, but it does not include details of the assumptions underpinning these shapes. PG&E also seeks clarification on the wind resources included in the hourly stack analysis.

PG&E appreciates the opportunity to comment on this preliminary Summer 2022 hourly stack analysis and looks forward to working with the CEC and other state agencies to inform the potential implications of an extended drought and western extreme-heat weather future. Please reach out to me with any questions.

Sincerely,

Licha Lopez

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