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<td>Submission Date</td>
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Pacific Gas and Electric Company Comments on the Natural Gas Scenarios Workshop

Additional submitted attachment is included below.
May 9, 2017

POSTED ELECTRONICALLY TO
DOCKET 17-IEPR-04

California Energy Commission
Dockets Office, MS-4
Docket No. 17-IEPR-04
1516 Ninth Street
Sacramento, CA 95814-5512


Pacific Gas and Electric Company (PG&E) appreciates the opportunity to provide comments on the recent Integrated Energy Policy Report (IEPR) Workshop on Natural Gas Scenarios hosted by the California Energy Commission (CEC). PG&E provides comments including the following key points:

- The preliminary forecast of domestic gas production appears conservative;
- Pipeline constraints may impact the reality of forecasted gas supply flows;
- The projection of increased gas demand post-2025 is inconsistent with the Diablo Canyon Power Plant retirement proposal; and
- The scope of the 2017 Natural Gas Outlook should include Renewable Natural Gas.

PG&E looks forward to continuing to work with staff on their important work with the Natural Gas Outlook throughout the 2017 IEPR proceeding.

I. Technical Clarifications Regarding Preliminary Natural Gas Common Cases

PG&E appreciates all of the hard work that CEC staff have undertaken to model and forecast natural gas demand, supply, and prices. The following points all pertain to details of the Natural Gas Common Cases presentation.

On slide 16 of the preliminary results, CEC notes that U.S. natural gas production forecast is the key driver of long-term price forecast difference between the CEC’s and the Energy Information Administration’s (EIA) projections. The production level in the CEC’s high demand case (32 Tcf/y) is lower than the forecast in EIA’s Reference Case. Additionally, the CEC’s production forecast range is lower than historical trends and the current industry average outlook (ranging 36-41 Tcf/y). Given falling production costs and increased efficiency, the CEC’s forecast of domestic production appears overly conservative. PG&E recommends additional analysis of American gas production scenarios.

\[http://docketpublic.energy.ca.gov/PublicDocuments/17-IEPR-04/TN217229_20170421T090254_Preliminary_Results_Natural_Gas_Common_Cases.pptx\]
The forecast of the California supply portfolio on page 21 of the presentation\textsuperscript{2} shows a growth of gas supply flows from Malin and Rocky Mountain displacing Southwest flows in 2026 compared to 2016. While it currently is more economical to flow gas from Malin and Rocky Mountain via the northern path than from the Southwest, PG&E recommends that CEC re-visit the model results regarding pipeline capacity constraints and future economics, including transportation costs. Redwood path, which connects Malin to PG&E Citygate, has a maximum firm capacity of approximately 2 Bcf/d. If Malin supplies were to increase from 18\% to 43\% by 2026 as shown in the pie charts on page 21, Redwood path would be flowing 2.2 Bcf/d of gas which is above its maximum firm capacity. While it may be physically possible to flow volumes above 2 bcf/d, it is very unlikely the Redwood path would have sustained flow above the firm capacity of the system. The Redwood constraint would also preclude additional Rocky Mountain supplies flowing from the Ruby Pipeline. (Current commodity and transportation economics typically favor Canadian versus Ruby supplies at Malin) Gas supply from the Rocky Mountains can also flow to California on the Kern River pipeline, but utilization is typically above 80\%, so there is little room for additional supplies via Kern River.

Preliminary model results on slide 20 show an increase in gas demand post-2025 related to the shutdown of Diablo Canyon Power Plant (DCPP). This assumption is inconsistent with the DCPP Retirement proceeding currently before the California Public Utilities Commission (CPUC). PG&E’s filing states that its proposal is to procure 2,000 gross gigawatt-hours of energy efficiency resources to replace DCPP and that the remainder of the need to replace Diablo Canyon with GHG-free resources be determined in the Integrated Resource Plan (IRP) proceeding.

II. Recommendation for the Proposed Scope of the 2017 Natural Gas Outlook Report

PG&E appreciates the work that CEC staff have put into preparing for the 2017 Natural Gas Outlook and broadly agrees with the outlined scope that was presented at the workshop. Over the course of the day, the Chairman asked questions related to renewable natural gas (RNG) of most of the workshop presenters. Given this interest, and the presence of RNG elsewhere in the 2017 IEPR scope, we think that renewable natural gas should be included in the scope of the Natural Gas Outlook in 2017. This section should include a comprehensive review of sources of RNG, technical potential of RNG available to California, including in and out of state resources, as well as RNG cost.

III. Conclusion

PG&E appreciates this opportunity to comment on the April 25, 2017 Integrated Energy Policy Report Commissioner Workshop on Natural Gas Scenarios and looks forward to continuing to work with the CEC on this topic.

Sincerely,

/s/

Wm. Spencer Olinek

\textsuperscript{2} \textit{Ibid.}