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Pacific Gas & Electric Comments on the Draft Environmental Performance Report

Additional submitted attachment is included below.

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**POSTED ELECTRONICALLY TO
DOCKET 16-IEPR-03**California Energy Commission
Dockets Office, MS-4
Docket No. 16-IEPR-03
1516 Ninth Street
Sacramento, CA 95814-5512Re: Docket 16-IEPR-03: Pacific Gas and Electric Company Comments on the 2016 Draft
Environmental Performance Report**I. Introduction**

Pacific Gas and Electric Company (PG&E) appreciates the opportunity to provide comments on the August 4, 2016 Integrated Energy Policy Report (IEPR) Update Workshop (Workshop) hosted by the California Energy Commission (CEC) to gather stakeholder input on the Draft Environmental Performance Report (Report).

PG&E recognizes the time and effort put in by CEC staff to draft this comprehensive environmental report detailing energy, legislative, regulatory, and renewable technology developments over the past 10 years. PG&E provides high-level comments on the study, and proposes constructive, specific suggestions to Report language to improve the efficacy of the study for use in the IEPR planning process.

Key points of PG&E's comments include:

- The Report should be technology neutral;
- Greenhouse gas emission reduction efforts should be made economy-wide to achieve the state's goals;
- Net Energy Metering needs to be discussed in a way that is accurate with respect to current state policies;
- Distributed energy resources should be presented comprehensively and in a way that evaluates all of their benefits; and
- Environmental justice, once-through cooling, and Diablo Canyon Power Plant language should be clarified.

II. Final Environmental Performance Report Should Support, Not Duplicate, Existing Planning Processes

It is unclear what the purpose of the Report is and parties were not requested to provide information to support the Report's development. In any case, the Report should not be used to create

duplicative studies or planning reports. For example, the Report suggests additional areas of study on transmission issues; however, numerous planning processes for transmission already exist at the CEC, California Public Utilities Commission (CPUC), and the California Independent System Operator (CAISO). The proposed topics could easily be addressed in the ongoing RETI 2.0 process, and the yearly aligned LTPP and TPP proceedings at the CPUC and CAISO, respectively. New planning processes should not be created.

III. Report Should be Technology Neutral

The report should remove assertions on the financial and regulatory viability of specific resources, such as bioenergy and geothermal.¹ Maintaining a diverse portfolio of technologies is essential to meeting California's clean energy goals in a way that is most cost effective for PG&E customers. As such, a technology-neutral procurement process, where all technologies can fairly compete is the best path forward. Bioenergy and geothermal power play an important role in our energy mix, in addition to all other renewable technologies from which we procure energy resources or may do so in the future.

IV. Greenhouse Gas Policy and Goals Should Reflect Need for Economy-Wide Efforts

The Report's discussion of greenhouse gas (GHG) policy should include recognition that achieving California's aggressive GHG reduction goals will require a concerted economy-wide effort. GHG reduction policies must take a flexible, multi-sector approach, recognize cross-sector emission shifts, and allocate costs equitably among all market participants. California's electric sector has made significant contributions to the state's progress in reducing GHG emissions. Chapter 4 of the Report notes an emissions shift from the transportation sector to the energy sector as a result of ambitious policies driving transportation electrification but does not acknowledge the policies behind this shift.

V. Draft Report Lacks Detail about Net Energy Metering

The Report does not mention the continuation of a favorable policy environment for rooftop solar distributed generation, including the extension of federal tax credits through 2021 and the Net Energy Metering (NEM) 2.0 decision approved by the CPUC in January.² The Report would benefit greatly by including an expanded discussion on existing policies for rooftop solar.

Furthermore, the Report may imply that customers can receive credit via virtual net energy metering (VNEM) from community distributed generation (DG) resources in other regions. Such statements should be modified to reflect that PG&E customers receiving VNEM benefits must be on contiguous property. This requirement is consistent with state policies governing VNEM.³

¹ http://docketpublic.energy.ca.gov/PublicDocuments/16-IEPR-03/TN212338_20160718T142510_Draft_2016_Environmental_Performance_Report_of_California's_Ele.pdf, p. 115-118

² Decision 16-01-044, January 28, 2016.
<http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M158/K181/158181678.pdf>

³ http://docketpublic.energy.ca.gov/PublicDocuments/16-IEPR-03/TN212338_20160718T142510_Draft_2016_Environmental_Performance_Report_of_California's_Ele.pdf, p. 115-118, p. 11

VI. Distributed Energy Resources are not Presented Comprehensively

The portions of the report that address Distributed Energy Resources (DER) are not comprehensive.⁴ As an example, Vehicle to Grid technologies are mentioned, but not Electric Vehicle (EV) Smart Charging or utility deployment of EV charging infrastructure. Additionally, DER-enabling policies are driven in part by the desire to increase adoption of GHG reduction strategies and to integrate renewables. Distributed resources should be valued based on the benefits they provide to the system with a focus on providing cost-effective service to customers.

VII. The Report Contains Unclear and Unsubstantiated Environmental Justice Assertions

Many of the assertions in the Report on environmental justice (EJ) issues are unclear and unsubstantiated, including its characterization of the CalEnviroScreen tool. In its present form, the CalEnviroScreen tool ranks “environmentally impacted” disadvantaged communities based on socioeconomic factors and exposure to local criteria pollutants and toxics. The report should reflect the fact that the California Environmental Protection Agency (CalEPA) has not incorporated any data on climate change effects into the tool and therefore, must do so prior to directing capital investments to communities in an effort to mitigate climate change effects or assist with climate adaptation. Specific EJ feedback is enumerated below:

- Page 63 of the Report correctly characterizes that "Power plants proposed in densely populated urban areas are often sited where residential land uses encroach on older industrial areas." However, the recommended action of the CEC working with the power industry to avoid or mitigate impacts places all responsibility for addressing said impacts on industry and misses the opportunity to engage affordable housing advocates, builders, and land-use planners in appropriate residential siting. It also does not acknowledge the role of Smart Growth principles in encouraging residential infill development in and near industrial areas, per SB 375.⁵
- As written, page 64 appears to misstate the purpose of CalEnviroScreen as a tool to identify "disadvantaged communities." In later sections, the Report correctly characterizes the tool as one to identify "environmentally" impacted disadvantaged communities; a nuanced but important distinction. This mischaracterization around the “disadvantaged communities” terminology is problematic when attempting to ensure the tool is appropriate for programmatic intent. As written, it is not clear if the CEC intends to use CalEnviroScreen for project-level impact analysis, which is explicitly prohibited per tool guidance documents.
- The Report’s section on Conventional Generation states that, "potential concentration or an increase in pollution...from the power plant and its associated effects top the concerns from EJ populations."⁶ However, Staff concede that they have not conducted any assessments to validate these concerns. This effort should be made a priority. The assessment should also place any identified impacts in the context of other ambient community exposures since available data suggests that power plant exposures are

⁴ *Ibid.*, p. 125-135

⁵ http://www.leginfo.ca.gov/pub/07-08/bill/sen/sb_0351-0400/sb_375_bill_20080930_chaptered.pdf

⁶ <http://docketpublic.energy.ca.gov/PublicDocuments/16-IEPR->

03/TN212338_20160718T142510_Draft_2016_Environmental_Performance_Report_of_California's_Ele.p
df, p. 65

significantly lower than other sources and may not be significant in determining health outcomes.

- As written, the Report’s Environmental Justice Outlook places the burden for mitigating societal under-investment in these communities on business and industry.⁷ This should be reframed or struck from the Report.
- Regarding climate change effects on EJ communities and consideration of climate adaptation, the Report notes that planning is needed. However, the State has not incorporated data on climate change effects into tools used to identify EJ and disadvantaged communities and must do so prior to directing capital investments to communities in an effort to mitigate climate change effects or assist communities in climate adaptation.

VIII. Once Through Cooling Sections Require Language Changes

Once Through Cooling (OTC) is discussed in Report chapters regarding State policy drivers as well as Report sections on the environmental performance of the electrical system; for accuracy, a number of language changes are recommended.

- Page 14 is written as though OTC kills millions of “fish...sea lions, turtles, and other creatures.” This section should accurately reflect that the state-wide entrainment of trillions of eggs and larvae is orders of magnitude higher than for turtles and marine mammals.
- Page 15 asserts that Diablo Canyon Power Plant (DCPP) “is responsible for the lion’s share” of OTC flow. DCPP was 22% of total OTC flow when all plants were operational and only accounted for 8% of entrainment at that time. The Report should reflect conditions at the time the OTC policy was implemented, not just conditions after numerous plants have been retired.
- Page 80 states that entrainment is proportional to OTC water volume. In reality multiple factors, including seasonality, play a role and the relationship is site-specific, as facility entrainment rates vary substantially. A reduction in the state’s OTC volume by a certain percentage does not necessarily equate to an equivalent percentage reduction in entrainment.
- Pages 83-85 of the Report should reflect that closed-cycle wet cooling is a viable alternative to OTC and that dry cooling is not the only future option besides plant retirement.
- Finally, the report should note that potential changes at DCPP to comply with the OTC policy are no longer necessary due to PG&E’s decision to not operate the facility past 2025.

⁷ *Ibid.*, p.67

IX. Report Language Should Reflect the Most Recent Details of PG&E's Joint Proposal and On-Going Efforts at Diablo Canyon

On August 11, 2016, PG&E, along with labor and leading environmental groups, filed with the CPUC a joint proposal to increase investment in energy efficiency, renewables and storage beyond current state mandates while phasing out PG&E's production of nuclear power in California by 2025.⁸ Under the terms of this joint proposal, PG&E will retire DCPD at the expiration of its current Nuclear Regulatory Commission (NRC) operating licenses.

The parties jointly propose that DCPD be replaced with a cost-effective, greenhouse gas free portfolio of energy efficiency, renewables and energy storage. It includes a PG&E commitment to a 55-percent renewable energy target in 2031, an unprecedented voluntary commitment by a major U.S. energy company.

PG&E considered a number of factors when making the decision to phase out Diablo Canyon. The joint proposal notes that the increase in the Renewables Portfolio Standard to 50-percent, the doubling of energy efficiency goals under SB 350, the challenge of managing overgeneration and intermittency conditions, the increase in distributed generation, and the potential increases in PG&E retail load shifting to Community Choice Aggregation led PG&E, in consultation with parties, to make the decision to retire Diablo Canyon at the close of its current operating license period.

However, the draft Report mentions none of these reasons and instead seems to suggest that PG&E has proposed to close Diablo Canyon for seismic reasons rather than because of the State's changing energy landscape. PG&E requests that this section of the Report "Status of California's Nuclear Plants" be modified to appropriately reflect the factors PG&E considered.

The same section of the Report could be improved by including information on the extensive work undertaken by PG&E to reduce seismic uncertainty at Diablo Canyon. PG&E maintains a Long Term Seismic Program (LTSP) for Diablo Canyon. The LTSP is a unique program in the U.S. commercial nuclear power plant industry. It is comprised of a geosciences team of professionals who partner with independent seismic experts on an ongoing basis to evaluate regional geology and global seismic and tsunami events to ensure the facility remains safe. Because of the LTSP and decades of industry-leading research, including as recently as 2014 and 2015, the seismic region around Diablo Canyon is among the most studied and understood areas in the nation.

The Report goes on to address concerns surrounding aging nuclear plants. PG&E has ongoing, NRC-approved and monitored maintenance programs. The Report should also reflect that PG&E has replaced the reactor vessel heads and steam generators and performs continual maintenance to ensure safe and reliable operations.

Finally, regarding Diablo Canyon, the Report addresses decommissioning. This section should reflect that, per PG&E's joint proposal, PG&E will perform a site-specific decommissioning study that will be submitted to the CPUC in 2019.²

⁸ <https://www.pge.com/includes/docs/pdfs/safety/dcpp/JointProposal.pdf>

² <https://www.pge.com/includes/docs/pdfs/safety/dcpp/JointProposal.pdf>

IV. Conclusion

PG&E appreciates the opportunity to comment on the Draft Environmental Performance Report, and looks forward to continuing to collaborate with staff as the development of the Report and 2016 IEPR Update advance.

Sincerely,

/s/

Wm. Spencer Olinek