

April 8, 2016

Forest Climate Action Team
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RE: Forest Climate Action Team – Draft Forest Carbon Plan Concept Paper

Pacific Gas and Electric Company (PG&E) appreciates the opportunity to provide comments on both the March 23, 2016 Workshop on the Draft Forest Carbon Plan Concept Paper¹ (Draft Concept Paper) and the March 23, 2016 Workshop on the Natural Working Lands Discussion Paper² (Discussion Paper).

Both the Draft Concept Paper and Discussion Paper outlined a number of important goals and strategies needed to ensure California's wildlands and urban forests, and natural and working lands are preserved for future generations and continue to provide environmental benefits to the state. Forest health is especially important to PG&E. Under PG&E's comprehensive Electric Vegetation Management Program, 300 arborists and 19 foresters inspect every mile of overhead power line (approx. 132,000 miles of line) in PG&E's service area each year. In addition, we provided \$2 million to local Fire Safe Councils for fire fuel reduction.

The Discussion Paper³ and the Draft Concept Paper⁴ also both emphasize the need to increase opportunities to use forest waste materials for bioenergy production. PG&E is a long-time supporter of the biomass industry and continues to be the largest purchaser of biomass-generated electricity in California. In 2015, PG&E procured 92 percent of total Renewable Portfolio Standard (RPS) eligible biomass generated electricity in the state. PG&E understands that biomass plays an important role in forest and land management. However, the cost of biomass electricity is considerably higher relative to other renewable energy sources, making it increasingly challenging to justify continued procurement which results in higher costs for our customers. For example, the levelized cost of solar (\$76 per megawatt-hour [MWh]) and wind (\$75 per MWh) is currently about half the cost of biomass (\$143 per MWh).⁵ Moreover, PG&E does not have an immediate need to procure additional renewable resources and is well-positioned to meet its RPS requirements for the second (2014-2016) and third (2017-2020) compliance periods. Finally, PG&E's total need for *all* electric energy is declining, as the

¹ Forest Climate Action Team. March 9, 2016. California Forest Carbon Action Plan: Managing our Forest Landscapes in a Changing Climate. Website: http://calfire.ca.gov/fcat/downloads/Forest_Carbon_Plan-ConceptPaper_Draft_PublicOutreach.pdf

² California Department of Food and Agriculture, California Natural Resources Agency, Governor's Office of Planning and Research, California Air Resources Board. March 17. Healthy Landscapes 2030: California's Climate Change Vision and Goals for Natural Working Lands. Website: <http://www.arb.ca.gov/cc/scopingplan/meetings/03232016/nwlvisiongoalsdiscussion.pdf>

³ See pgs. 8-9.

⁴ See pgs. 1,6,12, and 30.

⁵ Values calculated for new facilities using the California Public Utilities Commission's (CPUC) RPS calculator.

penetration of customer generation (e.g., rooftop solar) and benefits of energy efficiency investments grow.

Given these challenges, PG&E recommends that the state foster a long-term, sustainable structure for funding biomass investments, as it considers the role of bioenergy in healthy forests and natural working lands. Such an approach should include:

- **Investment by all load-serving entities:** PG&E supports economy wide, sustainable solutions to biomass issues shared across all load serving entities.
- **Provide public funding for societal benefits:** PG&E acknowledges that various social benefits are ascribed to biomass in particular and bioenergy in general beyond their value as energy products. A sustainable funding structure would provide public funding equivalent to the value of these broader societal benefits; ensuring that everyone who benefits from these investments help bear the incremental costs and the burden is not borne solely by PG&E's customers. PG&E supports the Draft Concept Paper's suggestion that Greenhouse Gas Reduction Fund (GGRF) is one of many sources of funding that should be explored for any above-market costs of biomass energy.
- **Ensure solutions are targeted to address specific problems:** The solutions developed to address the state's goals should be determined by the specific problems the state is trying to solve with a clearly established link to the proposed solution.
- **Promote and develop biomass alternatives:** The key to a healthy, sustainable, forest is not the generation of electricity subsidized by electric customers but rather the outcome of management practices that result in sustainable environmental and economic benefits. The state should explore, support, and prioritize the development of sustainable funding sources for biomass utilization and cost-effective alternative uses for biomass waste beyond electricity generation. For example, new technologies such as the production of synthesis gas from woody biomass materials for injection into the natural gas system may provide viable alternative uses for biomass material. The state should also evaluate whether transportation applications using synthesis gas from biomass could provide a more cost-effective solution for disposing of forest waste.

PG&E appreciates the opportunity to participate in and comment on the Draft Concept Paper and Discussion Paper, and looks forward to continued participation in this endeavor.

Sincerely,

/s/

Claire Halbrook

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Pacific Gas and Electric Company