

Thank you for your comment, Nicholas Targ.

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Attachment: PG&E PEIS Scope Comments.pdf

Comment Submitted:

Please find attached comments on the scope of the Bureau of Land Management's Proposed Programmatic Environmental Impact Statement to evaluate solar energy development submitted by the Pacific Gas and Electric Company. Please contact Janelle Kellman JEKU@PGE.COM if we may be of any assistance. [See Attachment.](#)

**PACIFIC GAS AND ELECTRIC COMPANY'S
COMMENTS ON THE SCOPE OF
THE BUREAU OF LAND MANAGEMENT'S
PROPOSED PROGRAMMATIC ENVIRONMENTAL
IMPACT STATEMENT
TO EVALUATE SOLAR ENERGY DEVELOPMENT**

Pacific Gas and Electric Company, a subsidiary of PG&E Corporation (PG&E), is one of the largest combined natural gas and electric utilities in the United States. Based in San Francisco, with 20,000 employees, the company delivers some of the nation's cleanest energy to 15 million people in northern and central California.

Serving one in every twenty Americans, PG&E maintains a firm commitment to environmental stewardship and to addressing issues of climate change. Since 2002 PG&E has entered into contracts for more than 2500 megawatts of renewable power. PG&E is also looking to develop and operate its own solar power resources in the southwest desert utilizing a range of solar power technologies. Much of this solar power will be developed in the Mojave Desert and on lands administered by the Bureau of Land Management (BLM or Bureau).

We appreciate the Bureau's leadership in addressing solar power development and the opportunity to provide comments on the scope of BLM's planned Programmatic Environmental Impact Statement (PEIS). PG&E looks forward to participating in the development of the PEIS and to working with the Bureau.

I. Purpose and Need of the PEIS:

PG&E supports the Bureau's holistic evaluation of the environmental impacts and benefits of utility-scale solar development in the six-state area. We agree that solar energy development is fundamental to the nation's energy security and economy. PG&E also believes that the PEIS offers an excellent opportunity to: (1) improve upon the efficient and orderly development of solar power generation on lands administered by the BLM; (2) help develop a wide-range of solar technologies on the lands administered by BLM; and (3) facilitate reduction of greenhouse gas emissions while maintaining energy capacity. PG&E recommends that these three elements be included as part of the purpose and need of the PEIS.

II. Scope of the PEIS:

PG&E supports the development of a PEIS that focuses on, as stated in the Notice of Intent (NOI) to prepare the PEIS, the following issue areas:

- solar energy technologies;
- distribution of solar energy resources on a regional scale;
- activities to be undertaken for site monitoring, evaluation, and utility-scale development;
- impacts associated with implementing current technologies; and
- mitigation measures and constraints relevant to solar energy development.

In addition to the goals and issues articulated in the NOI, PG&E urges the Bureau to evaluate the following during the development of the PEIS:

1. Activities to increase the efficient and orderly processing of applications and development of lands administered by the Bureau for solar power generation.

Such measures may include:

a. Steps to ensure the predictability of the site development process and reduce speculation. PG&E recommends, for example, that BLM adopt measures such as: (1) presumptive timelines for BLM review and processing of applications; (2) timelines for the applicant's submittal of information required for project evaluation; and (3) timelines for initiation of project development once the right-of-way has been granted. It is recognized that timelines will need to be tailored based on the complexity of the individual project and may change over time. However, by requiring project proponents to make diligent progress on applications and project development, BLM would increase the predictability of the applications process, place productive lands to use more quickly, and discourage speculation.

b. Development of a streamlined permitting process for future projects that can demonstrate: substantial compliance with all the criteria in the revised Project Plans of Development standards; technological expertise; and financial assurances. A streamlined process could also be appropriate for projects to be sited within pre-screened development areas (e.g., projects located in high productivity areas having impacts considered under a Resource Management Plan).

c. Interagency and inter-BLM District coordination and information sharing to help ensure that staff has the necessary resources to conduct efficient and consistent project review; information sharing among the affected Resource Advisory Committees; and continued streamlining and coordination in connection with the California Energy Commission's Application for Certification process for thermal plants having greater than 50 megawatts in capacity.

d. Development of a significant level of standardization during the application process. Specifically, standardized review measures could be implemented for site evaluation.

For example, to the extent that technologies and configurations can be anticipated, standard descriptions of equipment, presumptive siting

criteria,¹ and procedures can be developed and analyzed in the PEIS to increase consistency and reduce the amount of unique work required when authorizing site development under most conditions. The benefits of standard levels of analysis should be acknowledged and fostered throughout the PEIS to facilitate review of applications and consistency.

e. Development of a clear framework for evaluating cumulative impacts. BLM should develop and explain what process will be used for making assumptions related to impacts associated with development of utility scale solar energy developments. Such a framework should include, among other things: the scale or unit of analysis to be evaluated (e.g., aquifer) for a given resource impact; demand at load centers; likely development scenarios in light of upcoming changes to the California Independent System Operator (CAISO) interconnection process;² greenhouse gas considerations; and impacts that are likely to occur in the absence of facilitated development.

2. The existing and future solar energy technologies likely to be deployed, through a forward looking review that gives consideration to differences among technologies:

a. The needs of the State of California and the nation cannot be met by one solar technology or configuration alone. PG&E suggests that the PEIS describe and analyze a range of solar technologies and configuration that are currently in operation worldwide including solar thermal, photovoltaic, and concentrating photovoltaic. The PEIS should proceed under the assumption that the technologies' resources, needs, effects, costs, and efficiencies differ substantially, and, therefore, solar energy developers may require a range of options depending on specific site constraints. A review of the current technologies and configurations from an overall efficiency perspective is warranted since current and future technologies

¹ Siting criteria could serve as guidance for the selection of land areas presumptively suitable for development of solar energy projects. Among others, the following are examples of potential criteria: (1) areas with low potential for the presence of sensitive species or resources with previously disturbed lands; (2) areas with relatively flat slopes to minimize mass grading; (3) areas which are accessible from existing roads; (4) areas in proximity to existing linear utility lines or transportation facilities where maintenance access is already provided and usable for construction access or generation intertie, construction and maintenance.

² For example, the CAISO queue contains many projects that may never be constructed. Projects sufficiently advanced in the interconnection process and projects with Power Purchase Agreements (PPAs) will be processed sequentially, with the necessary transmission interconnection studies completed by October 2008. Other projects in the CAISO interconnection queue as of May 31, 2008, will be grouped together and studied en masse. Assuming timely FERC approval of CAISO's proposed process, this second group of projects will be required to pay a \$250,000-\$500,000 interconnection application deposit in Fall 2008, plus provide a Letter of Credit for 20% of any assigned transmission upgrade costs by Fall 2009 (of which half is non-refundable). It is likely that that this tiered payment and review structure will cause many projects to become infeasible, thereby substantially lessening the impacts as currently anticipated.

have and are likely to have a measurable impact on required land areas as well as resources that will be required to support these emerging technologies. The BLM may wish to refer to the data available on solar thermal and photovoltaic technologies available on the DOE, NREL, SEPA, and SEIA websites that provide cost trends for the industry.

b. The solar technology market is still in its infancy, and we anticipate tremendous changes in technology and in economic efficiency over the next several years. Accordingly, PG&E suggests that the PEIS consider, in addition to current technologies and configurations, those that are likely to emerge and be installed over the next three to five years. PG&E believes that there are technologies that will be available in the intermediate short term that will significantly limit impacts (e.g., through alternate configurations, water demands) on the lands administered by the Bureau. PG&E would be pleased to work with the Bureau, along with others, to identify and evaluate these technologies.

3. The need for an appropriate level of review of potential transmission upgrades that may result from utility-scale solar energy development. To a great extent, the presence or absence of existing transmission infrastructure with available capacity is the leading delimiter of solar power plants. BLM should, therefore, consider how the potential impacts of new solar generation driven transmission development can most appropriately be evaluated within the PEIS, given the continuing uncertainty surrounding load and resource demand.

a. For example, an analysis based on output generation derived from the CAISO queue alone may greatly overstate how much transmission development will occur. Instead, we recommend that due consideration be given to projected resource need, and how much development will occur that will be utilized. We encourage BLM to work with PG&E and other stakeholders on this issue, and to coordinate with the RETI process.

b. BLM may wish to consider whether the width of existing linear rights-of-way should be expanded if transmission lines traverse areas with planned energy development to accommodate site development.

4. The identification and integration of standard mitigation measures to address impacts:

a. Best management practices (BMPs) should be developed and implemented, where applicable, based on specific technologies, configurations, and bio-region or resource areas.

b. BMPs should not be prescriptive. Instead, PG&E recommends that BMPs be characterized and implemented as applicable presumptive

mitigation measures to help establish consistency, while leaving room for innovation and site-specific circumstances. This approach to BMPs leaves an appropriate level of detail to site specific circumstances and is consistent with a project manager driven approach to guide specific projects.

c. Flexibility should be maintained for water mitigation and land banking, particularly with respect to the retirement of extractive water uses and commitment of water rights to in-stream uses.

III. Alternatives to be Considered under the PEIS

The NOI describes three alternatives to be considered under the PEIS, including the following:

- No Action Alternative;
- Facilitated Development Alternative; and
- Limited Development Alternative.

PG&E recommends the following modifications to the alternatives, as presented:

1. The No Action Alternative should evaluate environmental, air quality, and greenhouse gas emission impacts that would occur in the absence of facilitated development of solar power systems on BLM administered lands.

2. The "reasonably foreseeable development" scenario of the Facilitated Development Alternative should take into consideration the fact that the maximum and likely build-out will be limited based on, among other things: CAISO queue issues (e.g., many applications are likely to be withdrawn when substantial processing fees come due in October 2008 and beyond); costs to developers; market conditions; and other factors. Moreover, many applications pending with BLM are overlapping, speculative, and are not likely to result in project development. Unless these considerations are taken into account, potential impacts may not be accurately described.

IV. BLM Planning Criteria to be Considered under the PEIS

PG&E supports the use of Planning Criteria to be used in the Resource Management Plan development process, and suggests the following:

1. Bullets 4 and 5. If proximate uses place constraints on utility scale solar power development, appropriate land use modification on both the proximate use and on the solar power use should be considered to facilitate compatibility to the extent practicable.

2. Include planning criteria that address:

- a. the air quality benefits of solar energy; and
- b. the energy security benefits of solar energy.
- c. the financial resources of the developer and/or a proven track record of performance to reduce speculation and overburdening of the application process.

V. Conclusion

PG&E, again, thanks the BLM for the opportunity to provide scoping comment on this proposed PEIS. We look forward to participating in the development of the PEIS and working with the Bureau.