Pacific Gas and Electric Company

Kathy Treleven
Manager
State Agency Relations

Mail Code B29L
Pacific Gas and Electric Company
P.O. Box 77000
San Francisco, CA 94177-0001
KTT3@pge.com

415.973.4185
Fax: 973.5003

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Docket Office:

Please find attached PG&E's comments regarding the IEPR Committee Workshop on the Comparative Costs of California Central Station Electricity Generation Technologies.

Please contact me should you have any questions.

Sincerely,

Kathy Treleven

Attachment

Pacific Gas and Electric Company Comments in Response to the IEPR Committee Workshop on the Comparative Costs of California Central Station Electricity Generation Technologies
August 25, 2009
Docket No. 09-IEP-1E

PG&E Comments on Draft Staff Report

Pacific Gas and Electric Company (PG&E) appreciates the extensive effort put forward by the Commission staff to create the 2009 Comparative Cost of California Central Station Electricity Generation Technologies Report. There is an increasing need for the kind of information provided in this report to inform planning efforts for both renewable and conventional resources. With the need for greater coordination across entities, particularly around renewable access, these kinds of reports provide a useful public reference to build common assumptions.

PG&E's initial comments for both the "Draft Comparative Costs of California Central Station Electricity Generation Technologies Report" (Draft Staff Report) are listed below for the Commission's consideration.

Comments on the Draft Staff Report

PG&E has the following comments on the methodology employed in assessing the cost of central electricity generation technologies:

- PG&E finds the Staff's modification to the process to include a range of potential costs based on the impact of uncertainty surrounding key variables to be a significant improvement over the 2007 IEPR Staff Report. Integrated resource planning involves making decisions with substantial uncertainty that will often lead parties to different conclusions about resource and transmission priorities. It is important to capture this uncertainty.

- In its evaluation of central station technologies, Staff assessed a range of potential outcomes surrounding project financing, operation and maintenance costs, and tax credits. The report also assessed the cost impact of delays in construction timelines. PG&E believes that future studies could be further enhanced by including an assessment of variability in the costs of construction, both in terms of labor and materials.

- The Commission should also consider that cost information may be skewed by market conditions/value at a particular point in time if there is an over or under supply of particular components. As Commission Staff has acknowledged, it is important to consider trends of cost information, and the likelihood that trends will continue, rather than single point estimates for a particular technology.

Additionally, PG&E has the following comments on the resulting cost of generation for specific technologies:

Conventional resources:

- PG&E would like further information regarding the assumptions differentiating the instant costs for a combined cycle from combustion turbine and advanced generation technologies. Combined cycles are more complex facilities than simple-cycle combustion turbine technologies. This would intuitively lead to the belief that, because of the relative complexity, the cost to construct combined cycles should be greater than the cost to construct combustion turbines, unless other factors are taken into account such as variability in economies of scale associated with a difference plant size. Further clarification as to whether this was the differentiating factor would be helpful.

- In future assessments, PG&E would like to see an assessment of the levelized cost estimates for mid-range operation of combined cycles, assessed at a 60% capacity factor, as these units will probably be utilized to help integrate renewables.

- PG&E would like the Commission to consider including an evaluation of reciprocating technologies in future updates of the Centralized Cost of Generation Report.

Renewable resources:

- The cost of solar technologies is a determining factor in assessing the most cost effective renewable resource strategies. With that in mind, PG&E would like to see a sensitivity analysis around the aggressive experience curve for both solar photovoltaic and solar thermal technologies.
- For small hydro projects that are new and supplemental to an existing hydro project, there is a very wide range of project specific costs. In future estimates it would be helpful to see a range of costs estimates.