



**Pacific Gas and
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Electronic Delivery

California Energy Commission
Dockets Office, MS-4
1516 Ninth Street
Sacramento, CA 95814

Re: Docket No. 11-IEP-1E and 11-IEP-1G

Docket Office:

Please find attached PG&E's comments in response to the Transmission Planning for Renewables workshop, held May 17. Please contact me should you have any questions.

Sincerely,

Attachment

11-IEP-1E

DOCKET

11-IEP-1G

DATE May 24 2011

RECD. May 24 2011

**PACIFIC GAS AND ELECTRIC COMPANY COMMENTS IN RESPONSE TO THE MAY 17TH
IEPR WORKSHOP ON TRANSMISSION PLANNING FOR RENEWABLES
DOCKET NO. 11-IEP-1E, 11-IEP-1G**

Pacific Gas and Electric Company ('PG&E') appreciates the opportunity to comment in response to topics raised at the IEPR workshop on May 17th, Transmission Planning for Renewables. We look forward to further collaboration with the California Energy Commission ('CEC') and their sister state and federal agencies on how best to shape policies that deliver safe, reliable, cost-effective, and higher levels of renewable energy to our customers. In advance of a more detailed proposal from Staff, PG&E would like to offer the following comments on transmission needs as they relate to the transmission planning process, studies, and interconnection

What progress has been made and what challenges (including resource adequacy/deliverability) have been encountered to date in the licensing and/or development of transmission infrastructure that facilitates renewable generation, including ARRA-funded projects?

The CAISO, CPUC, and CEC have worked in a cooperative manner to progress the state's RPS goals to where we are today. Utilities, developers, and regulators have participated in forums such as the CAISO TPP, CEC IEPR, CPUC LTPP, along with RETI and the CTPG to the point that the prospect of interconnecting sufficient renewable generation to meet the 33% RPS target is a more realistic goal.

Nevertheless, PG&E firmly believes that as an industry and as a state that providing a plan to merely connect the renewable resources to meet our environmental goals is only the first step. The challenges of operating a system with such a high penetration of intermittent renewable resources are far greater. Analyses to date that have focused on the feasibility of future system operations have painted an overly optimistic result that the current transmission system can accommodate the high levels of projected renewable resources. The assumptions for the retirement of once-through-cooling units, state exports, and spinning reserve margins need to be closely examined. Specifically, to assume that the rest of the Western Electricity Coordinating Council (WECC) will be importing renewable resources from the Mojave Desert is unfounded. Quite the opposite, a large majority of WECC states are projecting surpluses of renewable resources targeting the California market. Furthermore, assumptions for the retirement of once-through-cooling units in the LA Basin have a direct impact on whether the majority of desert renewable resources would serve the LA Basin beyond the 33% level or would be transmitted north along the transmission backbone.

As predicted, the long lead time of transmission needed to make generation fully deliverable is proving a challenge for renewable generation that is ready to come on line, but cannot count toward the resource adequacy requirement as it awaits the required transmission network upgrades. Going forward, a more proactive look at least regrets transmission upgrades could help to narrow this timing gap.

Furthermore, careful coordination between the CPUC and the CAISO to revise and refine the resource adequacy counting rules to allow for partial or temporary deliverability should be explored. For example, if generation is ready to come online and the existing (or even phased in) transmission system could allow for some portion of the generator's capacity to be counted, the current timing gap could be partially and temporarily bridged. Eligibility for resource adequacy depends on both CPUC rules and the CAISO tariff provisions. Therefore, any revisions must be carefully coordinated and put into effect roughly simultaneously.

What changes do you recommend be made to the existing transmission planning, permitting, and construction processes to ensure that appropriate, timely transmission upgrades that support renewable generation are completed?

Two major areas of transmission planning could be improved to help ensure that appropriate timely transmission upgrades support renewable generation. First, the generator interconnection study process and the transmission planning process need to be better coordinated. The CAISO is currently making great efforts to accomplish such coordination. Achieving such coordination is a large and complex undertaking, but much needed. Second, the CAISO's interpretation of its recently revised transmission planning process may be so conservative as to slow down the timely approval of the appropriate transmission. The CAISO should focus on a "least regrets" set of upgrades rather than a "no regrets" set of upgrades when considering the projects that it approves unconditionally. PG&E cautions that the Category 2 (Conditional Approval) concept found in the CAISO Tariff does not provide enough assurances to transmission developers to continue to develop such projects. This reluctance is compounded with the fact that once approved "unconditionally," project sponsorship would be up for bid. Either the CAISO planning process should not rely heavily on Category 2 and instead rely more heavily on Category 1, or provide for project sponsor identification and cost recovery for early development costs for Category 2 projects.

What additional changes would enable the planning-permitting-construction cycle to be shortened to no more than three years¹ without sacrificing the quality of the decisions?

The Chairman requested that PG&E elaborate on why it is prioritizing its connections between Northern and Southern California instead of those to the north (to BC).

PG&E continues to explore least cost resource options in the Northwest, Nevada, and the Southwest to meet the 33% RPS requirements. Of these three options the need for transmission is most evident for backbone reinforcements between Northern and Southern California. PG&E has actively advocated at the CAISO for nearly 5 years that such a backbone line from Midway to the Bay Area is needed. Thus, while, PG&E believes it is prudent to continue working on connections to the North and South, the southern 500 KV transmission line meets a number of clear needs. First, it provides necessary transmission capacity for PG&E to meet the 33% RPS requirements at the least cost to our customers. Second, it allows for a full dispatch of Helms which strengthens the systems ability to meet operational needs to due renewable intermittency. And third, it provides the best solution for, the reliability needs of the Fresno area.

¹ Governor Brown's Clean Energy Jobs Plan states the following: "The [Energy Commission] should 'fast-track' projects based on their anticipated ability to deliver clean energy to market. The permitting time for these projects – which now can take 6 to 8 years – should be dramatically reduced, and in no case be longer than three years." Furthermore, the Plan states that "As Governor, I will ensure that all agencies involved work together with a sense of urgency to permit the new transmission lines without delay."