PG&E Comments to the CEC on Lead Commissioner's Final Report on the 2011 IEPR

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VIA E-MAIL DOCKET@ENERGY.STATE.CA.US

California Energy Commission Dockets Office, MS-4 Re: Docket No. 11-IEP-1A 1516 Ninth Street Sacramento, CA 95814-5512

Re: Comments of Pacific Gas and Electric Company on the Lead Commissioner Final Report 2011 Integrated Energy Policy Report

I. INTRODUCTION

Pacific Gas and Electric Company ("PG&E") appreciates the opportunity to provide comments on the California Energy Commission's ("CEC") Lead Commissioner Final Report ("LCFR") 2011 Integrated Energy Policy Report ("IEPR"). PG&E is pleased to note that many of the technical issues raised in its December 23, 2011 comments on the draft IEPR have been incorporated into the LCFR. However, three key chapters – nuclear, combined heat and power, and renewables – still contain areas of concern to PG&E. PG&E highlights these concerns below and incorporates by reference its earlier comments on these issues.

II. NUCLEAR POWER ISSUES

As PG&E noted previously, it is supportive of numerous recommendations in the draft IEPR, but there are a number of the recommendations on nuclear issues that go well beyond the scope of Assembly Bill ("AB") 1632 and address nuclear power plant safety and operational issues that are subject to direct oversight by the Nuclear Regulatory Commission ("NRC"). While PG&E is fully supportive of sharing information submitted to the NRC and facilitating the State's participation in these federal proceedings, we do not believe it is legally appropriate for the CEC to undertake its own independent review of safety and operating issues which are subject to the exclusive legal jurisdiction of the NRC. PG&E respectfully requests that the

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LCFR be updated to exclude the recommended activities that are subject to the exclusive legal jurisdiction of the NRC.

III. COMBINED HEAT AND POWER ISSUES

In this chapter, several updates have been incorporated that capture PG&E's December 23, 2011 recommendations. However, on page 12, new text on Combined Heat and Power ("CHP") is introduced, indicating that "These [existing CHP] facilities improve the efficiency of the electric system by using less fuel to produce energy and can reduce air pollution [and] greenhouse gas emissions since less fuel is burned to produce each unit of energy output." This sentence is not supported by the IEPR record and should be deleted. PG&E provides support for this recommendation below.

First, with respect to greenhouse gas emissions, a CEC report on 2010 data shows that gas-fired CHP in California burned 11,161 Btu per kWh of electricity output, roughly the same as "Peaker Plants" (11,202 Btu/kWh) and "Aging Plants" (11,269 Btu/kWh), but much higher than "New CCs" (7,176 Btu/kWh). In other words, as an electricity producer, CHP's GHG emissions per kWh are roughly the same as those of peakers and aging plants. The figure for CHP should be adjusted to account for thermal output from CHP that is actually used (e.g., in some industrial process). However, no such adjustment was examined in the 2011 IEPR proceeding. To the best of PG&E's knowledge, the only public information on used thermal output pertains to the small CHP facilities examined in Itron's 2011 evaluation of the Self-Generation Incentive Program. As noted in PG&E's December 23, 2011 comments on the draft IEPR, Itron found that those small CHP facilities had higher GHG emissions than separate production of heat and power.² PG&E agrees that well-designed CHP operated to meet a thermal load can reduce GHG compared to separate production of heat and power, but there is no basis in the IEPR record for concluding that existing CHP facilities actually accomplish that feat, and limited evidence to the contrary. Accordingly, the CEC should delete this sentence or frame it as a question that should be explored in the 2012 IEPR Update. However, at this time, there is no factual basis in the record to support this statement.

Second, on air pollutants, PG&E is not aware of any factual basis in the 2011 IEPR record to support a claim of air-pollutant benefits from existing CHP. The scale of CHP's air-pollutant benefits, if any, is likely to be small. According to California Air Resource Board ("ARB") data for 2008 (the most recent year available), CHP facilities in California emitted 21.85 short tons per day of NOx, and power plants emitted 26.21 short tons per day of NOx.

¹ "Thermal Efficiency of Gas-Fired Generation in California", CEC-200-2011-008, Table 2, at: http://www.energy.ca.gov/2011publications/CEC-200-2011-008/CEC-200-2011-008.pdf

² Itron November 14, 2011 webinar at http://www.cpuc.ca.gov/NR/rdonlyres/3EF6BE45-8CC2-4607-A902-5421E8C6C560/0/SGIP2010ImpactEvalResultswebinar.pdf, slide 42

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Each of those categories comprises less than 1% of total NO_X emissions in California, which ARB shows as 3,209.71 short tons per day.³

For these reasons, PG&E recommends deletion of the above-noted statement.

IV. RENEWABLE ISSUES

PG&E fully supports the CEC's intent to develop a Renewables Strategic Plan as part of the 2012 IEPR Update. As part of that proceeding, it has been expected that additional work would be done to build a record and shape the framework for implementation of Governor Brown's 12,000 MW of localized energy resources. However, between the draft IEPR issuance and the LCFR issuance, significant definitions of key terms have been added to the LCFR that have not been part of the IEPR record. In particular, PG&E is concerned that the LCFR is now internally inconsistent in how it defines distributed generation ("DG") and localized energy resources.

For example, on page 29 of the LCFR, a definition of DG is provided as <20MW, RPS-eligible, and connected to low-voltage distribution. The LCFR also provides a second definition at page 32, which is <20MW, RPS-eligible, and connected to the transmission and distribution grid. Graphs and charts alternately include (table 1, p. 30) and exclude (figure 2, p. 33) facilities installed under the Self-Generation Incentive Program ("SGIP"), the Emerging Renewables Program ("ERP"), and less-than-20MW Renewable Portfolio Standard ("RPS") and Qualifying Facilities ("QFs") facilities.

The report should, at a minimum, delete the definition of DG found on page 29 because it is inconsistent with earlier definitions of the term. The report should also revise Figure 2 to include SGIP, ERP, and RPS/QF projects so that it is consistent with Table 1.

PG&E generally recommends that the LCFR avoid defining DG too narrowly, recognize that there is a breadth of potential DG technologies, and clarify that "DG" has not been defined for the purpose of the Governor's 12,000 MW initiative. It also should acknowledge that there are other technologies (e.g., fuel cells using non-renewable fuel) that could meet the intent of the initiative and count towards the 12,000 MW goal.

Lastly, PG&E reiterates its earlier request that the CEC acknowledge (on page 31) that past contract failures are historical, not predictive, and that suggestions/predictions using these rates therefore may not be accurate or useful.

³ ARB emission inventory at http://www.arb.ca.gov/app/emsinv/emssumcat_query.php?F_YR=2008&F_DIV=-4&F_SEASON=A&SP=2009&F_AREA=CA#0 CHP emissions are listed under "Cogeneration". Emissions from other electricity generators, including merchant and utility-owned plants, are listed under "Electric Utilities".

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V. CONCLUSION

PG&E appreciates the CEC's inclusion of many of PG&E's earlier comments into the LCFR and looks forward to working with the CEC team on the 2012 IEPR Update. Should you have any questions about PG&E's comments, please don't hesitate to contact me.

Sincerely,

/**S**/

Valerie J. Winn

cc: L. Green by email (<u>lynette.green@energy.state.ca.us</u>)

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