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VIA E-MAIL
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California Energy Commission
Dockets Office, MS-4
Re: Docket No. 12-IEP-1B
1516 Ninth Street
Sacramento, CA 95814-5512

Re: 2012 Integrated Energy Policy Report Update/Demand Forecast: Comments of Pacific Gas and Electric Company on the Draft Staff Report *Revised California Energy Demand Forecast 2012-2022, Volumes 1 and 2*

I. INTRODUCTION

Pacific Gas and Electric Company ("PG&E") appreciates the opportunity to provide comments on the California Energy Commission's ("CEC") *Revised California Energy Demand Forecast 2012-2022* ("Revised CED"). There have been several additions since the preliminary report was released in August 2011, in particular the inclusion of natural gas energy efficiency savings figures and the incorporation of television standards savings. Having access to updated natural gas savings figures is very helpful, as the most recent figures prior to the release of the Revised CED were from the 2007 CED.

PG&E's comments on the Revised CED focus on the need for: 1) coordination with the California Public Utilities Commission ("CPUC") on standards modeling, 2) a better understanding of the post-2018 lighting standards modeling; 3) more analysis on the gas energy efficiency savings; and 4) some reconciliation of the 2011 peak demand starting point is needed. PG&E is happy to discuss these comments with the CEC staff should additional information be needed. PG&E also provides as an enclosure to this letter a paper entitled "Electric Vehicle Penetration Study Using Linear Discriminant Analysis", as requested at the workshop.

II. COORDINATION BETWEEN THE CEC AND THE CALIFORNIA PUBLIC UTILITIES COMMISSION IS NEEDED ON STANDARDS MODELING

In previous Demand Analysis Working Group ("DAWG") discussions, PG&E has suggested that CEC staff coordinate with the CPUC consultants HMG. HMG is conducting the potential and goals studies on standards modeling. PG&E urges the CEC to initiate this coordination as quickly as possible, because forecasted savings from the Revised CED are significantly different from the preliminary Codes and Standards ("C&S") savings that HMG has forecast for the 2013-14 CPUC staff goals proposal. PG&E understands that these two sets of figures won't be entirely comparable, but where comparisons can be made, it would be very

helpful for both the CPUC goals setting process and future CED work to have as much consistency as possible.

III. POST-2018 LIGHTING STANDARD RESULTS NEED FURTHER REVIEW

PG&E has discussed with CEC staff that the modeling of lighting standards produces some peculiar results for the 2018-and-beyond period. These results appear to stem from the standard being modeled on the legislative language, rather than on language that governs the implementation of the standards themselves. For example, the Revised CED modeling shows incremental savings from lighting standards dropping significantly in 2019 from earlier levels. This is odd, given the last lighting standard goes into effect in 2018, and a few years will be required for the full benefits of the last lighting standard to be achieved, given older bulbs will need to be replaced with the new standard and incremental savings are expected to decline much more gradually than the Revised CED results indicate. CEC staff has indicated it will address this issue in the 2013 CED.

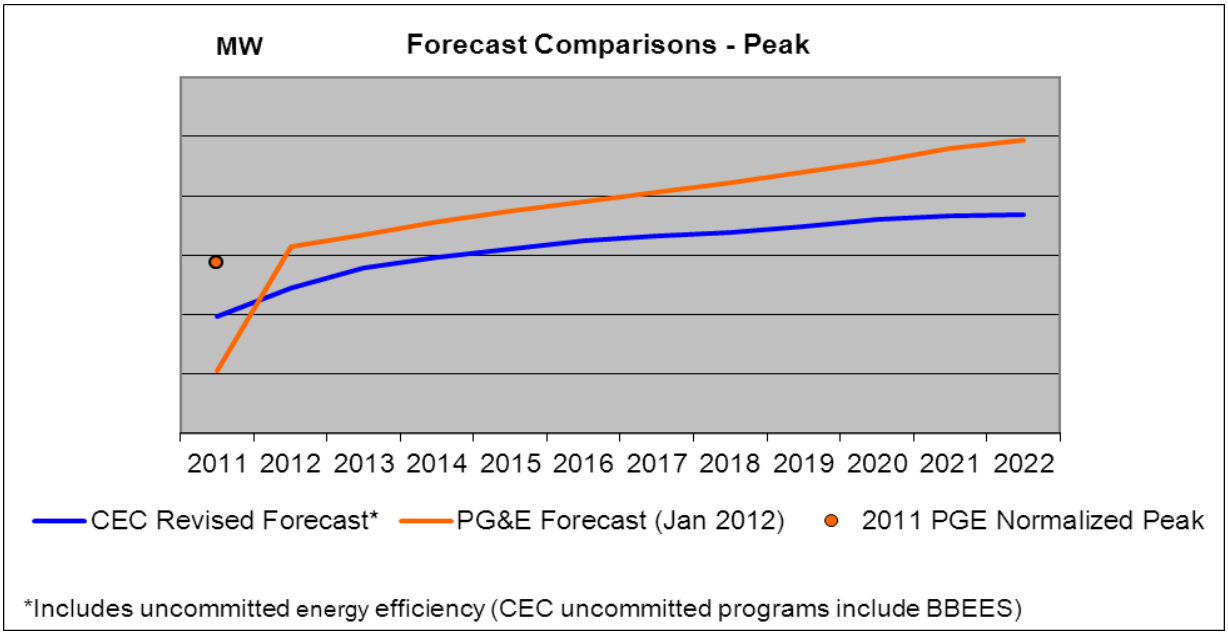
IV. MORE UNDERSTANDING IS NEEDED OF GAS ENERGY EFFICIENCY MODELING

While DAWG meetings have devoted considerable time to discussing electric energy efficiency savings, less attention has been paid to gas energy efficiency savings, in part because the previous 2007 gas figures were "relatively" out-of-date. However, now that new gas savings figures have been made available, it would be helpful to devote some time in upcoming DAWG meetings to better understanding these figures and the modeling behind them. For example, the Revised CED shows a significant reduction in cumulative gas savings in 2009 (on the order of 1,500 MMTherms). This means that there were net negative incremental gas savings in 2009 of 1,500 MMTherms. While this result could be partially explained by a decline in gas prices that led to some increase in consumption, 1,500 MMTherms is more than 10% of statewide gas consumption. The magnitude of this result is suspect, given that it occurred in the depths of a recession. Additional discussion may help us better understand what is contributing to this phenomenon.

V. A BETTER UNDERSTANDING OF HOW THE CEC NORMALIZED THE 2011 PEAK FORECAST IS NEEDED

Unusually mild summer-time temperatures in 2011 resulted in an annual peak anomaly for the PG&E service area. Not only was the peak observed in June (about a 1-in-10 year occurrence), but the peak itself was just an average (1-in-2 normal) peak for the month of June. PG&E's analysis suggests that this peak was nearly 2,000 MW below what would be considered a normal annual peak. The observed peak of 18,024 MW is estimated at 19,868 MW on a normalized basis. PG&E is unclear as to the CEC's approach to normalizing the 2011 peak, and needs to better understand whether staff is taking the observed peak and normalizing it, or using its existing forecast models to generate a temperature normal peak value for 2011. Either way, the staff approach projects a normal 2011 peak at 18,965 MW – 900 MW below PG&E's weather-normalized peak value for 2011.

The importance of this starting point discrepancy becomes apparent when PG&E's forecast and the CEC forecast are shown side-by-side, as on the graph below. (In this graph, the two forecasts are shown on a comparable basis, i.e., the CEC forecast is adjusted to include uncommitted energy efficiency.)

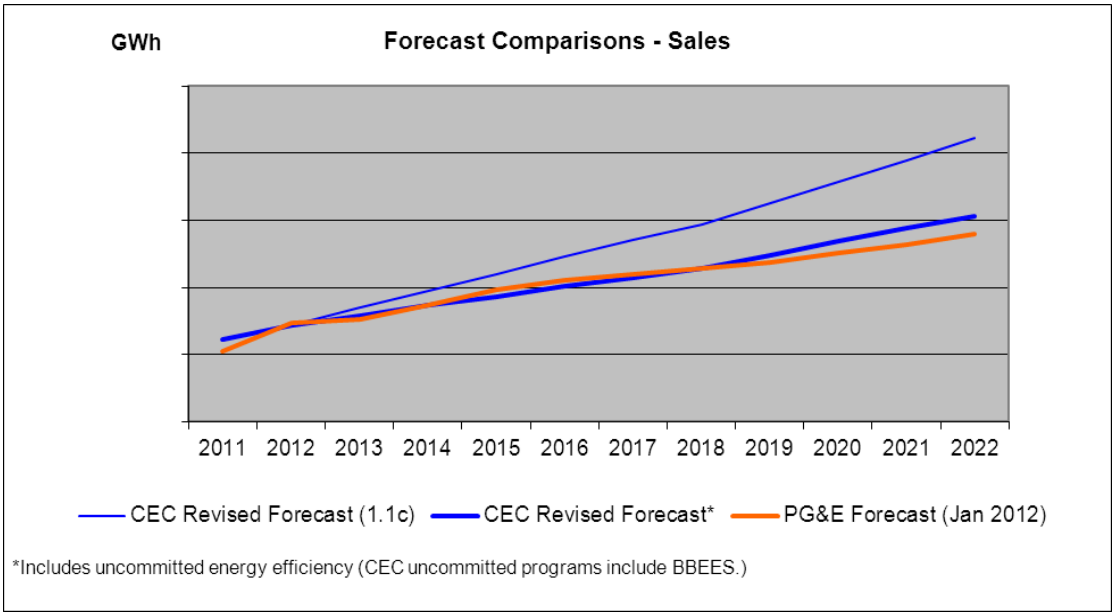


As can be seen, the respective starting points go a long way in explaining the difference in the forecasts in 2022. In fact, the difference in starting points (903 MW) is three-fourths of the difference in 2022 (1,247 MW).

Understanding differences in temperature adjustment can be a fairly detailed exercise in modeling approach and statistics, and PG&E understands that at this point in the IEPR process, a discussion of this type may be too involved to effect a change to the forecast. However, PG&E does recommend that at a minimum, the CEC should clarify its estimate of the 2011 data point in its forecast process for this IEPR cycle. If PG&E and staff can come to an understanding as to the value of the 2011 peak, much of the forecast differential could possibly be reconciled.

VI. THE CEC'S SALES FORECAST IS LARGELY COMPARABLE TO PG&E'S, AFTER ACCOUNTING FOR UNCOMMITTED ENERGY EFFICIENCY

In contrast to the peak discussion above, PG&E has no real issues concerning the sales forecast. On a comparable basis, the forecasts of PG&E and CEC line up fairly closely, with about a 1,000 GWh difference in 2022 (a little over 1 percent). The graph below, however, does visibly show how significant the inclusion of uncommitted energy efficiency is. This is an issue that others have also raised, so PG&E will not add to that discussion here, only to point out that the inclusion of uncommitted EE reduces usage by about 5,000 GWh in 2022.



VII. CONCLUSION

PG&E looks forward to continuing discussion of demand forecasting issues through the DAWG and other workshops in the 2012 IEPR.

Sincerely,

/s/

Valerie J. Winn

Enclosure (Electric Vehicle Penetration Study Using Linear Discriminant Analysis)

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