

March 7, 2010

DOCKET
09-IEP-1C

DATE MAR 07 2010

RECD. MAR 08 2010

California Energy Commission
Dockets Office, MS-4
1516 Ninth Street
Sacramento, CA 95814-5512

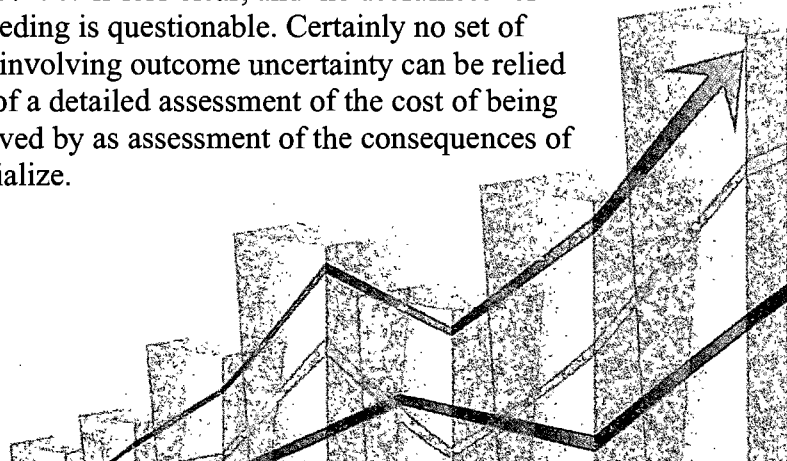
Re: Docket Number 09-IEP-1C
2009 Integrated Energy Policy Report (IEPR)
Electricity Demand Forecast

To Whom It May Concern:

Berman Economics requests the Commission accept these comments out-of-time. Berman Economics participated in the February 17, 2010, *Joint IEPR and Electricity and Natural Gas Committee Workshop on Incremental Impacts of Energy Efficiency Policy Initiatives Relative to the Adopted Demand Forecast* via WebEx. Technical difficulties associated with the broadcast made it difficult or impossible to hear information not provided in advance. The Commission released the WebEx recording and transcript on March 2nd and 4th respectively. This was the first opportunity Berman Economics had to hear much of the information.

Berman Economics shares Commissioner Byron's expressed concern regarding the reliability of the energy efficiency savings estimates and forecasts associated with the CFL initiative. The savings estimates appear to rely on expenditure reports from utilities and the forecasts on questionable assumptions by staff and its consultants regarding the continued expansion and increasing saturation of the CFL market. We do not question the accuracy of the utility reports; only the reasonableness of the energy efficiency savings inference. The record is devoid of the kinds surveys or analyses necessary to support the inferences, including comparisons between actual and predicted demands.

The forecast scenarios provide an illustration of the potential benefits associated with the initiatives, highly dependent upon the underlying assumptions. Their consistency with the 2008 Goals Study underlying D.08-07-047 is less clear, and the usefulness for informing the forthcoming 2010 LTPP proceeding is questionable. Certainly no set of assumptions or information base necessarily involving outcome uncertainty can be relied upon for regulatory purposes in the absence of a detailed assessment of the cost of being wrong. Rather the CPUC would be better served by as assessment of the consequences of decisions that fit a future that does not materialize.




The remaining uncertainties are policy and measurement related. The technical engineering information related to savings associated with specific actions is excellent. The focus is excessively on demand reduction, with a specious reliance on continued and increasing savings associated with CFLs. As Commissioner Byron pointed out, we don't even know if or when these are ever installed in California. Moreover, reliance on demand reduction measures is subject to substantial variability as they rely on consumer actions. By contrast, focus on improving efficiency on the T&D system not only presents a technical opportunity for greater savings, the measurement is far more accurate and reliable as utilities know what they've done and actual energy savings can be reliably determined based on purchases and inventory changes, as the energy efficiency savings is independent of consumer response.

There is also substantial policy uncertainty associated with energy efficiency in California. On the distribution system, for example, compliance with Federal (DOE) regulations can be accomplished through purchasing a transformer based either on DOE implicit, minimalist assumptions regarding the cost of losses and load factors, or based on a utility's own cost of losses and native load factors. Jurisdictions such as Maryland and the District of Columbia have issued rulemakings that require procurement based on life-cycle cost, rather than initial cost only, using a methodology specified in the rulemaking, including precise formulas for calculating loss factors consistent with Federal regulations. California, by contrast, has issued neither rulemaking nor guidance. Indeed, it is not clear that the IOUs in California report the basis of their transformer procurement decisions to the CEC or CPUC.

We have attached our responses to the questions posed by CEC and CPUC staffs. Should you have any questions or require additional clarification, please contact me at 703-281-0490.

Sincerely,

A handwritten signature in black ink, appearing to read "Robert A. Berman", written in a cursive style.

Robert A. Berman, Principal

Enclosure

Questions for Stakeholders

1. This project's origins derive from confusion about "overlap" between committed savings in the Energy Commission forecast and uncommitted savings. Has this report resolved the overlap issue for this IEPRIL TPP cycle, or do questions remain?

Questions remain with respect to the overlap issue, as well as the interpretation of the information. Regarding the "overlap" issue, there has been no systematic link of the assumptions to the results; thus it is not possible from the work presented to identify and remove an overlap. Moreover, as Commissioner Byron pointed out, it is difficult to interpret the forecasts that have been presented. More seriously, there is no measurement of forecast error and no comparison of actual relative to predicted. If the forecasts are to be used as general guidance, this may not present a serious problem. Relying on such information for decision purposes in a corporate or regulatory environment is ill advised.

2. Are the three scenario analyses undertaken by the staff team sufficiently consistent with the policy initiative groupings established by the CPUC in the original 2008 Goals Study that underlies D.08-07-047?

For the reasons stated in 1. above, scenario analyses are not sufficiently consistent with the 2008 Goals Study that underlies D.08-07-047.

3. Does the staff report and its multiple appendices provide sufficiently detailed results such that the CPUC can understand the broad assumptions and use the results in the forthcoming 2010 L TPP proceeding?

The staff report, including supporting appendices, can provide general guidance, but should not be relied upon for procurement purposes, and thus may inform the 2010 LTPP proceeding in only a general manner. Absent some statistically appropriate measure of the forecast error and a comparison of actual with predicted results, there is inadequate information for the forthcoming 2010 LTPP. At a minimum, staff should do an analysis of how the information might have impacted prior procurements. The analysis should also include a sensitivity analysis of potential errors relative to procurement implications, and an assessment of the "cost of being wrong" as forecast errors increase.

4. The policy uncertainties associated with major, sustained efforts to increase energy efficiency savings have been addressed by developing three scenarios, but other uncertainties are only qualitatively described. Is it the policy or the technical uncertainties that are more likely to dominate the overall uncertainty of achieving large energy efficiency savings goals?

The uncertainties are policy and measurement related. The technical information (engineering, not statistical) related to savings associated with specific actions is excellent. The focus is excessively on demand reduction, with a specious reliance on continued and increasing savings associated with CFLs. As Commissioner Byron pointed out, we don't even know if or when these are ever installed in California. Moreover, reliance on demand reduction measures is subject to substantial variability as they rely on consumer actions. By contrast, focus on improving efficiency on the T&D not only presents a technical opportunity for greater savings, the measurement is far more accurate and reliable as utilities know what they've done and audits are much easier; and the savings may be independent of consumer response.

There is also substantial policy uncertainty associated with energy efficiency in California. On the distribution system, for example, compliance with Federal (DOE) regulations can be accomplished through purchasing an off-the-shelf transformer based on DOE minimal implicit assumptions regarding the cost of losses and load factors; or based on the utilities own cost of losses and native load factor. Jurisdictions such as Maryland and the District of Columbia have issued rulemakings that require procurement based on life-cycle cost, rather than initial cost only, using a methodology specified in the rulemaking, including precise formulas for calculating loss factors consistent with Federal regulations. California, by contrast, has issued neither rulemaking nor guidance.

- 5. The staff report and the Itron Attachment identify replacement savings from decay of committed programs as an analytical issue for the CPUC to address. Is the concept of savings lost through measure decay sufficiently described for the CPUC to understand the choices it must consider about savings decay with respect to cumulative goals?**

No, there is insufficient specification of the concept of savings lost through measure decay, nor of the assumptions that underlie the forecasts. In the February 3, 2010 workshop, Itron, in response to a question, stated its assumption that the market for CFLs, and the associated savings, would continue to increase into the future. Specifically, that there is not saturation. These types of assumptions, and their implications, need to be made explicit in order for the CPUC to understand the choices it must consider.

- 6. The difficulties in meshing two complex analytic efforts to produce consistent savings estimates are described in the staff report and the Itron Attachment. How might efforts to develop such estimates in future IEPR/LTPP cycles be revised to improve consistency?**

The CPUC and CEC should have a single integrated model for all purposes. Since the ultimate question is load forecasting, both peak and energy, a model should be designed to meet those needs, as well as to include a structure to model the sorts of policies and efficiencies the CPUC and CEC would like to address. The distinction between committed and uncommitted energy efficiency appears unnecessary and simply introduces opportunity for ambiguity and error.

- 7. The staff demand forecast analyses and the energy efficiency studies of both potential savings and expected savings from hypothetical programs are highly complex topics. Transparency, constructive criticism, collaborative projects, etc. are means by which stakeholders can engage in the details and improve analytic products compared to efforts by staff alone. What might serve as a workable standard of transparency to satisfy the legitimate concerns of stakeholders and policy makers? What elements would be critical? How might it be created? Given the current absence of such a standard, does the published documentation satisfy such legitimate concerns?**

For the reasons described above, reliance on the current model and published documentation is ill advised. Transparency is only now being fully addressed; and in some cases, assumptions and problematic implications are revealed not through the documentation, but through questions due to the absence of clear, concise documentation. In structuring the sort of integrated tool suggested in response to question 6. above, staff should issue a white paper identifying the structure, need for assumptions, options, pros and cons of the various options, and staff's preferred position and explanation. Stakeholders can then respond to specifics and suggest alternatives. As it is unlikely that all assumptions can be identified at the beginning, several rounds of white papers will likely be required.