

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking to Examine the
Commission's Post-2008 Energy Efficiency
Policies, Programs, Evaluation, Measurement,
and Verification, and Related Issues.

Rulemaking 09-11-014
(Filed November 20, 2009)

**WOMEN'S ENERGY MATTERS
COMMENT ON AC RULING RE EM&V REVIEW**

July 16, 2010

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WOMEN'S ENERGY MATTERS COMMENT ON AC RULING RE EM&V REVIEW

Women's Energy Matters (WEM) appreciates this opportunity to comment pursuant to the July 2, 2010 Assigned Commissioner's Ruling on EM&V Review.

The Ruling summarized parties' previous recommendations concerning the overall focus of Evaluation, Measurement & Verification for energy efficiency, and asked questions about priorities and specific concerns.

Introductory Comments

Before we answer these questions, WEM urges the Commission to address a conceptual issue – placing EE more fully in the context of its relationship to the energy system. (This discussion addresses some of the questions on Market Transformation and making EM&V more relevant for the CEC demand forecast).

Currently EE (and EM&V) is overly self-referential; it largely ignores the role of EE in the *energy system* and tends to focus instead on the level of efficiency of the built environment of energy customers.

There is an attempt to view EE in relation to the larger system of the economy, but we believe an in-depth investigation of MT in a time of economic upheaval would yield little useful data and would suck a lot of energy and funds that could be put to better use.¹ We recommend that ED quickly draft MT protocols for interim use and move on to more pressing issues. A more thorough MT investigation could be more fruitful when and if the economy settles down.

WEM believes a review of EM&V should address *practical* problems.

Paying more attention to the impact of EE on the energy system would better serve customers as well as the environment. For example, a major issue in the energy system is California's ever-rising summer peak. This has powerful impacts on customers' pocketbooks. The current revolt in the Central Valley about paying

¹ Market Transformation (MT) theories attempt to identify how price effects and availability affect customers' willingness to purchase more efficient appliances, machinery or building features. The question is complex and may ultimately rest on subjective variables; if anything MT controversies could surpass the controversies over net-to-gross and other attribution issues. WEM believes that focusing on MT may serve to further disconnect EM&V from a focus on the energy system.

excessively high bills in the summer has everything to do with the failure of EE to sufficiently address the peak. EE measures like more efficient air conditioning, evaporative coolers, whole house fans, insulation, roof color, overall building design and shade trees could help solving individual consumers' problem (excessive bills) — and would help customers throughout the system by reducing the cost of the energy system by beginning to shave off the peak.

However, after many years of utilities ignoring these sensible solutions, the Commission has decided to *lower rates* for PG&E's larger users while *raising rates* for the lowest-income customers and customers who conserve the most (this provides a revenue-neutral outcome for the utility). If price signals mean anything, this is a serious blow to energy efficiency.²

Unfortunately, the current EM&V system has given PG&E and other IOUs an excuse to ignore logical efficiency solutions. In part, the problem is a restricted analysis of cost-effectiveness, with improper values for avoided costs (which should better address actual energy prices). This makes CFLs not just handy for utilities but even *necessary* to help utilities offset their many non-cost-effective programs — all the while neglecting the measures that would reduce the peak. (Residential CFLs are virtually useless to address summer peak.)

An important additional tool to solve the peakiness of California's energy system would be to add to the capabilities of the EM&V system in order to enable certain EE resources to bid into a supply side RFO. With our June 4th comments WEM supplied the New England ISO EM&V Guidelines which provide a checklist for what would be necessary.

² Another major problem in this time of economic dislocation is the lack of financing for practically anything. Otherwise, it could be that the biggest problem for EM&V will be finding something to measure as customer purchasing of almost anything is becoming more and more difficult — *especially* in the hard-hit Central Valley where they need EE the most.

In this regard, the Commission should make it a priority for utilities to offer On-bill Financing for residential customers. Utilities would have to be pressured to take on that risk — but WEM believes it would do far more to promote EE for the Commission to provide hundreds of millions of ratepayer dollars for on-bill financing than to funnel that amount to the pockets of utility investors. Even if every borrower defaulted, at least we would have more efficiency.

One unspoken problem is that truly reducing the peak would cut into shareholders' earnings. Especially in a falling economy, which tends to flatten energy growth, utilities want to maintain any excuse for adding to rate-base, and a continually rising peak provides justification for utilities to build new power resources and power lines.

Keeping EE disconnected from the energy system avoids disrupting utilities' supply-side profits too much — and provides EE profits to please Wall St. further. But maximizing EE while also maximizing supplies is extremely costly, in economic terms and climate change too. After all, the GHG emissions from manufacturing EE items and delivering EE services are not zero.

Questions from the Ruling:

4.1. EM&V Objectives

A. Several parties suggest adding a reference to the Strategic Plan's goal of market transformation to the Commission's adopted EM&V objectives. In particular, DRA proposes adding the following phrase to the "Market Assessment" objective adopted in D.09-09-047: "The goal of market assessment is to identify a common set of Market Transformation definitions based on CPUC assigned market indicators, which will allow the Commission to determine when market transformation has occurred for a program." Do parties support the addition of this phrase to the Market Assessment objective?

Yes.

B. Do parties support SCE's suggestion that the Market Assessment objective be expanded to specify that the purpose of Market Assessment is to assist the Commission in "[m]onitoring and guiding progress on meeting the goals of the Strategic Plan; and guiding updates to the Strategic Plan by providing new information about what market changes are most feasible and cost-effective"?

No.

C. Can the suggestions in questions 1 and 2 above be reconciled and, if so, how?

No. WEM prefers DRA's wording.

4.2. Macro Consumption Metrics

A. The NRDC supports and encourages exploration of Macro Consumption Metrics as a supplement to, but not replacement of, the current energy and demand saving metrics.¹⁷ Do parties agree with NRDC?

WEM agrees to the extent that MCM should not replace current energy and demand metrics.

We believe that actual energy consumption data would be preferable to constructing more models based on economic data. It will be interesting to see whether utilities can continue to keep consumption data secret, given the increased (albeit involuntary) transparency of Smart Meters.

One solution might be to develop a survey-based model where utilities supply actual data for a representative sample of customers throughout their territories, and extrapolate from there to overall consumption.

- a. If Macro Consumption Metrics cannot replace current impact evaluation practices, do they offer other benefits?**
b. The NRDC suggests Macro Consumption Metrics are necessary to “help inform progress towards the state’s objective to limit greenhouse gas emissions.”¹⁸ However, SCE argues that converting existing energy savings metrics to GHG emission reductions is sufficient to accomplish the same goal.¹⁹ Which perspective is most valid?

Neither, because neither deals with the extent to which EE actually deferred/displaced energy supplies.

- B. Do parties agree with PG&E’s suggestion that the inherent limitation of Macro Consumption Metrics is that “factors outside of the energy efficiency arena could skew the perceived effect of the energy efficiency programs themselves?”²⁰**

Yes.

- a. Is it possible to control for factors like economic activity or electrification of transportation such that the impact of energy efficiency is more evident?**

It might be possible, but also difficult and expensive, and the resulting data would still have questionable accuracy. As a practical matter, theoretical studies such as these would give utilities more opportunities to challenge EM&V evaluations. This is not desirable.

- b. Would the availability of certain data strengthen Macro Consumption Metrics? If so, what data, if any, would improve the reliability of econometric evaluations?**

See answer to 4.2A above.

- C. Would the addition of a Macro Consumption Metric comparable to that suggested by Horowitz,²¹ or other approaches, provide more certain measures of the aggregate impact of California’s energy efficiency policies than is available through existing EM&V?**

D. Would the addition of a Macro Consumption Metric comparable to that suggested by Horowitz, or other approaches, provide evaluation results more quickly than existing EM&V?

4.3. EM&V Beyond California

A. Parties suggest California establish a working group of evaluation practitioners and users to explore best practices for California and facilitate increased collaboration.²² What form would this working group take?

WEM would welcome CPUC pulling the plug on funding for CALMAC — and converting that venue to a similar entity run by Energy Division. It should be open to all parties — not just “practitioners and users.” It should NOT be a utility-picked group.

a. What should be the responsibilities of such a group?

Similar to CALMAC, including presenting, discussing and posting evaluations.

b. Who should lead the effort?

Energy Div.

c. What would be the group’s relationship with the Commission?

d. How should the Commission use the group’s recommendations?

Advisory and supplemental to independent evaluators – not substantive.

4.5. Market Transformation

See introductory comments above.

4.6. EM&V Needs and Activities of the CEC

A. D.08-07-047 sets interim energy efficiency savings goals for 2012 through 2020 for electricity and natural gas on a Total Market Gross (TMG) basis. The TMG goals encompass forecasted energy savings from a wide range of energy efficiency activities beyond investor-owned utility (IOU) programs. Can existing EM&V practices adequately determine the impact of energy efficiency initiatives beyond the Commission’s energy efficiency programs (i.e., compliance with codes and standards)? If not, should this capability be added and how?

EM&V *practices* would be useful to determine impacts — but obtaining the input data from a variety of sources would be a big challenge. Other EE efforts, e.g. CEC and municipal programs funded with federal stimulus money, and PACE programs, currently operate under different standards.

There is no system in most localities for determining compliance with CEC codes & standards, so there’s little data for EM&V contractors to review. They would have to develop original field data. They would also need to determine baselines.

We note that the federal ARRA measurement is overseen by an EM&V contractor who has been active in California. This party informed WEM that the federal standards are quite different. They are probably not compatible.

It would be useful to add this capability, although we believe there would be jurisdictional battles and a major issue would be who would fund the work.

Note - it would be essential to have this capability to have any hope of sorting out utility accomplishments from everyone else's work, if the Commission continues to provide shareholders incentives to utilities.

a. If the Commission's EM&V should measure energy efficiency initiatives beyond its own programs, how should such activities be coordinated with the CEC?

This would have to be discussed with CEC.

B. Parties note that EM&V impact evaluations, as well as other parts of the current EM&V framework need to provide support for long-term demand forecasts, such as those prepared by the CEC, and used in the Commission's long-term procurement planning. Should IOUs be directed, and funded through EM&V, to develop disaggregated demand forecasting models that more directly allow energy efficiency program impacts to be included in long-term forecast models?

Please see our introductory comments above.

a. Are there additional analytical efforts which could be undertaken to better support the integration of projected energy savings into California's demand forecasts?

Please see our introductory comments above.

Dated: July 16, 2010

Respectfully Submitted,

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CERTIFICATION OF SERVICE
R0911014

I, Barbara George, certify that on this day July 16, 2010 I caused copies of the attached WOMEN'S ENERGY MATTERS COMMENT ON COMMENT ON AC RULING RE EM&V REVIEW to be served on all parties by emailing a copy to all parties identified on the electronic service list provided by the California Public Utilities Commission for this proceeding and also by efileing to the CPUC Docket office, with a paper copy to Administrative Law Judge Darwin A. Farrar, and Presiding Commissioner Dian Grueneich.

Dated: July 16, 2010 at Fairfax, California.

/s/ Barbara George

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