

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

Order Instituting Rulemaking to Examine the
Commission's Energy Efficiency Risk/Reward Incentive
Mechanism

Rulemaking 09-01-019
(Filed January 29, 2009)

**COMMENTS OF THE NATURAL RESOURCES DEFENSE COUNCIL (NRDC) ON
PROPOSED SCENARIOS TO BE CONSIDERED**

April 20, 2010

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1. Introduction and Summary

The Natural Resources Defense Council (NRDC) respectfully submits these comments on Proposed Scenarios to be considered as requested by Assigned Commissioner Bohn's Ruling Dated April 8, 2010. NRDC is a non-profit membership organization with a long-standing interest in minimizing the societal costs of the reliable energy services that a healthy California economy needs. NRDC has more than 250,000 California members and activists with interest in receiving affordable energy services and reducing the environmental impact of California's energy consumption.

In these comments we outline six alternative policy assumptions that we recommend be applied to the Draft Verification Report energy efficiency savings estimates. We have crafted these alternative assumptions in order to produce savings estimates that will provide a more reasoned basis upon which to assess the performance of the utilities' energy efficiency portfolios.

We also encourage the Commission to spend the time necessary to understand and assess the completed evaluation reports and proposed parameter estimates and their implications for energy efficiency programs in California going forward. Many of the evaluation reports result in dramatic reductions to the estimated gross and net impacts of installed energy efficiency measures. If the new estimates are taken at face value they will result in substantial reductions in the estimates of efficiency savings and in the cost effectiveness of many, if not most, current and future measures and programs. While the instant proceeding concerns only the earnings associated with past programs, the

implications of these new estimates will inevitably have much broader effects that the Commission should consider carefully.

Therefore, while we provide these comments in hopes of assisting the Commission in producing a set of scenarios that will result in an appropriate level of RRIM earnings for the 2006-08 programs we also urge the Commission to use this process to produce a durable and reasonable estimate of program impacts.

2. NRDC Recommends the Commission adopt the proposed alternative policy assumptions to updated results before inclusion in the final report

As requested in the ACR, we propose the following six alternative policy assumptions for use in ERT scenario runs. We selected these six because we believe they address parameter estimates included in the Draft Evaluation Report that either do not further the Commission's goals of estimating the effectiveness of the efficiency programs, cannot be reasonably updated during the program cycle, or have not been completed with enough certainty to merit update. In order to fully evaluate the impact of these alternative policy assumptions, it would be most useful to have a individual scenario run for each alternative assumption and a separate scenario run with all six alternative assumptions.

A. Exclude updates to net-to-gross ratios

Estimates of net-to-gross (NTG) ratios are inherently subjective and difficult to substantiate. NTG analysis is particularly difficult without significant pre-implementation data collection, as occurred for the 2006-08 programs. In any case, changes to NTG ratios do not imply a change in the actual efficiency savings achieved. Accordingly, we propose that an alternative policy assumption to include in the ERT scenario runs is the use of ex ante NTG values.

B. Exclude estimated useful life updates

Commission policy prior to D.08-01-042 was to not update expected useful life (EUL) estimates during the program cycle for incentive mechanism calculations. This was generally justified based on the limited influence of program administrators on long term measure retention. In addition, measurement of EUL estimates generally require longitudinal studies that track efficiency measure retention over time. Update of EUL

estimates in the absence of such studies imposes undue uncertainty and risk on estimates of program performance. Therefore, we propose that an alternative policy assumption to include in the ERT scenario runs is the use of ex ante EUL values.

C. Exclude updates to interactive effects unless included in goals

The potential studies underlying the 2006-08 goals included positive interactive effects in commercial buildings, but did not include commercial negative effects or residential positive or negative effects. We do not believe it is appropriate to measure program impacts using a different yardstick than the yardstick used to establish the program goals. Therefore, we propose that an alternative policy assumption to include in the ERT scenario runs is the inclusion of positive commercial interactive effects to match the assumptions used in establishment of the program goals.

D. Exclude updates where no study was new completed

There are a number of parameter values that were updated in DEER without the benefit of a completed study. The retroactive application of ad hoc updates to parameter values in the absence of completed studies imposes undue risk and uncertainty on program impact estimates. Therefore, we propose that an alternative policy assumption to include in the ERT scenario runs is the use of ex ante values for parameters where there are no completed evaluation study results. Based on the results reported in the Draft Evaluation Report, this alternative policy assumption would appear to primarily affect the EUL values used in the analysis, a majority of which were revised on some basis other than completed evaluation studies.

E. Exclude updates where the ninety percent confidence interval includes the ex ante estimate

A number of studies were completed using relatively small sample sizes or using sampling data that was collected for a different planned study methodology. As a result, in many cases the final studies resulted in uncertain estimates with extremely wide confidence intervals. In some cases, the parameter estimate from the evaluation study was quite different from the ex ante value, but the ex ante value was within the ninety percent confidence interval of the impact estimate.

For example, a study may result in an estimate of average measure savings of 500 kWh/yr with a 90% confidence interval of +/- 400 kWh/yr. This means that, given the

limited sample size and the variability in the participant population, there is a 90% probability that the actual savings is somewhere between 100 kWh/yr and 900 kWh/yr. If the ex ante estimate was 650 kWh/yr, then it is within the confidence interval and cannot be rejected as a less accurate estimate of the savings than the estimate resulting from the study.

We recognize that impact evaluation is difficult and evaluators often must make do with suboptimal data. However, a wide confidence interval is, by definition, indicative of a low level of confidence in the estimated value. Adoption of large changes to parameter estimates in the face of such uncertainty is imprudent and statistically unwarranted.¹ Therefore, we propose that an alternative policy assumption to include in the ERT scenario runs is the use of ex ante values where the ex ante value lies within the ninety percent confidence interval of the estimated parameter value from the evaluation study.

F. NRDC Recommends the Commission assess the Final Upstream Lighting Evaluation Report

As part of the process to determine RRIM earnings, NRDC recommends that the Commission take a close look at the final upstream lighting evaluation report. As the Commission is well aware, this program constitutes a particularly large fraction of total portfolio impacts and therefore is of particular importance. We believe there are significant issues with the evaluation of this program that call into question the impact estimates used in the Draft Evaluation Report.

We will elaborate on our concerns in our forthcoming comments on the Verification Report. However, in the meantime, given the magnitude of this program, we recommend that an alternative policy assumption to include in the ERT scenario runs is use of the ex ante estimates for the upstream lighting program. This proposal should not be taken as evidence that we believe that the ex ante estimates are accurate. Instead, inclusion of this assumption would provide an estimate of the impact of the results of the evaluation study and the importance of a closer look at that study's methodology and results.

¹ Bayesian analysis is used to provide a quantitative evaluation of the relative validity of study results to prior estimates.

3. Conclusion

NRDC appreciates the opportunity to provide these comments and to offer our recommendations for alternative policy assumptions for ERT scenario runs. We look forward to working with Commission staff and other stakeholders to address the important issues raised in this proceeding over the coming months.

Dated: April 20, 2010

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Noah Long". The signature is written in a cursive, flowing style.

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CERTIFICATE OF SERVICE

I hereby certify that I have this day served a copy of the “**COMMENTS OF THE NATURAL RESOURCES DEFENSE COUNCIL (NRDC) ON PROPOSED SCENARIOS TO BE CONSIDERED**” to all known parties of record in proceeding R.09-01-019 by delivering a copy via email or by mailing a copy properly addressed with first class postage prepaid.

Executed on April 20, 2010 at San Francisco, California.



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