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)

DIVISION OF RATEPAYER ADVOCATES' REPLY COMMENTS IN RESPONSE TO THE ASSIGNED COMMISSIONER'S RULING POSING QUESTIONS IN RESPONSE TO PARTIES' COMMENTS

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I. INTRODUCTION

The Division of Ratepayer Advocates (DRA) submits the following reply comments in response to the "Assigned Commissioner's Ruling" (ACR) issued July 2, 2010. The ACR summarized parties' responses to an earlier May 21, 2010 ACR and asked follow-up questions based on parties' input. It provided parties the opportunity to comment in response to questions by July 16, 2010 and to file reply comments on July 23, 2010. In these reply comments, DRA makes the following recommendations:

- The Commission should support the success of Market Transformation (MT) by ensuring the development of the correct measurement tools and framework.
- Macro Consumption Metrics (MCM) would provide an important indicator for measuring EE program success.
- MCM would provide important information in measuring progress toward greenhouse gas (GHG) reduction goals.
- The Commission should use the structure of the Demand Forecast Energy Efficiency Quantification Project (DFEEQP)

working group as the basis for the EM&V Best Practices working group and pursue continued collaboration with the CEC.

II. DISCUSSION

A. The Commission should support the success of Market Transformation (MT) by ensuring the development of the correct measurement tools and framework

PG&E's response to furthering MT objectives is that it is unnecessary because "[t]he Strategic Plan is akin to a roadmap to Market Transformation."[1] However, the Strategic Plan describes a high-level vision for MT, but does not include the criteria to achieve that vision. The Northwest Energy Efficiency Alliance (NEEA), for instance, formulates a Strategic Plan of its ultimate goals, but also articulates a Business Plan for advancing progress toward those goals for each funding cycle.[2] A comparable Business Plan for the California energy efficiency programs (covering both programs managed by the Utilities[3] and an MT entity) would provide a useful interim planning tool prior to development of portfolios and program implementation plans.

The Business Plan will be used to formulate logic model hypotheses in order to ensure progress toward the Commission's long-term EE goals. These logic models should be designed first as the basis for each portfolio program/strategy. The models will illustrate how each EE program or strategy removes market barriers, justifying ratepayer subsidy of the program or strategy. Having a Business Plan and logic models for portfolio planning will be more effective than planning without such guidance. This advance planning may also result in a streamlined and phased approval process for the Utilities' EE portfolios so that key milestones can be evaluated and adjusted along the

[1] Comments of Pacific Gas and Electric Company (PG&E) to ACR, filed July 16, 2010 (PG&E Comments), p. 3.

[2] See DRA's Comments in Response to the Assigned Commissioner's Ruling Posing Questions in Response to Parties' Comments, filed July 16, 2010 (DRA Comments) which provided links to NEEA's Strategic Plan and its Business Plan.

[3] DRA refers collectively in these reply comments to Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), San Diego Gas & Electric Company (SDG&E), and Southern California Gas Company (SoCalGas) as "Utilities."

way. Such planning will help avoid procedural delays that result when the Commission and parties only are able to review the Utilities' time-intensive applications after they are submitted. A phased approach will use the timeline more effectively, be more likely to avoid numerous revisions and achieve an on-time start date.

SCE proposes new language for the market assessment objective, which is ambiguous and overly broad. For example, it uses the term "market transformation" to define "progress toward market transformation."[4] As DRA clarified in its opening comments,[5] it is less important to broadly define what MT means,[6] then to clearly define the actual MT criteria needed to determine whether or not measures or strategies require ratepayer subsidies. DRA assumes that a combination of market assessment and logic model hypotheses, such as those NEEA uses, will aid in clearly defining when the Tipping Point has occurred and ratepayer subsidies for a measure or strategy are no longer necessary or helpful.

In contrast, SDG&E and SoCalGas describe a scenario in which subsidies continue until the California Energy Commission (CEC) has incorporated a measure/practice into Codes and Standards (C&S), in order to prevent consumers and market actors from reverting to their previous inefficient ways. DRA asserts that a ratepayer funded program strategy continued for years without an end in sight should be viewed as a failure. Successful and effective MT strategies would reach the Tipping Point as quickly as possible, allowing the market to take over on a clear timeline with key milestones, and actively striving to reach that goal.

SDG&E and SoCalGas note that "what may be 'transformed' in one market may not be in another."[7] NRDC appropriately observed that market assessment should occur

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[4] SCE Comments to ACR, Phase II, filed July 16, 2010 (SCE Comments), pp. 5-6.

[5] DRA Comments, p. 3.

[6] DRA believes that Market Transformation has already been broadly and sufficiently defined in the vision of California's Long-term Energy Efficiency Strategic Plan, Section I – Pages 4-5. http://www.californiaenergyefficiency.com/docs/EEStrategicPlan.pdf

[7] Comments of SDG&E and SoCalGas on ACR regarding EM&V, filed July 16, 2010 (SDG&E/SoCalGas Comments), p. 1.

at the level of end-use technology,[8] not at the program level.[9] DRA explained in its opening comments that the unit to be measured should be clearly and discretely defined.[10] Therefore, the Commission should distinguish market sectors vs. a "market" for a given measure/technology. In this regard, DRA concurs with TURN that "no one single set of MT metrics applies to all programs."[11] Accordingly, DRA believes that SDG&E's and SoCalGas's concern is unfounded that different sectors of the market may progress at different rates, since the logic model hypothesis is designed to address market barriers and would take this into account.

Because the logic model for each program/strategy should be designed to eliminate market barriers, DRA disagrees with NRDC's conclusion that "one way to measure Market Transformation is by the absence of energy savings for further efficiency program as identified by energy efficiency potential studies."[12] First, using potential studies as the only basis for designing EE programs has been historically limiting because they fail to capture new ideas and technologies. Second, ratepayers should not subsidize measures and programs until every last bit of potential is attained, but instead only until the market achieves sufficient momentum so that further energy savings will occur without continued ratepayer subsidies. The market will ultimately address the remaining potential once barriers are sufficiently removed. Continuing ratepayer subsidies beyond the Tipping Point would have EE programs competing with the marketplace, and might be counter-productive (*e.g.*, by encouraging artificially low prices that are unsustainable).

[8] However, as DRA cautioned in its opening comments, EE strategies should not view "the next generation of efficient product or practice" simply as subsidizing the same technology which may have a higher level of efficiency, such as "super" CFLs. In this case, it is likely that barriers for CFLs have already been removed.

[9] Comments of Natural Resources Defense Council (NRDC) to ACR related to Post-2012 EM&V, filed July 16, 2010 (NRDC Comments), p. 3.

[10] DRA Comments, p. 22.

[11] Comments of The Utility Reform Network (TURN) to ACR, filed July 16, 2010 (TURN Comments), p. 8.

[12] NRDC Comments, p. 4.

Going forward, the Utilities should not remain in the CFL or appliance recycling business. Instead, EE programs should remove market barriers and then move on to new technologies and strategies that leverage ratepayer subsidies to increase EE savings.

SDG&E and SoCalGas comment in response to a NEEA performance report that "[t]hese types of goals and metrics are not new to California as such endeavors were undertaken in 1998 through 2000."[13] This statement misses the point. While such data collection may not be new, the Utilities are not utilizing market assessment data in devising and implementing an appropriate MT strategy. Optimal funding for energy efficiency programs should develop appropriate logic model hypotheses based on market assessments that target market barriers, design programs targeted only to those who would not otherwise take action, formulate collaborative strategies appropriately along the Diffusion Curve, define an exit strategy for programs, and then move on to eliminate successive market barriers.

The Utilities' comments in this proceeding and Rulemaking (R.) 10-05-006 (the 2010 long-term procurement planning proceeding), claim to support the Commission's big, bold energy efficiency strategies (BBEES), but in practice the Utilities EE portfolios largely result in short-term energy savings.

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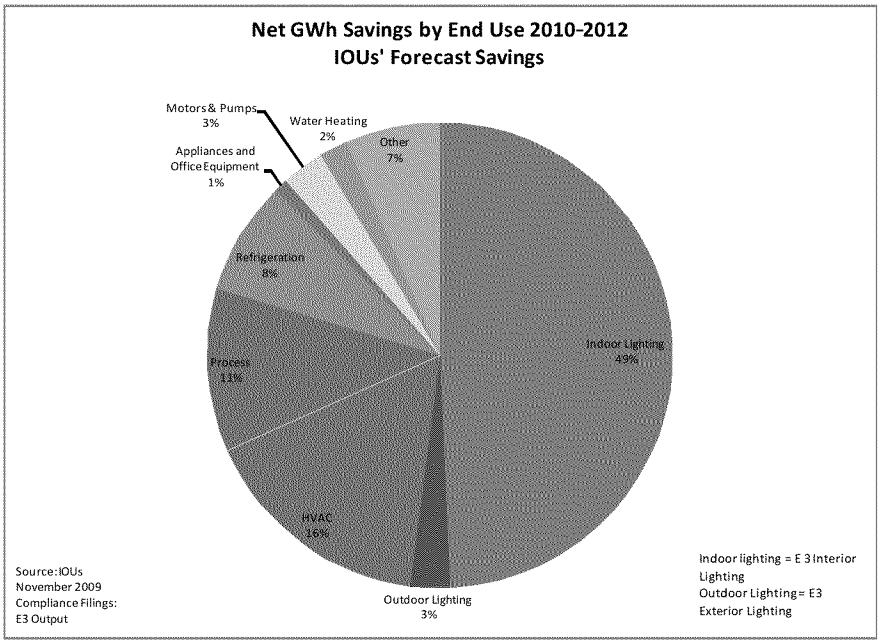
[13] SDG&E/SoCalGas Comments, p. 8.

The pie chart below shows that lighting is projected to be 51% of 2010-12 Utility portfolio EE savings as compared with 58% in 2006-08.[14]



As DRA pointed out in its opening comments, the Utilities' EE strategies for their 2006-09 programs yielded quickly decaying EE savings resulting in sharply declining committed EE savings beyond 2012. The pie chart above illustrates that this scenario will likely be repeated for the 2012 LTPP.

While NEEA's MT model is an appropriate starting point, California is unique and the Commission should supplement that model with other relevant measurement strategies.[15] For example, DRA supports many of the CEC's recommendations summarized in its July 16, 2010 letter to the CPUC on this issue:

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[14] TURN's analysis of 2010-12 EE portfolios illustrates the concern that short-term energy savings strategies are already a disproportionate component of 2010-12 portfolios. Once fund-shifting begins, this percentage could increase. As a result the 2012 LTPP process is likely to again see the quick decay of EE savings.

[15] Efforts to upgrade the EM&V framework should also be coordinated with efforts in the Smart Grid proceeding to identify metrics in order to streamline resources and costs and prevent duplication. As noted in the Smart Grid proceeding: "To the extent practicable, this new list of metrics should make use of existing metrics, including those related to energy efficiency and demand response, in an effort to

- EM&V efforts must move beyond counting widgets;[16]
- The CPUC EM&V process should emphasize expansion of existing appliance and equipment saturation studies;[17]
- The EM&V framework should be grounded in an overarching effort to understand the effects of multiple influences on energy demand;[18]
- The EM&V process should include a study to construct the historical record of EE accomplishments to improve EE forecasting;[19] and
- EM&V should measure decay and understand its impact on cumulative savings goals. Such study will help both EE portfolio design and the LTPP process, and provide a more clear understanding of whether or not the Utilities actually view EE as on an equal footing with supply side resources.[20]

B. Macro Consumption Metrics (MCM)

1. Macro Consumption Metrics will provide an important means of measuring EE program success.

DRA agrees with TURN that "[t]he role of current energy and demand savings metrics is dictated by the IOUs' continued reliance on short-term savings and widget-dominant EE portfolios, which neglects deep-rooted savings from BBEES and Market Transformation achievements."[21] Consequently, DRA echoes TURN's concern that an

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reduce the burden upon staff and participants." Footnote: "For example, D.09-09-047 lists Market Assessments as a primary objective of the Commission's energy efficiency evaluation efforts and D.10-04-029 orders ED staff to develop metrics to measure the impact of the Commission's energy efficiency efforts on electric appliance and energy service markets. Once developed these metrics may also benefit the Commission's evaluation of Smart Grid impact and should be considered through the Smart Grid metrics workshop," D.10-06-047, p. 85.

[16] Letter from Robert Weisenmiller and Jeffrey D. Byron of the CEC to Commissioner Dian Grueneich, July 16, 2010 (CEC Letter), p. 6.

[17] Id., p. 6.

[18] Id.

[19] Id., pp. 6-7.

[20] Id., p. 7.

[21] TURN Comments, p. 3.

MCM focus on relative changes in demand, rather than absolute changes, would produce a misleading portrait of true results.

As TURN notes, ascribing the potential to "an upper bound on the effect of EE policies" will "most likely overstate[] the impact of EE."[22] This has the potential to inflate the energy savings potential and to establish a controversial model for measuring program success. Accordingly, DRA supports the CEC's recommendation that EM&V funding be used to undertake an MCM pilot study that should "become a joint effort between Energy Commission and CPUC/ED [Energy Division] staff."[23]

2. MCM will provide important information in measuring progress toward greenhouse gas (GHG) reduction goals.

DRA agrees that MCM is an important and valid methodology for tracking progress in reducing GHG emissions.[24] NRDC explains that because

> AB 32 establishes a limit on total emissions, progress towards meeting that limit must also be measured in terms of the state's absolute emissions. Since Macro Consumption Metrics provide insight into trends in metrics like total consumption they can contribute to the state's understanding of its overall progress toward the GHG emissions limit.[25]

SDG&E and SoCalGas point out that MCM can help address the potential for double counting that might otherwise occur.[26] Overall, it appears that most parties agree that NRDC's proposal to use MCM for measuring progress in GHG emission reductions and SCE's proposal to convert existing energy savings to GHG emissions reductions answer two different questions, and that each is necessary for evaluating progress

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[22] TURN Comments, p. 5.

[23] CEC Letter, p. 3.

[24] SDG&E/SoCalGas Comments, p. 3.

[25] NRDC Comments, p. 5.

[26] SDG&E/SoCalGas Comments, p. 3. As SDG&E and SoCalGas point out, a customer could participate in an EE program resulting in saved GHG and that credit for the same GHG savings might be claimed by the manufacturer, the EE program administrator, and the Air Pollution Control district.

towards GHG reduction.[27] While DRA agrees that both methodologies may be useful in providing a big picture view of GHG reductions, DRA agrees with TURN that the most important perspective regarding measurement of GHG reduction is absolute reduction as measured by MCM.[28]

C. The Commission should use the structure of the Demand Forecast Energy Efficiency Quantification Project (DFEEQP) working group as the basis for the EM&V Best Practices working group and pursue continued collaboration with the CEC

Consistent with the CEC staff's responsibility for integrated planning and Energy Division's (ED) responsibility to manage EM&V, DRA supports TURN's recommendation that a new EM&V working group should evolve out of the existing structure of the DFEEQP[29] working group, with co-management responsibilities by CEC and ED staff. The CEC likewise echoes TURN in stating "we urge that this group or some equivalent be preserved as a forum for pursuing the topics we have identified herein."[30]

An ongoing forum for communication and coordination on a variety of overarching EM&V issues across the CPUC and CEC would be productive. DRA agrees this is essential to ensure that the "joint effort would result in both Commissions using the same metric/tool once it has been developed, further increasing the consistency between Energy Commission and CPUC proceedings."[31] This revised working group could also be an ongoing forum for reviewing evolving "best practice" EM&V methodologies. For instance, in regard to MCM and demand-side impacts, the CEC

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[27] SDG&E/SoCalGas Comments, p. 3; PG&E Comments, pp. 4-5; SCE Comments, p. 8; NRDC Comments, p. 5.

[28] TURN Comments, p. 5.

[29] The DFEEQP was established in response to issues raised in D.07-12-052 and tasked with determining a consistent approach to demand forecasting and quantification of energy efficiency programs. The DFEEQP convened regular meetings with stakeholders including Energy Division, the Utilities, TURN, DRA, and CARB.

[30] CEC Letter, p. 8.

[31] Id., p. 4.

noted in its letter that it "had planned on developing such metrics during 2010-2011."[32] In order to focus and optimize output from this working group, DRA supports NRDC's recommendation that the group have "clear objectives, a clear process for meeting and follow-up to action items, and committed participation from energy agency representatives."[33] Given the parties' desire to build a record for EM&V post-2012, DRA further agrees with NRDC that this forum should be used to bring together energy and evaluation experts from California and beyond.[34]

However, DRA does not agree with the Utilities who appear to want to relitigate the Commission's decision on management of EM&V. SCE states that "[i]n order to allow comparison between current California practices and general practice in the rest of the nation, the Commission should ask another threshold question: what organization manages the EM&V studies for energy efficiency programs, and why?"[35] SCE recommends that the Commission "contract with (or order the utilities to contract on its behalf with) a neutral organization that is not generally a party in CPUC proceedings."[36] SDG&E and SoCalGas state "[t]he primary function of the committee would be to develop and [e]valuate EM&V studies using peer-review methods from start to finish."[37]

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[32] CEC Letter, p. 3.

[33] NRDC Comments, p. 6.

[34] NRDC Comments, p. 6.

[35] SCE Comments, p. 12. In this section, SCE also asserts "[g]iven that the earnings mechanism will no longer be linked to ex post results, it is now appropriate for the utilities to take back primary responsibility for managing EM&V studies." The Commission has determined that it will use ex ante values for planning and reporting accomplishments for 2010-2012 energy efficiency programs, that will be frozen based on the best available data at the time 2010-2012 program activity starts (D.09-09-047, Ordering Paragraph 28, at p, 390). It is still important, however, to measure EE program accomplishments accurately and without bias for purposes of planning for the next cycle and for long-term procurement planning. The neutral management of the EM&V process is essential to prevent conflicts of interest by having implementers responsible for evaluating their own work, as determined in D.05-01-055 and reaffirmed in D.09-09-047 and D.10-04-029.

[36] SCE Comments, p. 17.

[37] SDG&E/SoCalGas Comments, p. 5.

PG&E asserts that "[t]he Commission should look to this advisory group as though it were an independent expert evaluation consultant."[38]

The Commission already has an independent manager of EM&V issues that hires expert evaluation consultants: the Energy Division. The Utilities are yet again pressing for peer review and "blue ribbon"-type panels that would be redundant to ED's management of EM&V. They persist in undermining ED's neutral, financially disinterested role in managing the EM&V process. This issue was addressed in D.10-04-029 when the Commission reaffirmed and strengthened ED's oversight role, and again should be rejected as outside the scope of this proceeding. Moreover, the DFEEQP process has demonstrated success and has the added benefit of keeping communication open between the CEC and CPUC, the two groups responsible for management of integrated planning (CEC staff) and EE EM&V (ED).

Question 4.3 in the ACR asks parties to discuss what form a working group should take related to exploring "best practices." The Utilities' recommendation for an unwieldy advisory group structure would result in a process that is more complicated and onerous than is needed for a group of stakeholders tasked with addressing best practice issues.

While DRA believes that a working group could be a forum to vet a range of overarching EM&V issues, DRA takes issue with one of NRDC's recommendations. NRDC advocates for improvement of EM&V activities that support the demand forecast process, claiming that "attribution studies in California cause systematic underestimations of savings and could likely lead to under-investment in energy efficiency."[39] However, DRA believes that the CEC is correct in pointing out that "it is likely to be impossible to study the impacts of energy efficiency in isolation from the numerous other forces influencing energy consumption."[40] A new EM&V framework should not approach evaluation of programs and market assessment as if the IOU EE programs were "the only

[38] PG&E Comments, p. 8.

[39] NRDC Comments, p. 7.

[40] CEC Letter, p. 6.

game in town." Because of the cacophony of "green" influences in the marketplace, it would be nearly impossible to attribute an appropriate proportion of spillover market effects to the IOUs, and would also be inordinately expensive and contentious.

III. CONCLUSION

DRA urges the Commission to maintain its bold vision for achieving long-term energy savings through the BBEES and MT and to continue advancing the implementation of MT criteria, process, and metrics. It will be a lost opportunity if by 2013 the Commission still does not have a framework for measuring accountability for MT objectives, five years after approval of the Strategic Plan. A key component of realizing the Commission's big bold vision for energy efficiency is providing the tools to measure its achievements.

Yet, as described in DRA's opening comments, the IOUs have demonstrated their reluctance to embrace the BBEES as real or possible. Therefore, the Commission should update the EE framework to reflect its vision and delegate tasks to the appropriate market actors with the best core competencies. The Commission should send a strong signal that it does not intend to be sidetracked by delays[41] in updating the EM&V framework. Accordingly, DRA recommends that:

- The CPUC hire a consultant to prepare a detailed recommendation articulating MT planning criteria and evaluation methodology (using NEEA approach as a foundation as described in DRA's opening and reply comments) to be presented to parties and for public comment, in order to continue building the record and implement MT in time to inform development of 2013-15 EE programs;
- The CPUC/CEC jointly manage a MCM pilot program; and

[41] This is particularly important given the delays in the 2010-12 portfolios, which took nearly 3 years of planning, necessitated a year of bridge funding, and involved 3 separate application filings and numerous compliance filings post-decision (D.09-09-047).

- The CPUC/CEC use the structure of the DFEEQP working group as the basis for a jointly managed and ongoing forum for EM&V best practices to consistently measure EE program successes and provide data and accountability in a number of forums.

Respectfully submitted,

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CERTIFICATE OF SERVICE

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[X] **E-Mail Service:** sending the entire document as an attachment to all known parties of record who provided electronic mail addresses.

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Executed on **July 23, 2010** at San Francisco, California

/s/ Charlene D. Lundy
Charlene D. Lundy