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Comments on the California Public Utilities Commission's 2013-2014 Evaluation, Measurement & Verification Plan

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### Publication Date

2012-12-19

## **Comments on 2013-2014 EM&V Plan Draft 12-4-12**

From Carol Zabin, UC Berkeley Donald Vial Center

*Submitted December 19, 2012*

Thank you for the opportunity to present comments on the research roadmap. We would like to make several recommendations on the plan, which neglects two areas of research that were addressed in the Guidance Decision and the Approval Decision. These are:

- Research on the costs and benefits of contractor qualification and worker skill standards; and
- Research on the labor market characteristics and business environment of contractors participating in IOU resource programs, including wages, working conditions (including health and safety conditions), employee turnover rates and other factors.

These two areas of research are of critical importance as the Commission investigates redesign of energy efficiency programs both for supporting high quality work in the performance contractors and workers to design energy efficiency programs that support high quality work in the installation and maintenance of energy efficient equipment in homes, buildings, industry and agriculture.

### Costs and Benefits of Standards

One of the key recommendations of the 2011 California Workforce Education and Training Needs Assessment was that all IOU resource programs should require minimum qualifications for contractors and minimum skill standards for workers/technicians.<sup>1</sup>

The May 2012 Guidance Decision recognized the significance of this recommendation and its potential to change the way IOU resource programs are designed and implemented. However, it opted to delay consideration of mandating standards citing the lack of sufficient evidence to date to assess both the costs and benefits of standards to warrant their mandate at this time. The Decision states:

“We acknowledge the potential need to mandate skill standards and certifications for specific energy efficiency measures or services offered through utility programs. However, at this time we find that there is insufficient evidence to make this determination at this time. While high-level market research cited in the Strategic Plan and the Needs Assessment indicates significant savings potential from quality installation, additional comparative information on the specific effects of increasing standards for energy efficiency programs should be gathered and assessed before adopting these recommendations on a broad scale. Specifically, questions remain regarding the potential impacts on customer costs and benefits of requiring high-road skill standards, and the potential impacts on program participation rates as a result of costs, benefits, or other factors. There is also a lack of information on how such impacts compare with the potential benefits of increased energy savings, lower costs over the lifecycle of the equipment, and the creation of higher quality jobs. Therefore, we direct the utilities to include in their applications the following information regarding HVAC quality installation, CALCTP-certified installations, and any other sector strategy-induced skill standards identified by them: (1) data or estimation of the incremental customer cost, if any, of requiring skill standards; (2) data or estimation of the average and range of permitting/compliance costs across permitting jurisdictions in the IOUs' service territories; (3) data or estimation of impacts, if any, mandatory skill standards would have on program participation rates; (4) data or estimates of the incremental energy savings and customer cost savings over the life of the equipment; and (5) any other potential

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<sup>1</sup> Zabin et al, 2011 p. 292 [http://www.irle.berkeley.edu/vial/publications/WET\\_Part2.pdf](http://www.irle.berkeley.edu/vial/publications/WET_Part2.pdf)

benefits associated with higher standards, such as fewer call-backs, lower frequency of customers over-riding control systems, lower life-cycle costs, and increased consumer uptake of measures based on higher quality and certainty.”<sup>2</sup>

While the IOUs and stakeholders provided some data on the costs and benefits of standards in response to the Guidance Decision, most of the data was anecdotal and a robust research agenda is still needed in this area.

The current research roadmap does address this issue partially, and we are pleased to see that these issues are included for the first time. The Lighting Roadmap proposes a future study of the impact of CALCTP certified technicians once there is an incentive program in place. In comments on the October Draft Lighting Roadmap and in comments in the EE proceeding at large, the California Construction Industry Labor Management Cooperation Trust suggested that a retrospective study could immediately be carried out.<sup>3</sup> The WE&T roadmap makes progress in this area by focusing the impact evaluation on behavior change of contractors and workers who participate in training, and addressing some certification issues in the residential market study. The HVAC roadmap includes an HVAC Contractor & Technician Behavior Study (Phase II) that addresses certification issues, as well.

While acknowledging the progress in addressing these key workforce issues, we believe that decision-making about standards will require more comprehensive and robust research on the costs and benefits of contractor qualifications and worker skill standards. We are not able to fully develop a research agenda in these comments, but it should explore methodologies and data collection alternatives, as well as review the literature of research in the building and construction industry on standards such as prevailing wages and project labor agreements. It should look at the costs and benefits of standards in multiple sectors (residential, commercial etc.), in both blue collar and professional occupations, and for both contractors and workers. Part of this research could be accomplished using surveys of contractors that analyze the relationship between types of contractors. This could be measured by the skill and experience level of their workers, whether or not contractors participate in state certified apprenticeship programs, whether or not they are required to pay prevailing wage, etc., and energy efficiency outcomes, measured by inspection failure rate or other data that captures work quality. As a starting point, the EM&V roadmap should include a scoping study of what data and methodologies are available to analyze the impact of contractor and worker standards on energy savings.

#### Data and Analysis of labor market conditions, job characteristics, and contractor and worker characteristics

The Nov. 15<sup>th</sup> Decision Approving the 2013-2014 Energy Efficiency Programs and Budgets includes an order that the IOUs collect data on contractors, jobs, and workforce using the data collection protocols outlined in the ESAP Decision 12-08-0444.<sup>4</sup> The reason for this data collection, as expressed by the

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<sup>2</sup> Decision 12-05-015 May 10, 2012; Section 13.2.4 Skill Standards and Certifications.  
[http://docs.cpuc.ca.gov/PUBLISHED/FINAL\\_DECISION/166830-12.htm#P2072\\_473221](http://docs.cpuc.ca.gov/PUBLISHED/FINAL_DECISION/166830-12.htm#P2072_473221) 1

<sup>3</sup> Comment on the Energy Division’s proposed EM&V Lighting Roadmap. From Elizabeth Klebaner on behalf of the California Construction Industry Labor Management Cooperation Trust, 10/17/2012.

<sup>4</sup> Decision 12-08-044, p. 181. These data collection requirements include:

- (a) Contractor and subcontractor contract terms (competitive bid, direct award, etc.);
- (b) Contractor and subcontractor compensation schemes (hourly, piecemeal, salaried, etc.);
- (c) Number of inspection failures and the types of failures (including the number of enrolled customers later deemed ineligible, number of incorrectly assessed households and instances of measure installation inspection

stakeholders who requested it, is to assess the equity impacts of ratepayer investments – i.e. are the jobs generated by ratepayer investment good jobs; and who gets the jobs.

We also believe that this data is essential for understanding the impact of labor market conditions on the performance of contractors and ultimately on energy savings. It will be useful for evaluating the effectiveness of training investments, the costs and benefits of standards, the interrelationship between job quality and work quality/energy performance, and other key issues.

The EM&V research roadmap should include research on how to collect this data in a cost-effective and efficient matter, and how to use this data to answer the equity questions that are of concern.

### Conclusion

The research roadmap makes significant progress in beginning to address the workforce issues that were highlighted in the Needs Assessment and that are essential for consideration of alternative approaches to workforce issues, including but not limited to training strategies. However, we urge the Energy Division and the IOUs to develop a comprehensive research agenda on jobs and workforce issues. These comments scratch the surface of what is needed. We suggest that the EM&V teams reach out to workforce development experts in academia and in the evaluation community to help the CPUC and IOUs develop the roadmap and to carry out the research.

Thank you for consideration of these comments.

Respectfully submitted,  
Carol Zabin, Co-Chair  
UC Berkeley Donald Vial Center

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failures);

(d) Level and type of Utilities' training (including lead safety training) and screening (including background check) these specific contractors have completed;

(e) Customer feedback for these contractors, positive and negative;

(f) Demographic data of the current Energy Savings Assistance Program workforce, including minority, local, low income, disabled, displaced, and other disadvantaged communities.