

Coalition for Energy Efficiency Meeting Discussion Topic Proposal on Workforce Standards

Date: July 13, 2016

To: Energy Efficiency Coordinating Committee

From: Energy Efficiency Coalition

Key Elements/Summary

PA business plans should include clear and detailed descriptions of how PA incentive programs will ensure energy efficiency measures are installed by a skilled and trained workforce in order to increase energy savings by reducing lost or forgone energy savings. This should be done to address poor-quality workmanship and to ensure engagement of a higher skilled and more effective workforce. PA business plans should also address how skilled and trained workforce requirements would be consistent with prior Commission rulings (Long-Term Energy Efficiency Strategic Plan, D.12-11-015, D.14-10-046).

The University of California, Berkeley, Donald Vial Center for Employment in the Green Economy (UCB-DVC) report, *“Workforce Issues and Energy Efficiency Programs: A Plan for California’s Utilities”* sets forth several recommended pathways for addressing this workforce quality issue. This IOU-funded report should be used as the template for the PA business plan proposals on this subject.

In developing a comprehensive plan to address workforce issues in PA EE programs, this report included input, expertise, and opinions of the IOUs, firms implementing IOU programs, policy and subject matter experts, CPUC Energy Division staff, labor and contractor advocates, environmental organizations, low-income advocates and the consultant team. Its goals, which the Energy Efficiency Coalition shares, are to:

1. Realize the potential energy savings from EE programs through a highly skilled workforce
2. Include workers from disadvantaged communities

Problem Statement and Observations

The UCB-DVC Report identified several issues requiring PA action and program involvement:

1. Poorly executed work is resulting in lost energy savings.
2. Achieving the state’s ambitious energy conservation targets requires increasingly complex energy conservation measures.
3. PA programs have not set skill and performance standards for contractors, which are necessary to attract higher skilled contractors to participate in the EE programs.
4. Workers from minority, low-income, and disadvantaged communities need better access to career-track opportunities in energy efficiency, and defined pathways for advancement into higher skilled, higher wage jobs.
5. Work quality issues are inhibiting market transformation by perpetuating uncertain and often poor returns on investment for energy efficiency work.

The UCB-DVC report provided evidence that improper equipment installation in energy efficiency retrofits is the norm, not the exception. Work done improperly in PA programs is often attributed to workers having inadequate skills. At the same time, contractors who invest in a higher skilled workforce are not being cultivated or rewarded. The lost energy savings resulting from poor installation are locked in for the lifetime of the retrofitted equipment or system, which is often ten to fifteen years or more. This creates both short - and long - term lost opportunities for the EE programs. To date, PA EE programs have not included rigorous contractor or workforce standards. As a result, program evaluations have consistently found that actual savings are substantially below projected savings, resulting in a persistent and significant gap between reported and evaluated savings across the IOU EE portfolio. [UCB-DVC report, Appendix 2B (Evidence of Work Quality Affecting Energy Savings).]

While the PA EE programs have introduced some minimal requirements that are intended to promote better performance and improve program outcomes (e.g., contractor licensing requirements, customer information, and a small handful of programs with competency requirements), these measures are weak compared to the much more robust workforce and related standards found in many other sectors in the economy, including in segments of the building and construction industry, which is the main industry for energy efficiency investments. For example, the Public Contract Code requires design-build projects contracted by local-agencies to use a skilled and trained workforce.

The primary goal of PA EE programs is to save energy, but they also serve as a significant source of job generation in the state, and they inevitably affect not just the number of jobs but also the type of jobs that are created in energy efficiency work, including the skills and wages for workers hired by contractors, as well as who gets the jobs. Training programs alone – without standards - will not ensure that EE measures are installed by skilled workers nor will they ensure that disadvantaged workers receiving this training will be hired. Intervention on the demand side of the labor market is also needed to meet the Long-Term Energy Efficiency Strategic Plan (LTEE Strategic Plan) energy and equity goals. EE program design can raise the standards for EE work and provide better job opportunities for graduates of training programs targeted at disadvantaged workers by relying on the state-certified apprenticeship system and tying EE incentives to the employment of a skilled and trained workforce. The CPUC has acknowledged that training programs for disadvantaged workers are, on their own, not enough to achieve this goal, and recognized the importance of efforts to broaden access to jobs in the EE sector.

A requirement that PA business plans must address how incentives will ensure energy efficiency measures are installed by a skilled and diverse workforce is consistent with prior Commission rulings. In 2008, the Commission issued its Long Term EE Strategic Plan. The LTEE Strategic Plan requires that, by 2020, “California’s workforce is trained **and fully engaged** to provide the human capital necessary to achieve California’s economic energy efficiency and demand-side management potential.”

The Plan also includes a goal to “ensure that minority, low-income and disadvantaged communities fully participate in training and education programs at all levels of the demand-side management (DSM) and energy efficiency industry.”

Subsequent Commission directives have continued to call for PAs to address these issues. In 2012, the PAs were ordered in D.12-11-015, *Decision Approving 2013-2014 Energy Efficiency Programs and Budgets* to develop a comprehensive approach to increasing the demand for skilled workers through

skills standards and certification requirements for utility incentive programs. In D.14-10-046, *Decision Establishing Energy Efficiency Savings Goals and Approving 2015 Energy Efficiency Programs and Budgets*, the CPUC directed the IOUs to describe how they would incorporate the UCB-DVC Report recommendations for addressing these issues.

These directives cannot be met solely through workforce education and training. Incentive requirements must also be adopted to ensure engagement of a trained workforce. Without such requirements, incentive measures will continue to be installed by a workforce selected on the basis of low initial cost without regard for quality, performance, and energy saving effectiveness. Without such requirements ratepayer funds will continue to be spent on incentive measures while actual savings will remain substantially below projected savings, and real cost will be high. In their November 1st filings, PA Business Plans must concretely describe how they will achieve the Commission's clear directives.

Proposed Solution(s)

PA BUSINESS PLANS SHOULD ADDRESS THE FOLLOWING ISSUES, USING THE UCB-DVC REPORT AS A GUIDE FOR ADOPTING SPECIFIC PROGRAM REQUIREMENTS:

- **Incorporate contractor and workforce standards** into the program requirements for EE incentive programs to help ensure ratepayer-subsidized EE measures are properly installed, operated and maintained, and the energy savings potential from ratepayer subsidies is fully realized.
- **Expand Workforce Education and Training programs** to include greater alignment with, leveraging of, and support (including funding) for California's main training and education institutions, including community colleges, the state-certified apprenticeship system, colleges and universities (in addition to the IOU energy efficiency centers).
- **Create an inclusion program** to broaden opportunities for workers from minority, low-income and disadvantaged communities to enter rewarding careers related to EE and ensure that jobs generated by ratepayer investment provide living wages and defined pathways for advancement. This inclusion program should be tied to state-certified apprenticeship programs, which provide the structure and pathways for successful inclusion programs in the construction and utility industries.

Acknowledgement of legal, regulator, and high level operational constraints to the proposed solution(s)

No legal, policy or regulatory constraints identified.