

Southern California Edison
SCE EE Business Plan A.17-01-013

DATA REQUEST SET A.17-01-013-CEE-SCE-001

To: CEE
Prepared by:
Title:
Dated: 03/24/2017

Question 019:

On what basis does the 2018-2025 Energy Efficiency Rolling Portfolio Business Plan assume that increasing awareness of training opportunities would significantly reduce the number of HVAC and lighting system measures being installed by inadequately trained technicians? Please provide the documents, studies, data, reports or other evidence on which this assumption is based.

Response to Question 019:

Codes and Standards staff are in constant contact with builders and code enforcement officials. These groups have expressed the need for better understanding by the building industry regarding how their work affects the energy efficiency performance of a building. Multiple white papers published by a stakeholder insight group, the Compliance Improvement Advisory Group, advocate for training to improve the compliance process.[1]

To help rectify this issue, technician certification is required for permit closure by the Energy Code (Title 24, Part 6) in several key areas related to energy efficiency (EE). This includes closure of permits for advanced lighting controls and residential HVAC installations. These technician certifications include Home Energy Rating System (HERS) and Acceptance Test Technician for lighting controls. The statewide utilities support training leading to certification for both HERS and ATT-Lighting technicians as well as the voluntary IHACI North American Technician Excellence (NATE) HVAC training and certification program.

The Codes and Standards program conducts outreach to increase awareness of the value of compliance with California's energy standards and the availability of the many tools, training and resources offered by the statewide utilities to support improved compliance. This includes increasing awareness of training opportunities to attract technicians to these recognized certification programs as well as other EE and Energy Code related topics.

Awareness and understanding of standards are necessary for implementing standards-based work. A good example is HVAC Quality Installation / Quality Maintenance (QI/QM) measures. According to the California HVAC Contractor and Technician Behavior Study, Phase II [2], Quality contractors who successfully implement QI/QM are those who undertake and emphasize continuous training, invest in their staff, are open to feedback, and perform Quality Assurance / Quality Control (QA/QC) regularly. Best practices for delivering QI and QM involve continual learning and feedback. The HVAC QI/QM program's technical training provides this by

providing instruction on how to perform work to ACCA/ASHRAE standard.

[1] <http://www.caciag.com/Issues>

[2]

http://www.calmac.org/publications/HVAC_C%26T_Behavior_Phase2_FINAL_REPORT.pdf