

**DOCKETED**

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<b>Filer:</b>	Cori Jackson
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## CEA's Top Legislative Initiatives, Projects, and Pilots focused on Improving HVAC Energy and Building Standards Compliance in California

### Legislative Initiatives

#### **1 – Change “May” to “Shall” in the Diagnostics Section of Title 24 (RA2-8)**

The Energy Commission-certified Third-Party Quality Control Program (TPQCP) HERS inspection procedure is a more secure, efficient, and less expensive way to accomplish HERS testing on HVAC systems than conventional HERS testing. Through 100 percent wireless technology and automated data checking, the TPQCP enables a 1 in 30 inspection process as opposed to the 1 in 7 conventional HERS testing. The TPQCP was approved by the CEC because it is more accurate, reduces the cost of HERS testing, and makes fraudulent practices almost impossible. As currently written, Code allows individual municipalities to reject TPQCP testing, which is simply due to word choice when the requirements were enacted. In using the word “May”, some municipalities interpret this an “optional” test mechanism and elect to accept only traditional processes with paper-based tests and requirements. The confusion created in the marketplace by this take-it or leave-it approach has nullified the potential gains in efficiency the program was intended to provide. A change of wording from “may” to “shall” would ensure that all municipalities accept TPQCP HERS testing. It would provide consistency as well as cost saving across the state. It would also result in more suppliers developing secure diagnostic systems, more TPQCP providers, and, most importantly, more contractors using highly accurate automated testing equipment.

#### **2 – Enable Statewide, Online Permitting of HVAC Systems**

Lack of compliance is the single biggest impediment to improvements in energy efficiency for the HVAC industry, and has been so for two decades. Statewide, online permitting of HVAC systems combined with registration of certain HVAC equipment (see #3 below) may be the only way to accomplish the States goal of 90 percent HVAC code compliance by 2020. An Energy Commission certification process for online permitting systems, similar to the HERS Providership system, would keep the industry efficient and competitive. Contractor's permitting costs would be reduced by the convenience of online permitting. Small fees for permits would enable the establishment of integrated online systems at very little cost to the state and the increase in the number of permits would be a windfall for municipal coffers. Solar equipment and water heaters could be included in the programs for very little additional cost.

### **3 – Require California HVAC Equipment Registration**

California’s HVAC distribution system includes what is, in effect, a black market for HVAC equipment. Suppliers and distributors have lobbied long and hard to keep it that way. Equipment that is sold to unlicensed and uncertified “installers” evades all efforts to ensure that California’s Energy Standards are followed or that customers get what they pay for. The simple way to close this huge loophole is to add language to the Energy Standards that requires HVAC compressors sold in California include a permanently affixed, barcode or similar California HVAC Registration tag. Registration numbers would be issued by the State and assigned by equipment manufacturers. Building permits could then include registration numbers. A software application could match registration numbers with building permits and identify numbers for which no permits were pulled. Tracking HVAC equipment would be as simple as tracking a package shipped by UPS and would be a function of the online permitting systems. Equipment sold to unlicensed contractors or contractors who did not pull permits and test installations would be readily traceable. The combination of equipment registration and online permitting would quickly make compliance close to universal.

### **4 – Ensure Mobile and Fixed Asset Open Protocols and Data Security**

As the importance, potential, and scale of energy efficiency retrofits continue to grow, some companies are trying to capture and/or restrict markets and projects through the use of proprietary protocols, restrictive specifications, and arbitrary project management practices. In order to assure competition, open markets, and low costs in this growing industry, the CEA will champion legislation that requires open protocols for all mobile and fixed assets used in distributed energy resource (DER) related projects. These changes will also establish the principal of customer-ownership of all data and appliance control and require very high levels of security and protection for any entities that collect or store energy related data.

#### Pilots and Projects

1. **Pilot for Utility Program Compliance Advocacy** - CEA pilot to prove utility rebate programs that require assurance of compliance (permits are pulled, and closed, and installations HERS tested) in order for rebates to be paid will generate high levels of participation from licensed and certified contractors, and improvements in actual measured energy savings. Pilot will also demonstrate multiple cost reducing strategies such as mobile and embedded EM&V, bundling of demand response with energy efficiency measures, and automated program administration. The pilot will include the following:
  - a. Streamline online permitting
  - b. HVAC equipment registration
  - c. Embedded EM&V (monitoring/DR modules,)
  - d. Mobile EM&V (diagnostic tools from various manufacturers,)
  - e. Mobile Video EM&V
  - f. Demand response management
  - g. Demand response infrastructure maintenance program

- h. Automatic fan controllers (various manufacturers,)
- i. Automated program administration
- j. Pay-for-performance remuneration
- k. User-accessible resource monitoring and analysis dashboards
- l. Contractor and technician training programs

**HVAC Innovation Acceleration Project** – CEA to develop funding sources to investigate and test promising energy-saving HVAC technology and report on successful innovations through the publication of white papers.