

**DOCKETED**

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| <b>Docket Number:</b>   | 17-EBP-01  |
| <b>Project Title:</b>   | Improving Energy Compliance of Central Air-Conditioning and Heat Pump Systems  |
| <b>TN #:</b>            | 224441   |
| <b>Document Title:</b>  | California Building Official's Comments On Improving Energy Code Compliance  |
| <b>Description:</b>     | Comments on California Energy Commission (CEC) Request for the Promotion of Regulatory Compliance in the Installation of Central Air Conditioning and Heat Pump Systems. |
| <b>Filer:</b>           | System   |
| <b>Organization:</b>    | California Building Officials  |
| <b>Submitter Role:</b>  | Public   |
| <b>Submission Date:</b> | 8/7/2018 5:02:07 PM  |
| <b>Docketed Date:</b>   | 8/7/2018   |

*Comment Received From: (CALBO) CA Association of Building Officials*  
*Submitted On: 8/7/2018*  
*Docket Number: 17-EBP-01*

**Comments from CALBO on Improving Energy Code Compliance**

of Central Air Conditioning and Heat Pump Systems

*Additional submitted attachment is included below.*



August 3, 2018

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Submitted via E-Mail:

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**RE: Docket No. 2017-EBP-01: Comments on California Energy Commission (CEC) Request for the Promotion of Regulatory Compliance in the Installation of Central Air Conditioning and Heat Pump Systems**

California Building Officials (CALBO) respectfully submit the following comments to Docket Number 2017-EBP-01, regarding the CEC's proposal for the Promotion of Regulatory Compliance in the Installation of Central Air Conditioning and Heat Pump Systems. These comments address some of the issues that have been brought forward by the CEC and other stakeholders during previous workshops.

**HERS conflict of interest- Building Departments hire HERS Raters**

The proposal to require local building departments to hire HERS raters in order to eliminate real or perceived conflict of interest is a non-starter. Building departments do not have staff trained to oversee HERS testing and verification. Most building departments are already under-staffed. This proposed action would require additional fees that would not off-set the cost of additional staff. This action would increase the cost of compliance. HERS Providers are the logical choice for this role.

**Standardized State-wide permitting process.**

There are several questions that arise when considering this proposed action:

How would this affect local building departments?

What, if any would be the local jurisdiction's role in this process?

How can the addition of another layer of bureaucracy simplify and streamline the process?

There is no evidence that oversight and implementation of a permitting program by a large bureaucracy will result in a more efficient process. Adding an additional layer of bureaucracy would increase the cost of permitting HVAC change-outs. Supporting local jurisdictions efforts to implement online permitting would be a more cost effective approach.

Below is a comparison of certification exam process administered by International Code Council (ICC) and by DSA. The Department of General Services (DGS)/ Division of the State Architect (DSA) have been tasked with development and administration of the Certified Access Specialist (CASp) exam. Based on the State's performance in exam administration it is doubtful that a process administered by the State of California would be either simplified or streamlined.

#### ICC administered certification exams

- Cost for the exam and certification \$209.
- Choice of regional testing facilities or your own home.
- Exams can be scheduled for any convenient day.

#### DGS/DSA administered CASp exam

- Cost is \$1600 to become certified.
  - \$500 to apply for the exam.
  - \$800 to take the exam (each time).
  - \$300 for the piece of paper that shows you are certified
- Exam offered at one site in southern California and one in northern California.
- Exam offered only two times per year.
- Approximate 25% pass rate.

#### **Building Department compliance process complex and expensive.**

The permitting process for HVAC change-outs is basically the same across the state with some minor differences in procedure. The typical process is for the applicant to submit an application either in-person, online, FAX or email. The permit fee is paid and when the project is complete then a final inspection is scheduled. Inspectors can now utilize HERS Provider project status report to confirm HERS testing and verification. The inspectors then inspect for code compliance. The process is not complex. Some may argue that it is too expensive but local jurisdictions cannot provide the service without a fee.

#### **Simplify energy code compliance.**

The **documentation** of energy code compliance for residential HVAC replacement is unnecessarily complex. The installation, testing and verification forms required include 28 pages (CF2R and CF3R). It is important to note that forms do not necessarily equal compliance. I have asked Energy Commission staff to explain the purpose of the installation forms (CF2R). The response is that these forms are to help the property owner prepare for future litigation. My next questions are:  
How often have the forms been used in litigation?

Why is every building department, every HVAC contractor performing change-outs and every HERS provider in the State of California being tasked with assisting property owners in the preparation for future litigation that does not happen?

Not only is this not our role but I would also question the cost effectiveness of the preparation, collection and storage of these documents. Has there been a study to determine cost effectiveness of CF2Rs? CALBO is absolutely supportive of energy code compliance and acknowledge the importance and necessity of the CF1R and CF3R forms. It is our opinion that the CF2R has no demonstrated value.

#### **Training and certification for installers.**

Although there is currently no required training and certification for a technician performing HVAC change-outs, CALGreen does require HVAC installer training and certification for new construction or when conditioned space is added. Training and certification for technicians performing HVAC change-outs could be codified in CALGreen or the California Energy Code. CALGreen specifies training and certification by one of the following providers:

- State certified apprenticeship programs.
- Public utility training programs.
- Training programs sponsored by trade, labor or statewide energy consulting or verification organizations.
- Other programs acceptable to the enforcing agency.

#### **Quality of installations.**

In regard to HVAC change-outs, the local jurisdictions inspect utility connections (gas and electrical) as well as other code required safety measures. We are unable to verify key energy efficiency measures such as duct testing, refrigerant charge and airflow/fan watt draw. The elimination of sampling could potentially address some of the quality installation concerns but it could also have unintended consequences such as shortage of HERS raters and adding cost. Another potential solution would be to introduce more robust QA procedures by the HERS providers.

#### **Enforcement agencies are resource constrained.**

There have been suggestions to provide additional funding to the CSLB and local building departments to enhance enforcement efforts. It should be noted that building inspectors do not drive around looking for unpermitted work. If we come across unpermitted/illegal construction then we take action. Building inspectors have very specific tasks and schedules during the day and do not have time to search out unpermitted work. This is not a cost-effective approach to address unpermitted work.

The CSLB has made strides to simplify reporting of unpermitted work or unlicensed contractors. The CSLB has developed an online form specifically for building department staff that can be used to report contractors performing work without permit. It is important that these actions be meaningful and that there is follow-through and results.

**Public service announcements**

The public/consumers need to be a part of the solution. It would seem that the utilization of social media and other more traditional outlets could be a cost-effective way to educate the consumer. Most consumers pay attention when the message includes cost savings and potential hazards.

CALBO appreciate the opportunity to provide comments and to be involved in this process.

Sincerely,

A handwritten signature in black ink, appearing to read 'Gregory Mahoney', with a stylized flourish at the end.

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