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CAL SMACNA Comments DOCKET: 2017-EBP-01 -- Improving Energy Compliance of Central Air Conditioning and Heat Pump Systems

Additional submitted attachment is included below.



California
Association
Sheet Metal and
Air Conditioning
Contractors
National
Association

October 18, 2018

Via CEC Electronic Commenting System

California Energy Commission Docket Unit, MS-4 Docket No. 2017-EBP-01 1516 Ninth Street Sacramento, CA 95814

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Telephone (916) 363-7460 Facsimile (916) 363-7544 E-Mail chris@ cal-smacna.org Office 1400 K Street Suite 212 Sacramento California 95814 Website http://www. cal-smacna.org Re: <u>CAL SMACNA Comments on Improving Energy Compliance of Central Air-Conditioning and Heat</u> Pump Systems; Docket 2017-EBP-01

Dear Commission Staff:

I write on behalf of the members of the California Association of Sheet Metal and Air Conditioning Contractors' National Association (CAL SMACNA) in follow-up to the California Energy Commission's workshop on the doubling of energy efficiency savings by January 1, 2030 as mandated by Senate Bill 350, the Clean Energy and Pollution Reduction Act of 2015 (de León, Chapter 547, Statutes of 2015).

CAL SMACNA is a non-profit statewide trade association representing over 400 sheet metal and air conditioning contractors who employ more than 25,000 union employees and administrative personnel throughout the state of California. These contractors perform commercial and residential heating, ventilating, and air conditioning; architectural and industrial sheet metal; as well as stainless steel kitchen equipment, manufacturing, testing and balancing, siding and decking. Their range of work includes public works, private commercial and residential projects.

In brief, CAL SMACNA believes California will not be able to meet its goal of doubling statewide energy efficiency savings by January 1, 2030 without addressing both: 1) statewide HVAC permit compliance issues and; 2) HVAC contractor and workforce quality issues.

COMPLIANCE ISSUE -- HVAC REGISTRY

Study after study shows the vast majority of HVAC swap-outs and retrofits are being installed without any permits or Title 24 compliance documentation. Statewide efforts to improve permit compliance have been an abject failure due to the limited resources of local building departments to enforce the law. The consequences of this failure are significant not only for Title 24 energy efficiency compliance but also our collective efforts to reclaim high GWP refrigerants and dispose of them properly per SB 350 goals. Given this unchanging reality, CAL SMACNA now believes it is time to utilize existing tracking technologies to help our local building departments use their limited resources more efficiently.

CAL SMACNA encourages the state to finally develop an HVAC registry to ensure that when HVAC systems are purchased there is an electronic record that may be utilized by local building departments to efficiently determine if the necessary permits are being pulled and the Title 24 compliance documentation is filed. This is not only essential to ensure code compliance but it will also help ensure a fair marketplace for responsible contractors.

CAL SMACNA's HVAC contractors who are pulling permits, employing a skilled and trained workforce, and following Title 24 building codes are routinely underbid in the marketplace by contractors operating in the shadows of the underground economy. Contractors that perform unpermitted work are more likely to be unlicensed, use low wage, untrained workers, skip acceptance testing or commissioning of systems, and vent high GWP refrigerants into the atmosphere. The cost differential between a typical residential HVAC system installed by a responsible contractor that is fully permitted and code compliant versus an HVAC system installed without permits and Title 24 compliance is often many thousands of dollars. To the end consumer, this cost-savings is too great to ignore especially when there are little to no consequences for them or their underground contractor under the current system.

The 2016 Existing Building Energy Efficiency Action Plan Update states that "addressing the application, compliance and enforcement of building standards in existing buildings is a high priority." Accordingly, the Plan calls for improving retrofit compliance with permitting and code requirements to 90% by 2020.

To meet this compliance goal, the 2016 Existing Building Energy Efficiency Action Plan recommends development of an HVAC equipment sale registry that can be used to track HVAC sales to ensure that permit requirements are being followed for all HVAC installations.

While CAL SMACNA at one time opposed an HVAC registry due to concerns about potential administrative costs, we now see that it is essential to marketplace change. As such, we support and encourage the development of an easy to use statewide HVAC registry that is capable of assisting local building departments achieve higher rates of HVAC permit compliance.

In addition to permit compliance, California must also focus upon HVAC contractor and workforce quality issues as well.

HVAC Contractor and Workforce Quality Issues

The efficiency of heating and air conditioning equipment is highly dependent on the quality of its installation. Studies show that poor quality installation of HVAC systems has been found to result in a 20-30 percent increase in energy use. Moreover, poor quality installation is pervasive in California.

The California Energy Commission has found up to 85% of replacement HVAC systems are installed incorrectly. Increased efficiency requirements for HVAC equipment and spending billions of dollars on incentives for HVAC retrofits is, in the end, meaningless if these systems are not being installed correctly.

The high rates of poor installation outcomes for HVAC equipment can be tied directly to the use of irresponsible contractors AND untrained, underpaid workers who have not gone through apprenticeship programs. The utilities have found that the majority of HVAC installers don't have the technical knowledge, skills, or abilities to properly install systems. In fact, recent utility Energy Efficiency Business Plans stated that less than half of HVAC technicians in California are aware of even basic national

standards for work quality and that there are high failure rates for job performance even on routine tasks. This needs to change.

We need to adopt measures to improve the energy efficiency of HVAC systems not just through increased equipment efficiency standards, but also by adopting policies that encourage or incentivize hiring a trained and qualified workforce. We need to create a system that rewards contractors for investing in a skilled and trained workforce and supporting apprenticeship programs.

We need to ensure that a "certified, high performing workforce" will be used to deliver energy efficiency retrofits, "thereby transforming efficiency incentive work from a low-cost bidder framework to a lowest-cost qualified bidder framework." To achieve this goal, the Action Plan recommends adopting contractor and workforce standards into energy efficiency program requirements.

CAL SMACNA strongly encourages the Energy Commission to understand and recognize that the full spectrum HVAC training provided by state approved apprenticeship programs leads to significantly greater energy efficiency savings and refrigerant recovery rates. The investment in these programs and employment of a skilled and trained workforce (as defined in PCC 2601 et. seq.) is a primary indicator of a responsible contractor that should be supported not undermined in the HVAC marketplace.

Both an "HVAC Registry" and "Responsible Contractor" policies are essential to the transformation of California's existing HVAC marketplace to achieve a higher road in both permit and code compliance. Again, the goals of SB 350 cannot be achieved without both of these policies being supported by our state agencies.

CAL SMACNA is pleased to continue to work with the Energy Commission and staff to achieve these goals. If you should have questions or need additional information, please do not hesitate to contact me at (916) 363-7460. Thank you.

Respectfully,

Chris Walker

Executive Vice President

CAL SMACNA