

DOCKETED

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Comments of the Sacramento Municipal Utility District on Sacramento HVAC Compliance Workshop

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Additional submitted attachment is included below.

**STATE OF CALIFORNIA
BEFORE THE CALIFORNIA ENERGY COMMISSION**

In the matter of:)	Docket No. 17-EBP-01
)	
Improving Energy Compliance of Central Air-Conditioning and Heat Pump Systems, SB 1414 Compliance Plan)	Sacramento HVAC Compliance Workshop
)	
)	October 19, 2018

**Comments of the Sacramento Municipal Utility District
on Sacramento HVAC Compliance Workshop**

Background:

Senate Bill No. 1414 (Wolk, Chapter 678, Statutes of 2016) requires the Energy Commission, in consultation with the Contractors State License Board (CSLB), local governments and building officials, and stakeholders, to approve a plan by January 1, 2019, that promotes compliance with Part 6 of Title 24 of the California Code of Regulations in the installation of heating, ventilation and air conditioning (HVAC) systems. The law also requires these agencies to adopt regulations increasing compliance with permitting and inspection requirements, including sales and installations of central air conditioners and heat pump systems in California. Through a series of public workshops, the Energy Commission sought public input in a collaborative effort to develop this plan. Significant work has been done to date on this issue by the Statewide Utility Codes & Standards Team, and by other nongovernmental organizations such as the California Energy Alliance (CEA). SMUD appreciates the opportunity to share our ideas on HVAC compliance through these comments.

Introduction:

This topic is critical for the state and is of interest to SMUD because we have invested in HVAC compliance locally and the ability of the state to achieve its goal of building decarbonization will be impacted by customer satisfaction. Permitting for retrofits has been shown to improve quality and satisfaction of the consumer, ensuring comfort and bill savings. If 90% of HVAC replacements continue to be performed without a permit, then a sustainable level of decarbonization may never be achieved. Stakeholders need to be brought on-board by trying new partnership models and by assisting local governments with making the permitting application process easier and cost effective.

Unfortunately, previous state regulatory efforts to improve HVAC permit compliance have been largely unsuccessful. There has been a lot of time and money invested in trying to determine how to improve code compliance, yet, recent studies show that after years of effort, HVAC retrofit compliance rates for the state are still at approximately 10%.

Stakeholder comments at the Energy Commission's August Workshops suggested training as a potential way to increase permit compliance. Licensed contractors already know that a permit is legally required to change out an existing HVAC system – additional training will not have an impact on increasing permit compliance. Once permit compliance is the norm, training may be useful for improvement of contractor's work. The quality of HVAC installations is very important, and performance improves with code compliance because permits require testing after system installation, whereas unpermitted jobs are rarely tested to ensure the system is performing efficiently.

"Energy Code Ace"- the program run by the investor owned utilities (IOUs) through the Statewide Utility Code & Standards Team, has created extensive trainings, reports, white papers and tools. The state has not implemented most of the recommendations from those white papers, some of which we refer to throughout these comments. The state should reconsider implementing these recommendations in a meaningful way, as well as include consideration of additional efforts such as those we suggest in these comments.

Unfortunately, there are no quick and easy solutions to this issue and to improve compliance, new paths must be forged. Current statewide code compliance is estimated at 10%, remains largely unchanged over the years. Due to SMUD's incentive programs, compliance in the Sacramento area is estimated to be near 25%. Incentive programs increase compliance because they require a permit. Incentive programs can help, but the downside is that a healthy portion of the incentive dollars are merely going to pay for the permit, rather than incenting efficiency improvements. Given the state of the HVAC installation field today, SMUD offers the following suggestions for the focus of the Energy Commission and other state agencies.

Suggestions for Moving Forward:

1. Work with Distributors, Large Retailers and Leverage Existing Statewide Marketing Campaigns

As suggested by other stakeholders, the state could significantly help HVAC compliance by working with HVAC equipment distributors to require a license number to be recorded for any equipment purchase related to HVAC or water heating retrofit. (This idea was also suggested by Energy Code Ace white paper, circa 2012, although they advocated for recording serial numbers.) SMUD supports the CEA proposal, submitted into this docket, for a statewide equipment tracking system that doesn't require serial

numbers. The Energy Commission and the California Public Utilities Commission (CPUC) can use their existing energy efficiency programs and staff to work with CSLB to design a system that will link water heater and HVAC equipment purchases to permits. Products that cannot be tied to a permit could at least be tied to a regional distribution point.

A second idea is to target homeowners for education and outreach about the benefits of obtaining a permit when they are shopping at “big box” home improvement centers. This campaign could include coupons or other incentives to obtain permits for future improvements or retrofits. This solution could be accomplished by utilizing voluntary local energy consultants or Home Energy Rating System (HERS) raters to provide the education in-store.

The Energy Commission and CPUC should also consider a statewide educational campaign targeted at consumers – so that they understand the energy performance implications of unpermitted HVAC work. This campaign could be part of or in conjunction with Energy Upgrade California, and the new market transformation initiative mandated under Senate Bill No. 1477 (SB 1477, Stern, Statutes of 2018).

A good example of such a program at the local level is the West Sacramento campaign around consumer awareness of permitting, encourages homeowners to protect their investment/re-sale value by pulling a permit (as noted in “Statewide Utility Codes & Standards Team” comments). This campaign also reminds contractors that they can lose their license for doing unpermitted work.

2. Work with the State Licensing Board

The CSLB is in a great position to enforce HVAC permit compliance, but, as they stated at the workshop, they lack sufficient funds to do effective enforcement. If CSLB had the resources to investigate and act on unlicensed and unpermitted work it could discipline contractors that are operating outside the law. SMUD suggests that this could be accomplished through inter-agency agreements with the Energy Commission and the CPUC.

The CSLB has an online service which allows consumers to report any contractor who fails to pull a permit for construction activity. The CSLB works with the contractor regarding the permit allegation and takes the appropriate disciplinary action, up to and including: civil penalty assessments, an order to correct (permitting the work), and suspension or revocation of the license. Given their ability to be truly impactful, SMUD encourages the Energy Commission to work directly with CSLB to expand and automate this process, through workshops or through the development of an inter-agency agreement. There may be some efficiencies to sharing resources between

state agencies and assisting with enforcement could be a good use of energy efficiency funds.

The Statewide Utility Codes & Standards Team white paper also suggests increasing fines on contractors and rewarding/promoting contractors who comply with the law through a “whitelist” or awards ceremony. (See Statewide Utility Codes & Standards Team Comments). SMUD agrees and emphasizes that the state should increase the enforcement budget of the CSLB and encourage the CSLB to administer swift and meaningful enforcement to send a strong signal to the contractor community. The Energy Commission and CPUC should also allow efficiency money to be spent on compliance issues, because compliance is directly linked to improving efficiency.

3. Work with Real Estate Boards/Realtor Associations

SMUD was surprised that real estate organizations were not represented at the recent workshop discussions we participated in, because they are a necessary party and could be instrumental in making progress on this issue. State funds could be used to train realtors to educate consumers about energy efficiency and the importance of getting a permit that extends well beyond energy efficiency.

The most effective code compliance jurisdiction, as reported by several contractors interviewed by SMUD, is the City of Davis. The City of Davis inspects the homes and permit records at point of sale of each building in the city. This is well known by its homeowners and most homeowners will not allow any work on their homes prior to personally reviewing the permit. Outside of Davis, permits are thought more of as a hinderance that increases the cost of construction – avoided by contractors and homeowners.

Realtors/Real Estate Agents are an important group in this industry and permitting protocols like the structure in Davis would benefit from their support. This idea could be expanded to the home inspection industry by making permit lookup a basic part of a home inspector’s checklists of items for review.

4. Work with Local Governments and Fund Local Permitting Process Changes

SMUD encourages the Energy Commission’s consideration of supporting local governments to make permitting easier for contractors, so they that are more likely to do permitted work. Some ideas include helping local jurisdictions creating an on-line permit application that lowers the barrier to permits, which has been done in Sacramento for HVAC and water heating permits, among others. Requiring a personal visit to a local permitting office to fill out hard-copy paperwork creates significant and unnecessary disincentives. Improving testing sign-off efficiency would also help compliance. We support the CEA’s recommendation regarding online permitting:

“Industry has demonstrated successful online permitting systems that have been, to some extent, vetted by industry-sponsored pilots and CEC-sponsored studies. CEA recommends the CEC invest in expanded pilots and demonstrations in order to fully develop commercial system requirements. Once requirements are codified, any company can then apply for certification to market their system in California.”

5. Leverage SB 1477 Programs and Other Efforts on Building Electrification

Statewide efforts on building electrification could help with this issue through new incentive programs being developed under SB 1477. As we electrify, part of any incentive program must be proper use and enforcement of the existing energy codes. We know pulling permits is rare for HVAC, and it is even rarer for water heaters. The good news is that incentives should require a permit to be verified, so this should drive improved compliance. But, when most jobs are not permitted then approximately the first \$200-\$400 of an incentive is spent just creating parity between the permitted and unpermitted installation.

Therefore, electrification incentives (like the one SMUD currently offers) ensure that the work done is permitted. For space heating with heat pumps, performance is proven to suffer when not inspected. Proper HERS testing and inspections are important for proper heat pump performance and customer satisfaction.

We agree with the comments of the Statewide Utility Codes & Standards Team that along with a new focus on building electrification should be a consideration of HERS program reform to ensure the independence of the raters. The California Energy Alliance HVAC Compliance and Enforcement Modernization program is aimed directly at the goals of SB 1414 and they recommend changes to the HERS program. CEA points out in their comments: “HERS is a vital component of the state’s framework designed to achieve its energy and carbon savings goals. Under Senate Bill 350, Statutes of 2015, The Clean Energy and Pollution Reduction Act, the CEC and CPUC are legally required to evaluate and update the HERS program to ensure it continues to meet the needs of California and provide support for the bill’s mandate to deliver a cumulative doubling of statewide energy efficiency savings by 2030.”

Conclusion:

SMUD encourages the Energy Commission to be bold and to look for new and innovative solutions to this issue. Code compliance for HVAC changeouts and all retrofits should be well above 80% and making such a drastic improvement in compliance will require courageous and decisive actions by the Energy Commission, in concert with other state agencies. The goal is ensuring efficiency and value for Californians who make significant investments in their home by way of HVAC and water heating upgrades.

Thank you for the opportunity to comment on the HVAC Compliance Workshop.

/s/

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