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EFCA Comments on 2016 CEC Action Plan Update

Additional submitted attachment is included below.



Date: 11/1/16

To: California Energy Commission

Re: Existing Buildings Action Plan Update

Comments by EFCA

Docket: 16- EBP-01

By: Charles Cormany, Executive Director

The following are written comments regarding the CEC Existing Buildings Energy Efficiency Action Plan Update Draft for 2016 submitted 10/21/2016. We have reserved our comments for specific topics we feel need further conversation or review.

The following comments are organized by section and sub-section.

- 1.3.1 Home Energy Rating System (HERS) II: Although we support the concept of a whole house rating system we are concerned about using HERS II for this process. HERS II is a complicated software solution that relies on a wide range of data inputs and is subject to error if any one of these inputs is not correct. In practice we have seen the HERS II tool deliver inconsistent results delivering vastly different ratings on similar building stock. While we recognize that this tool can be effective, we are concerned that it is too dependent on highly trained raters providing accurate and consistent input. In our experience the variability of data collection and input is a significant barrier to using HERS II in the residential sector. Although we have no concrete solution we suggest the commission utilize as simple a solution as possible for asset ratings to minimize data input errors.
- 1.5.4 **Water End-Use Efficiency**: As 50% of residential water is used outside the home we suggest the commission encourage home raters and building inspectors to include irrigation system inspections as part of their evaluation of residential buildings. Our contractors often find significant issues with residential irrigation systems, in the form of leaks, which waste significant amounts of water. Performing an irrigation inspection as part of a whole house rating could mitigate these losses. We are in favor of other irrigation water saving solutions such as advanced irrigation controls and the addition of rain sensors to existing controllers.
- 1.5.3 **Training and Communication:** We support education and training efforts as they are crucial to providing a skilled and highly trained workforce. We feel the local government officials need to be a significant part of WE&T. Building inspectors, in particular, need to be aware of the advantages of a whole-house approach to energy efficiency upgrades. Building departments need to support contractors who pursue deep energy retrofits and encourage others to do the same. Currently most building inspectors are not familiar with building science best practices and the multiple benefits energy efficiency retrofits.



- 1.5.7 **Compliance Plan:** Many energy efficiency contractors express frustration over the lack of consistency of existing regulation enforcement. It is widely recognized that the HVAC industry in California is circumventing the permitting process in order to avoid Title 24 duct testing. The lack of enforcement of existing regulations creates an uneven playing field for contractors who abide by the existing regulations. We suggest the commission include funding to educate building departments and provide resources that will allow local building departs to enforce existing regulations. Without support and funding from the CEC local building departments will not be able to effectively enforce new or existing regulations.
- 1.8.1 **Utility Procurement of Energy Efficiency:** We are in full support of using energy efficiency savings as a resource for procurement and support pilot efforts in place to demonstrate the potential of this emerging market. We feel the aggregation of energy savings for the purpose of procurement is a critical component to achieving market transformation.
- 3.1.1 **Sustainable and Effective Program Delivery:** We support all efforts to reduce program portfolio and transaction cost. We encourage the commission to consider the effects changes to programs might have upon contractors and involve them early and often in the program design process. Streamlining costs will be necessary to achieve scale and promote market transformation.
- 3.2.1 **Performance Assurance:** We have consistently supported an approach to energy savings that includes measured or confirmed energy savings including the CPUCs High Opportunity Programs or Projects (HOPPS) program. We believe normalized meter consumption has the potential to revolutionize the marketplace and will be a key component in the process of true market transformation. We strongly believe that a measured performance approach will lead to higher quality projects and deeper energy savings. Measured performance will reduce operational costs due to the fact that by nature it includes EM&V, as incentives are based on actual energy savings.
- 3.3.2 Knowledge, Skills and Abilities (KSA) Specifications: We are in favor of certifications for workers and others in the industry. We encourage the commission to consider certifications for building officials who will be in charge of code compliance. As mentioned previously, the lack of support and understanding by local governments and building officials is a barrier to adoption of energy savings principles. We would also like to go on record for suggesting that the commission specify that all workforce education and training materials and efforts be provided in **Spanish**.
- 3.3.7 **Identify workforce competencies...:** To meet the states goal of doubling of energy efficiency by 2030 the current workforce will need to grow significantly. We are concerned that providing this workforce will be a barrier. Currently many contractors are challenged with growth due to the lack of available workers. The recent rebounding of the construction trades has created a serious shortage in the number of available workers across the board. We are



concerned that the commission may have underestimated the current lack of available workers. We are concerned about the growth potential for an industry that requires additional trained and certified workers.

3.4 Scale Up Zero Net Energy Retrofits: Perhaps our largest concern of this update are the regulatory barriers in place that will limit ZNE projects. In many cases the best path to ZNE is by converting existing buildings from natural gas furnaces to electric heat pumps. The mild climate in California makes heat pumps a very attractive solution for the heating and cooling of residential buildings. Many of the foremost energy efficiency contractors in the state are utilizing heat pumps due to their high efficiency. Typically heat pumps are 200% to 300% efficient compared to 97% efficient for gas furnaces. Outdated regulations and policy are creating barrier for mass adoption of heat pumps due to the restrictions placed on contractors. Converting from one energy source to another is considered "fuel switching". As some utilities only provide one source of energy, they will lose customers if the industry moves towards heat pumps. To complicate the issue further some utility incentive programs will provide zero incentives if fuel switching is a part of the solution. It is time for the commission to take a stand and address these outdated and restrictive regulations that are impeding the progress of this effective and energy efficient solution. Regulations need to support the interests of the industry over the interests of the utility providers. California will struggle to meet its energy goals if this issue is not addressed in a timely and effective manor.

We appreciate the opportunity to participate in this discussion. If there are questions about any specific item mentioned above please contact me directly for a more detailed explanation.

We look forward to working together to meet our states energy goal and provide a better future for the residents of California.

Regards,

Charles Cormany

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