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California Energy Commission

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Written Comments for Docket 12-EBP-1

Attn: Dockets Unit

California Energy Commission

From: Michael E. Bachand, President

RE: Comments on Draft Action Plan for Comprehensive Energy Programs for Existing Buildings

**General Comments:**

CalCERTS supports and encourages implementation of many of the key initiatives identified in the Draft Action Plan. As Commissioner McAllister repeated several times during the June 2013 workshops, scalability of efforts is going to be a key requirement in order to achieve the ambitious goals of AB758. The key initiatives that are ultimately adopted should, therefore, have scalability as a chief component. However, scalability alone is not enough to ensure the energy savings required to reach the goals. In addition to scalability, the initiatives must be accessible to market actors to implement; they must show significant correlation to the achievement of the goals (i.e. effectiveness); and they must be able to be documented in such a way that the CEC and the CPUC can have a high level of confidence that the goals have actually been met.

Of course, there are multiple pathways to achieve scalability, market accessibility, effectiveness and documentation, either individually or in concert. As the Draft Action Plan indicates, stakeholder collaboration and engagement will be the tool that can bring together the efforts of the multiple pathways and opportunities. Again, CalCERTS supports this concept of collaboration and feels strongly that the collective collaboration of market actors has greater potential for success than the sum of individual efforts that heretofore may not have been in a collaborative environment.

Another key component of success, especially with regards to scalability, will be to utilize existing infrastructure to help minimize the “ramp up” time to begin implementing the effort from all pathways. There is a significant energy efficiency workforce already trained and in place, even though it needs to be scaled up, too. Even though the existing workforce may need to be retrained and expanded based on whatever key initiatives are adopted, there is a lot of fundamental training and education already in place. There are 772 currently certified Title 24 Compliance HERS Raters, Whole House HERS Raters, and HERS Building Performance Contractors that have substantial



training and experience that can be directly applied to some of the key initiatives. This workforce can also be trained to do tasks related to HERS ratings, but not currently included in a HERS Rater's duties. For instance, if some type of audit is devised that is less than a California Whole House Home Energy Audit as defined in current regulations, then current HERS Raters could easily be trained to perform these audits by building onto their existing training and qualifications. If different or multiple software programs are developed or adopted, this existing workforce already has a basis in understanding how software works and could be quickly trained in the use of new software.

There has been a lot of stakeholder discussion about the behavioral component of energy usage. While there is no denying that much work could and should be done in this area, the fact remains that an asset remains in place no matter what the behavior of the occupants. All dwellings change ownership or occupancy sooner or later, so it is imperative to know what the asset's energy efficiency level actually is, regardless of occupancy. This supports the need for gathering and examining the data from the buildings. A very frugal user of air conditioning does not have any effect on how much insulation is in the attic, and the next occupant may not be so frugal. We need to know what is in these existing building so we can improve them cost effectively and with long-term energy measures that are not dependent on behavioral change.

Comparing one asset to another has some value in being able to establish relative energy usage over a large population sample. This provides a relative understanding of certain market areas and how large populations could be targeted for improvements, but it does not ultimately remove the need to know how the individual assets are configured so improvements can be made cost effectively.

## **No Regrets Strategy 1: Data Reporting and Management**

### NR 1.1

The HERS Provider registries, the CPUC database and the Energy Upgrade California database already contain much data that can be used in the key initiatives of NR 1.1. Especially the Provider registries have already accomplished and demonstrated key initiatives 1, 2, and 3. The rulemaking contemplated in initiative number 4 could be very effective in getting more participation in the data acquisition than has previously been achieved. And, in fact, initiative number 5 should be included in the rulemaking rather than as a recommendation.

### NR 1.2

The data and activity contemplated here should be integrated with the data gathered in the initiatives of NR 1.1. By combining the usage data (such as "Green Button") with the data on the registries, direct correlations can be made on buildings where improvements have been made.

### NR 1.3

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This is the initiative that should be used to tie NR 1.1 and NR 1.2 data together.

***Suggested Program:***

Develop a program that sends home energy professionals out to consumers to offer an audit or rating (possible incentive here), while also tying the results of the audit to the “Green Button” data in a Provider’s or other similar registry. If an improvement project is done (possible incentive here) on the home, then the before and after hourly consumption data is readily available without having to disturb the homeowner further. If an improvement project is not done, then that data can be examined for two purposes: First, there will be usage data from more than one year; secondly, similar data from similar homes in the community could be aggregated and used to go back to the home where no improvements were done, and show actual “neighborhood” data to the consumer demonstrating the effectiveness of upgrading the energy features of the home.

**No Regrets Strategy 2: Support for Standards Compliance and Enforcement**

CalCERTS believes that the all key initiatives here are imperative to a successful effort to meet AB 758 goals.

NR 2.1

Increasing compliance has been generally on the industry’s mind for several years. With this funding source, the current political will to meaningfully improve the existing building stock, and a workforce that is arguably ready to step up, now is the time to move on this issue.

Programs are already being designed that will directly feed data to the Commissions through high-tech processes that make it much easier than ever before for contractors to comply, and to demonstrate compliance. These programs will not only demonstrate the capability to get better compliance, but they will actually begin the market transformation in a small way. This small first step can be scaled up very quickly using the data acquired by the pilot program(s), and by the technology now available to the market actors.

Tracking and determining the disposition of HVAC equipment is one of the early keys to determining the amount of compliance, the locations where compliance is currently strong or weak, and is key to determining the actual market size and demographics. The technology and processes are ready to go and could be implemented on a pilot basis immediately.

A statewide, easy-to-use, online permitting system would greatly enhance the probability that a permit would be pulled. This, again can be easily accomplished through technology, but not



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every market segment currently can access or afford the technology required to do online permitting. In fact there is not just a technical component to this concept, there is a political component that will need addressing, also.

While there is some argument that just because permits are not being pulled does not mean that the work is being done poorly. It does however mean that we do not know whether it is or is not. Furthermore, there is a reason that building departments inspect jobs. The ultimate goal of a building inspection is to help assure the health and safety of the consumer, but the fact remains that there is absolutely no doubt that jurisdictions firmly believe that for compliance to occur, inspection or the threat of inspection must be in place. The point here is that it is a pretty safe bet that energy efficiency will improve to some degree with more inspections by HERS Raters and building inspectors. It is also absolutely critical to the AB 758 process that the amount of work being done is, in fact, documented, accounted for, and recognized for the inherent value that it has.

Finally, education and training of contractors, building department, consumers and other market actors should be statewide, uniform, relevant, complete and ongoing. See other CalCERTS comment documents for further comments.

***Suggested Program:***

For alterations to existing building, the first step of a program would be to implement a pilot program that has two approaches, or two programs, each with one approach. The first program would use existing technology and processes to track serial numbers on equipment sold in California. Starting with just a few stakeholders who are willing to participate, this program would track the serial number in a central location (for the pilot this could be in a Provider registry, but in the larger program, it would be more centralized if need be). The tracking would tie the sale of the equipment, the purchasing contractor, the building permit number, and installation address all together. This program can ultimately lead to understanding how many permits are being pulled (or not), and the locations, etc. The second (either combined or simultaneous) approach is to use existing processes to form a statewide uniform process that all building jurisdictions would use for HVAC replacements and other alterations to existing buildings. This would make it less cumbersome for the data to become centralized, accessible to decision makers, and easier to deal with.

Respectfully Submitted,



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