

July 17, 2015



To: California Energy Resources Conservation and Development Commission

Re: Order Instituting Information Proceeding Docket No. 12-HERS-1

From: CalCERTS, Inc., a California Approved HERS Provider ("CalCERTS")

Comments to the Order Instituting Informational Proceeding

Docket No. 12-HERS-1

# Introduction

In these comments CalCERTS, Inc. will suggest modest changes to the Whole House Home Energy Rating (WHER) program that should greatly facilitate achieving the "broad market adoption of both asset ratings and home assessments" as presented in the Problem Statement in the June 17, 2015 CEC workshop. As the only approved Whole House Provider in California, we have had sufficient experience with Whole House Ratings and related programs, such as EUC, to comment on which components of that program were successful, which weren't, and why. We will introduce our proposal, discuss the lessons learned from the existing program, and detail how our proposal addresses the requirements of the Existing Buildings Energy Efficiency Action Plan.

Our core proposal is this: Develop a single field checklist that contains enough information to perform an asset rating from the checklist, and that can also be used to populate the software necessary for an energy assessment. This checklist would be in close alignment with checklists used by national asset rating programs such as the DOE Home Energy Score. This would align

31 Natoma Street, Suite 120 Folsom, CA 95630 Voice: 916-985-3400 Fax: 916-985-3402 Email: info@calcerts.com Website: www.calcerts.com the role of Whole House Home Energy Inspector with asset ratings, and Whole House Home Energy Raters with energy assessments, so that workforce needs can be easily met through an existing workforce of certified Whole House Home Energy Raters. Assessment software should be developed from the E+A+A approach already programmed in CBECC. A final, crucial, component is that the checklist and software be designed to be consistent enough that Ratings of the home performed by different people result in identical assessments.

#### Lessons learned from the Whole House Home Energy Rating Programs

The California WHER program was a tremendous step that started development of a state approved energy assessment program to inform homeowners and guide energy efficient improvements to homes. However, data shows that the Whole House program was not widely adopted, and in fact there are serious problems with the current iteration that are actively preventing adoption. Fortunately some of these issues can be addressed in order to streamline the program and increase adoption while still maintaining the core of the program. These issues are:

- Multiple programs
  - One of the reasons that Whole House Ratings were not broadly adopted previously is that vastly different methodologies were allowed in various programs. For example, Energy Upgrade California permitted both Whole House Ratings and BPI Audits, which led to substantial confusion in the marketplace.
- Lack of ongoing support
  - The Whole House program was launched in 2010. Although Providers, Raters, and other industry stakeholders requested changes to clarify and simplify the training requirements, data points gathered, and the software, Energy Commission has not updated the program in five years. Furthermore, changes to law that could have promoted the Whole House program were not sufficiently publicized or enforced one example being the HUD letter that specified that all Energy Efficient Mortgages in California be based on Whole House Ratings. Addressing some of those issues now may be a beneficial way of targeting 'low-hanging fruit' for this next iteration of the Whole House program. Additionally, we suggest that this iteration be written to allow for more frequent updates and for adoption of new technologies without requiring a rulemaking.
- Complexity
  - Some of the most significant reasons that the Whole House program was not more widely successful in 2010, and since, is that it's simply too complicated. The approval process for Providers took a substantial amount of time. The training required, including a Field House, required a week long commitment from potential Raters. There was a lack of clarity about which data points were required, and even whether diagnostic testing, such as blower door testing, was necessary. The software was difficult for new users to understand. A standardized, simplified checklist along with streamlined software addresses many of these concerns and would arguably facilitate market adoption.

# **Aligning Energy Asset Ratings**

As previously stated, CalCERTS, Inc. supports a single asset rating that aligns with national asset ratings such as the DOE Home Energy Score. We propose that there be a single checklist used for asset ratings that captures the same information used in national asset ratings. Ideally this asset rating checklist would also capture all of the data points required for an energy efficiency assessment. The result would be a single checklist used for all asset ratings and energy efficiency assessments. Having a combined checklist helps to guarantee consistency across different programs, because it helps to guarantee that each program is getting the same information. It also makes it easy for Raters to develop an energy efficiency assessment from an already existing asset rating, which helps to open the door to the assessment market. Yet another benefit of such a checklist is that it helps to ensure simplicity and consistency when Raters are trained to perform either of these services.

### Establishing California's asset rating methodology

One of the benefits of having the streamlined checklist, aligned with national asset rating programs, is that the checklist is ideally suited for inclusion in the appraisal process. Existing property appraisers could be trained, in a short period of time, to gather checklist information for any items they're not already inspecting as part of a standard property appraisal; existing Whole House Raters or Inspectors will benefit from exposure to the appraisal process and may seek to become proficient with property appraising as well. This offers the opportunity for the homeowner to simultaneously receive an asset rating and energy efficiency appraisal from the same person, at the same time, without the need for repeat visits, and also helps to address any concerns about the existence of an adequate workforce.

Another benefit of the streamlined checklist and a single asset rating approach is that it simplifies the process for all industry stakeholders. Not only do homeowners, appraisers, realtors, and raters benefit from this simplicity; so do jurisdictions that want to make point-of-sale inspections mandatory, and so do lenders that would like to participate in the Energy Efficient Mortgage process.

# Minimum Standards for Building Performance Assessment Tools

CalCERTS, Inc. fully supports the software or modeling approach to assessment. The Energy Commission can specify necessary inputs and outputs, and test and approve software to guarantee consistent ratings. The existing CBECC engine supports the E+A+A approach already, which allows energy consultants to receive 'more credit' for features, such as insulation, that a Rater has verified. This could be further modified to support a Whole House Rating that is less complex and time consuming than the previous version, and since it is open source, it could also provide a platform for other software vendors to build from.

Although smart meter data could in principle be used as the basis for an assessment, there are issues that would need to be addressed:

- Not all homes have smart meters.
- It is difficult to see how smart meter data, standing alone, could provide a homeowner with "a list of prioritized, cost-effective energy efficiency cost upgrade opportunities".

• Energy Commission would gain no new information about energy efficiency features in existing building stock.

With these issues in mind, CalCERTS, Inc. recommends that smart meter data be allowed as an optional component of a software approach to assessments rather than a stand-alone program.

Respectfully Yours,

Michael Ebachand Michael C. Bachard

Michael E. Bachand President

Michael C. Bachand Vice President