

**DOCKETED**

<b>Docket Number:</b>	22-HERS-02
<b>Project Title:</b>	2022 Title 20 Home Energy Rating System (HERS) OIR Proceeding
<b>TN #:</b>	248136
<b>Document Title:</b>	CHEERS Comments
<b>Description:</b>	N/A
<b>Filer:</b>	CHEERS Staff
<b>Organization:</b>	CHEERS
<b>Submitter Role:</b>	Applicant
<b>Submission Date:</b>	12/16/2022 3:19:10 PM
<b>Docketed Date:</b>	12/16/2022

December 16, 2022

**RE: CHEERS Preliminary Comments on 22-HERS-02 – Staff Report & Workshop**

The comments below are provided by CHEERS as initial feedback to the workshop presentation, discussion, and corresponding Staff reports. They are intended as preliminary commentary to be followed up with additional support, and likely other ideas, as the OIR process moves forward. CHEERS welcomes the challenging though ultimately productive discussions ahead and reiterates its willingness to work with Staff and industry to achieve the desirable outcomes originally intended of the HERS program.

**HERS Program Objectives**

Russ King thoughtfully summarized the original intention of HERS in his comments submitted on November 3, 2022, Docket 22-HERS-02:

The Whole-House Home Energy Raters program is voluntary and offers efficiency upgrade recommendations to improve a home's energy rating. The HERS program utilizes HERS Providers and HERS Raters. The Field Verification and Diagnostic Testing (FV&DT) program is a mandatory administrative program to verify compliance with the Energy Code and collect compliance data. Both services use HERS Providers and HERS Raters. HERS Providers certify, train, and oversee HERS Raters, who perform the ratings, verifications, and testing.

The HERS Program's original objective was to offer homeowners the ability to evaluate their home's energy efficiency "score" and to provide a way to quantify and incentivize energy savings from energy improvements.

The CEC proposed new measures for the energy code that depended heavily on how well a feature was installed. These new measures required more than just an inspection, it required sophisticated diagnostic testing using complicated and expensive equipment. Once these new measures were introduced, the California Building Officials (CALBO) expressed concern about having the resources and skill set for conducting such tests. It was at this time when the concept of "special inspectors" was proposed. HERS raters were the ideal candidates for this new concept because HERS raters were already trained and certified on the diagnostic tests and associated equipment. As expected, there were concerns regarding consistency, competence, and conflicts of interest which resulted in the "HERS Regulations".

HERS Regulations were developed in conjunction with CEC staff and industry stakeholders, including CBIA and CALBO. Two HERS providers, CHEERS and CalCERTS, developed longstanding programs with no financial assistance from the CEC. Without the HERS providers, the energy code, as written today, could not be enforced.

HERS raters have evolved into a new purpose. They are essentially an extension of the building department and are "special inspectors" for the energy code. Building departments have requested that HERS raters inspect more energy features to free up building inspectors time which is primarily spent on health and safety issues.

## Program Challenges

The primary challenge of the HERS Program is the failure to educate the homeowner of this program and contractors being unwilling to invest in the equipment necessary to perform the required testing.

HERS Raters have established business partnerships with Builders and Contractors which resulted in a conflict of interest:

1. Contractors opted to rely on the Rater to do the initial diagnostic test of the equipment installed rather than the Rater verifying the Contractors diagnostics.
2. The Rater was reluctant to fail a project in fear of losing the Builder/Contractor as a customer leaving the homeowner with a noncompliant system. Moreover, when one Provider identifies a noncompliant Rater and implements disciplinary actions, the noncompliant Rater moves to the other HERS Provider without consequence, exasperating the issue.

There have been examples of Raters and Rater Companies not adhering to the requirements set forth by the CEC however, it is estimated that the percentage of noncompliant Raters are less than 10% of the HERS Industry. Investing in educating the homeowner of the HERS Program and leveraging technology to help standardize the Quality Assurance (QA) processes across the industry will expose noncompliant Raters and ensure the objectives of the HERS Program are realized.

## HERS Program Considerations & Options

CHEERS recognizes there are several opportunities to improve the California HERS and FV&DT Programs and appreciates CEC's efforts to bring forth proposals for public discussion. Given the scope of the proposed changes and CEC Staff's objective to cultivate actionable feedback from the industry, CHEERS has provided some preliminary comments and suggestions for the CEC to consider.

### A. Homeowner Outreach:

To achieve the original objectives of the HERS Program, the CEC might consider funding a multi-year marketing program informing California homeowners of the HERS Program and benefits. Additionally, Utility's might consider offering incentive programs that reduce costs associated with Rater inspections for the homeowner, builder and contractor is worth exploring.

### B. Require Diagnostic Equipment

CEC and the Contractors State License Board (CSLB), might consider mandating HVAC contractors to comply with the 2013 Energy Code requiring contractors to conduct diagnostic testing immediately following installation.

### C. Assignment of Risk and Legal Liability:

*"Staff recommends increasing the scope of training regarding 'building science' and focusing on additional practical skills for **determining the measures are appropriately installed** and comply with the Energy Code. For example, training should be expanded in areas of design and installation of strategies that will better assist raters to **identify the cause of failed FV&DT.**"*

The Raters responsibility is to verify the builder/contractor is compliant with Title 24 regulations. Requiring Raters to identify “cause of failed FV&DT” is beyond the original objective of verification of compliance for Title 24.

The Registry’s objective is to store all Title 24 documents, train Raters and provide quality control measures to ensure Raters adhere to current Energy Code requirements. Raters are not qualified to determine whether a system was installed properly, rather the Rater’s responsibility is to verify the installer’s diagnostics for the system installed. Furthermore, making such a claim subjects the Rater to significant risk and legal liability. As the trainer, this risk extends to the Provider. This kind of liability could easily rise to become an existential concern for both parties.

Clauses assigning liability can also be found in the Addition of Section 10-103.3 to Part 1 of the Building Standards under 5C “Remedy for Flawed Field Verification and Diagnostic Tests”:

***“ii. The FV&DT Administrator is responsible for remedying any flawed field verification and diagnostic tests identified by audit or by any other means.***

*iii. A flawed field verification and diagnostic test is remedied by providing an additional field verification and diagnostic test to the hiring party that corrects the untrue or inaccurate reporting.*

*iv. The FV&DT Administrator may seek reimbursement for the remedy from the FV&DT Technician who performed the flawed field verification and diagnostic test.”*

Holding the Provider responsible for remedying any flawed field verification and diagnostic tests identified by audit or any other means exposes the Provider to unsystematic risk. This is analogous to requiring the CSLB be responsible for any flawed installations by licensed contractors, which is not the case even considering the vast resources available to the State of California.

This same section of the Building Standards includes the following:

***A. FV&DT Administrators shall not accept, store, or disseminate untrue, inaccurate, or incomplete information or information received through actions not conducted in compliance with these regulations, including information related to field verification and diagnostic testing information, field verification and diagnostic test results, or results on a certificate of compliance or certificate of installation documents.***

CHEERS requests the CEC provide guidance on how this could be practically implemented.

#### **D. Moving the FV&DT to Title 24:**

CHEERS understands the CEC’s desire for a more effective FV&DT program within the code cycle. Furthermore, CHEERS supports Raters helping builders, contractors and homeowners be compliant with Title 24 Part 6. However, the proposed changes and associated costs may require Providers to reevaluate long term business viability. Introducing the potential for substantial business model change every three years is a level of uncertainty few, if any, businesses will put investment behind.

## E. Conflict of Interest:

Raters in California have built relationships with contractors and builders over time in a way that has vastly improved their performance. Moreover, builders and contractors rely on Raters to help explain the evolving regulations associated with the Energy Code.

Per [RA2.4.1](#) and [RA2.4.2](#) of the 2019 Building Energy Efficiency Standards, Contractors are required to conduct diagnostic testing following the installation of equipment. Raters are required to verify the results of the diagnostic tests. Contractors have become dependent on Raters to conduct diagnostics as many contractors have not invested in diagnostic equipment. This poses a conflict, when a Rater fails a contractor, the Rater is at risk of the contractor opting to work with a different Rater.

Raters become Rating Companies to offer services to a broader market. However, since Raters are individually certified, CHEERS applauds the CEC's proposals to adequately define a Rater Company and hold them to the same bar as a certified Rater.

Additionally, the CEC proposes a class of contractors that are not required to have a 3<sup>rd</sup> party FV&DT:

*“EXCEPTION to Section 1673(j)(3): California Whole-House Home Energy Raters, who are working as or for a Building Performance Contractor certified under an Energy Commission-approved Building Performance Contractor program as part of a Provider's Rating System as specified in Section 1674(e) of the regulations and in the HERS Technical Manual, **shall not be required to be an independent entity from the person(s) or firm(s) performing the work on a home.**”*

This proposal insures a continuation of the conflict of interest.

Regarding any conflict of interest between the Energy Consultant and the HERS Rater, CHEERS does not see any. Outside California, HERS Raters fulfill both roles.

## F. Training:

The staff report indicates that there exists an inconsistency in the training provided by the two Providers. The training requirements as outlined in the current regulations is quite vague and leaves each Provider to apply their own interpretation and implementation. For example, stating that a Rater must be trained on “building science” could result in a 20 minute or 5 hour long course. Without a clear and concise set of requirements, the training materials provided by the Providers will continue to be inconsistent. This lack of clear and concise requirements also leads to issues for CEC staff that must review and approve the training materials. Currently this review is subjective based on the perspective of whichever staff member is tasked with the review. When materials that were previously approved and have not changed are then found to be non-compliant the next code cycle, this is a clear indicator that there is an underlying issue.

CHEERS recommends that clear and concise training requirements be developed for use by not only the Providers but also by CEC staff in their review. Perhaps the industry might be best served by CEC development of the core materials that the Providers could then use to integrate into their preferred delivery method. CEC staff could look to the EPA's ENERGY STAR Rater

training materials as an example. It would also benefit the goal of consistency for CEC staff to develop the various quizzes and final exam. This would ensure that all Raters are held to the same standard to gain their certification.

CHEERS has engaged new programs to provide compelling training courses for Raters. However, the proposals for new training & QA appear to be in addition to the current mandate, and as written they are all required.

CHEERS recommends the CEC allow options for both the Provider and the Rater. We also recommend that some of those options include CEUs for relevant online training and webinars to help fulfill continuing education requirements for Raters, as is done in so many other professions.

In the Addition of Section 10-103.3 to Part 1 of the Building Standards under iii. "Other mandatory subject areas" (for FV&DT Technician training) include:

*"Basic building science, testing and verification techniques likely to be used in the field, including the principles of heat transfer, building energy feature design and construction practice, including construction quality assurance, **onsite renewable generation**, and 'house as a system' concepts, safety practices relevant to home energy testing and verification procedures and equipment, energy efficiency effects of building site characteristics, types and characteristics of space heating, space cooling, **service hot water, and hard wired lighting systems**, function and proper use of diagnostic devices including but not limited to: duct leakage testing equipment, blower doors, and air flow and pressure measurement devices, and construction types, equipment types, and their associated energy efficiency ramifications."*

Again, while more training is always welcome, several of the subjects mentioned above have either nothing to do with FV&DT or are more associated with the skills of a veteran Whole Home Rater. For this reason, we favor having the ability to offer different levels of Rater training and QA.

#### **G. Amending Naming Conventions:**

CHEERS supports the notion of two levels of Raters. However, the Proposed Regulatory Language includes Analyst, Auditor, Inspector & Rater. CHEERS recommends the Rater name remains as to minimize disruption to the Rater's business. Energy Raters are part of a national climate movement.

#### **H. Add New Ways for Providers to Conduct Quality Assurance:**

CHEERS is eager to find ways to improve QA, and we feel that all the proposals in this section have merit. However, we feel QA requirements should apply differently for Raters that:

1. Are new vs more experienced Raters
2. Have good track records as opposed to multiple QA flags

Additionally, CHEERS sees opportunities for much greater QA efficacy & efficiency using technology. Time-stamped & geo-tagged photos can automatically log arrival and departure

times at the site, pictures documenting primary data inputs can be uploaded, and various data parameters built into the registry can flag abnormalities. Such methods will go a long way to toward increasing the robustness and reliability of FV&DT data, saving a significant amount of time and money for everyone.

Regarding limiting the number of jobs allowed daily, we feel this is an arbitrary exercise which seems better suited to be part of the technology-driven “flags” meriting further investigation and/or QA, as opposed to hard and fast regulation.

Regarding the requirement for every Rater to pass an In-Lab simulation annually, in addition to being incredibly time intensive and financially costly to the Rater, we feel this is overly onerous, and unnecessary for veteran Raters.

**I. Costs:**

Total costs of the proposed changes to a Provider are estimated to be up to \$1.25M initially, and roughly up to \$5M annually. Approximately two thirds of these annual cost estimates are due to the assignment of risk and legal liability CEC has proposed to Providers and Raters. Without CEC identified sources of funding, these costs would largely be shouldered by California’s HERS Raters.