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*Comment Received From: Russell King, M.E.
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**CaICERTS and CHEERS combined comments on 2022 Express
Terms**

Additional submitted attachment is included below.



March 9, 2021

To: California Energy Resources Conservation and Development Commission
From: CalCERTS and CHEERS, CA HERS Providers
Re: Combined comments on CEC proposed Express Terms for the 2022 Energy Code, Docket # 19-BSTD-03

We appreciate this opportunity to provide feedback to the California Energy Commission. For those who may not know, CalCERTS and CHEERS are the only two approved California HERS providers in the state. We train, certify, and provide quality assurance on all HERS Raters in the state. HERS Raters are the third-party special inspectors that provide field verification and diagnostic testing to assist building departments in the enforcement of the Title-24, part 6, Energy Codes. We have teamed up to address specific proposed changes for the 2022 code language that affect HERS raters, HERS providers and the HERS industry in general. Our comments stem from our mutual goals of:

1. Improved compliance with the energy code
2. Simplified and streamlined protocols and procedures
3. Reasonable alternatives to compliance options
4. Enforceability of the requirements

We request to be directly involved with the development of the details of any new verification protocols and any regulations that directly affect us. We appreciate the hard work and dedication by CEC staff and consultants and their roles in meeting the above goals.

JA2.1.1 – Counties and Cities with Climate Zone Designation

The changes in this section imply the CEC will no longer publish a list of California Cities with climate zone designations by zip code. Our registries and users explicitly rely on such a list to automatically designate the climate zone based on the address of the project. Not having this feature would likely require users to look up their climate zone and enter it manually, increasing the likelihood of incorrect entries. Relying on building departments to decide which CZ a project should be in when a zip code falls into more than one CZ creates confusion and inconsistencies. Furthermore, the referenced online tool does not align well with the satellite imagery. The boundaries in this tool bisects cities, neighborhoods and even single residences leaving one to wonder which CZ they belong in. See image, below.



We recommend that the zip code list be maintained and that climate zones be aligned with zip code boundaries to eliminate anywhere that a single zip code falls into more than one climate zone.

JA7.4.8 – Commission Oversight

This new section is redundant to existing language. Other than the specific time requirements for compliance, the language in the second paragraph of JA7.4.1 adequately covers these requirements. Access to documents is a function and feature of both registries and a requirement for approval.

It is unclear what the purpose is of the “30 days of receipt of request” language indicates, since CEC staff’s access to documents is already a requirement under JA7.4.1. If a time frame is necessary, the language should be clarified as to its purpose and added to JA7.4.1. rather than adding this new section.

JA7.7.1.3 Image File Format Specification for Document Registration

The specification of a “flat image file” restricts the providers to comply with a technology that is no longer feasible. Flattening a file is not supported by many PDF creating tools, including Adobe. The intent of this section can be met using other technologies that are just as safe. We propose the following edits to this section:

“Image files transmitted to a Data Registry that originate from an Energy Commission-managed compliance Report Generator or approved compliance software as part of document registration procedures shall be non-editable ~~“flat” image files~~ in PDF format. Registered compliance document images produced by a Data Registry shall be non-editable ~~“flat” image files~~ in PDF format. The PDF image of a registered compliance document shall not be recreated from data when a user subsequently wishes to view a copy of the registered document or download a PDF file copy of the document. Thus, the ~~image file~~ shall be generated only once, and stored in the Data Registry as a “non-editable” ~~image file~~.”

JA7.8.2.6 – Disclosure of Contractual Agreements with EDDS

The added language requiring approval of every EDDS that an API interfaces with is burdensome and will cause unnecessary review delays. As long as all APIs and EDDS are disclosed, we see no reason for them to be individually approved. As written, the new language will further suppress innovation in a market looking to integrate technologies other industries incorporated as standard practice 15+ years ago. CEC staff have already been overly burdened with lengthy review requirements. Adding this additional requirement, and extending the associated review time, disincentivizes the adoption of new technologies in the HERS market.

We recommend removing this language specifically:

“Where a Registration Provider makes use of an Application Programming Interface (API), each EDDS that the API interfaces with must be approved.”

JA11.7 – Certificates of Availability (PV Systems)

The new language in this section requires a solar assessment report that uses satellite or drone images. It states that images must be “attached” to the report and that the Certificate of Installation (CF2R) “shall be available on the building site for inspections”. This implies the use of hard copy documentation. This is inconsistent with the goal of an all-electronic documenting and reporting process that the HERS providers have been working hard to facilitate. Also, the specific use of photos needs to be carefully thought out because it can have a significant impact on how the HERS registries maintain and store these documents. We request that CEC staff work with us to further develop this section.

Furthermore, we would like to strongly reiterate our request from last code cycle that PV system verification be the responsibility of HERS Raters, rather than city and county building inspectors, as recommended by the original CASE study reports and broadly supported by interested parties. We are hearing from raters and building department personnel that since the implementation of the 2019 code, correct installation of PV systems is not being consistently enforced or documented. This is due to the complexity of the installation requirements, incomplete documentation by installers and inadequate training of building department staff. HERS raters are trained and certified to perform field verification on a variety of complex systems, including PV systems. It would be easy to enhance our training to ensure that the people verifying PV systems are properly trained and certified. This would improve the real benefits of this extremely important requirement of the CA Energy Code.

Furthermore, we have hard data showing that CF2Rs for HERS verified measures are much more likely to be completed than CF2Rs for non-HERS measures.

RA3.1.4.2.2 - Nominal Air Handler Airflow

The new language of section (d) provides for the use of the indoor units’ nominal capacity to determine target airflows. We agree with this approach; however, we want to make sure that CEC staff is aware that there are units that do not meet the minimum requirements under any

design scenario. We recommend that CEC staff notify manufactures that units that do not meet these requirements should not be installed and put some form of certification or listing in place that prevents these units from being installed or even sold in CA. Otherwise, raters will be put in the very difficult position of having to fail very large multi-family projects because units were installed that have no chance of meeting the 350 cfm/ton requirements.

RA3.1.4.7 - Verification of Air Filter Pressure Drop Rating

We cannot find where this is referenced in the code language or what triggers this specific protocol. Please clarify when and why this protocol might be used. It is a complicated and time-consuming verification to perform. If it is to be applied broadly to many differently types of systems, it may be overly burdensome for Raters and installers to perform.

NA 7.5.3.2.2 (duct leakage testing in nonresidential buildings)

This new section details duct leakage testing according to a SMACNA manual. It is not clear when this specific protocol is triggered. Please clarify when and why this protocol might be used. The second paragraph regarding percentages to be tested appears to establish a sampling protocol, but the language is vague and subject to liberal interpretation that would allow systems to pass that probably should not.

End of comments.

Thank you for the opportunity to comment and for your thoughtful consideration of our suggestions.

Signed,



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