



March 6, 2015

CALIFORNIA ENERGY COMMISSION
Dockets Office
1516 Ninth Street, MS-4
Sacramento, CA 95814

California Energy Commission

DOCKETED

15-BSTD-01

TN # 75324

MAR 06 2015

Attention: Docket No. 15-BSTD-01

Re: Residential Appendix Section RA4.4.20 Solar Water Heating Systems

In regards to the 45-day language in the above referenced Section, the International Association of Plumbing and Mechanical Officials (IAPMO) believes that the requirement for certification by a single private entity (the Solar Rating and Certification Corporation, or SRCC), is contrary to accepted procedure for establishing lawful and enforceable product certification requirements. There are many capable, accredited conformity assessment bodies in California and throughout the nation offering certification services to the marketplace. IAPMO Research and Testing Inc., a part of the IAPMO Group, is an accredited certifier of solar water-heating systems and collectors recognized by the California Solar Initiative – Thermal Program. IAPMO requests revision of any language wherein the state specifically names any one entity or otherwise designates a “sole source,” in order to eliminate any potential anti-competitive effects.

IAPMO is aware of the language change proposed by staff and referenced in the document entitled “Staff Intended Changes To Address Concerns With 45-Day Language” dated February 24, 2015 on page 4 of 6 under the bullet called out as Section 150.0(n)3, however we do not believe that by merely changing “testing agency” to “listing agency, while retaining the specific mention of a private entity, our concern outlined above is adequately addressed.

California Government Code Section 65850.5 (f)(2) reads as follows:

“Solar energy systems for heating water in single family residences and solar collectors used for heating water in commercial or swimming pool applications shall be certified by an accredited listing agency as defined in the California Plumbing and Mechanical Codes.”

California Plumbing Code, and California Mechanical Code Section 214 both read as follows (in part):

Listing Agency. *An agency accredited by an independent and authoritative conformity assessment body to operate a material and product listing and labeling (certification) system and that is accepted by the Authority Having Jurisdiction, which is in the business of listing or labeling. The system includes initial and ongoing product testing, a periodic inspection on current production of listed (certified) products, and that makes available a published report of such listing in which specific information is included that the material or product conforms to applicable standards and found safe for use in a specific manner.*

Further, the designations “OG-100” and “OG-300” are obsolete. While at this writing SRCC has not secured final ANSI recognition for its draft Standard 100 for solar heating collectors, or Standard 300 for small residential solar domestic water heating systems, the Standard 100 and Standard 300 nomenclature has replaced the “OG” designations.

Finally, the “ratings” referred to regarding both Standard 100 and 300 are not a part of either standard; rather they are internal SRCC procedures. IAPMO has recently published Draft IAPMO/ANSI Standard S1001.4 Energy Production Rating of Solar Heating Collectors for public comment prior to its finalization in the near future. When published in early 2015, this standard will allow for solar collector ratings to be produced by any accredited listing agency. Also, publication of Draft IAPMO/ANSI Standard S1001.2 Performance Rating of Solar Water Heating Systems is nearing; this will allow for ratings of residential solar domestic water heating systems to be produced by any accredited listing agency.

Accordingly, IAPMO recommends that RA4.4.20 should be amended to read:

RA4.4.20 Solar Water Heating Systems

Solar water-heating systems and/or collectors shall be certified and rated by an accredited listing agency as defined in the California Plumbing and Mechanical Codes ~~the Solar Rating and Certification Corporation (SRCC)~~ or by a listing ~~testing~~ agency approved by the Executive Director.

To use collectors with the SRCC Standard ~~OG-100 certification and rating~~, the installed system shall meet the following eligibility criteria:

- (a) Include all of the features modeled and generated in the Commission approved solar savings fraction calculation.
- (b) The collectors shall be installed according to manufacturer’s instructions.
- (c) The collectors shall be located in a position that is not shaded by adjacent buildings or trees between 9:00 AM and 3:00 PM (solar time) on December 21.

To use a solar water-heating system with the SRCC Standard ~~OG-300 certification and rating~~, the installed system shall meet the following eligibility criteria:

- (a) The collectors shall face within 35 degrees of south and be tilted at a slope of at least 3:12
- (b) The system shall be installed in the exact configuration for which it was rated. The system shall have the same collectors, pumps, controls, storage tank and backup water heater fuel type as the rated condition.
- (c) The system shall be installed according to manufacturer’s instructions.
- (d) The collectors shall be located in a position that is not shaded by adjacent buildings or trees between 9:00 AM and 3:00 PM (solar time) on December 21.

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In addition, Part 6, Section 150.0 (n) 3 should be amended to read:

Solar water-heating systems and collectors shall be certified and rated by an accredited listing agency as defined in the California Plumbing and Mechanical Codes ~~the Solar Rating and Certification Corporation (SRCC)~~ or by a listing~~testing~~ agency approved by the Executive Director.

Thank you for the opportunity to provide these comments. Please contact me if there are questions regarding these recommendations.

Best regards,

A handwritten signature in black ink, appearing to be 'Les Nelson', with a stylized, cursive-like script.

Les Nelson
Vice President, Solar Heating and Cooling Programs