

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**



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Order Instituting Rulemaking Regarding Policies,
Procedures and Rules for the California Solar
Initiative, the Self-Generation Incentive Program
and Other Distributed Generation Issues.

Rulemaking 08-03-008
(Filed March 13, 2008)

**PETITION OF ECHOFIRST INC. FOR MODIFICATION OF D.10-01-022
ESTABLISHING THE CALIFORNIA SOLAR INITIATIVE THERMAL
PROGRAM TO PROVIDE SOLAR WATER HEATING INCENTIVES**

Donald C. Liddell
DOUGLASS & LIDDELL
2928 2nd Avenue
San Diego, California 92103
Telephone: (619) 993-9096
Facsimile: (619) 296-4662
Email: liddell@energyattorney.com

Counsel for
ECHOFIRST INC.

July 18, 2011

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking Regarding Policies,
Procedures and Rules for the California Solar Initiative,
the Self-Generation Incentive Program and Other
Distributed Generation Issues.

Rulemaking 08-03-008
(Filed March 13, 2008)

**PETITION OF ECHOFIRST INC. FOR MODIFICATION OF D.10-01-022
ESTABLISHING THE CALIFORNIA SOLAR INITIATIVE THERMAL
PROGRAM TO PROVIDE SOLAR WATER HEATING INCENTIVES**

Pursuant to Rule 16.4 of the California Public Utilities Commission’s (“Commission’s”) Rules of Practice and Procedure (“Rules”), EchoFirst Inc.^{TM1} (“EchoFirst”) respectfully submits this Petition for Modification (“Petition”) of Decision (“D.”) 10-01-022 entitled Decision Establishing the California Solar Initiative thermal Program to Provide Solar Water Heating Incentives (“Decision”).

I. INTRODUCTION.

As explained here and elsewhere in the Petition and the attached Declarations, this Petition was filed in order to comply with Rule 16.4(e) of the Commission’s Rules of Practice and Procedure (“Rules”). The reason that this Petition was not filed earlier is because there was absolutely no indication that it might be needed. EchoFirst would have promptly filed a Motion for Party Status at that time but for the sudden material change in what appeared to EchoFirst and other Program participants to be a well settled Commission policy.

The Decision should be modified to implement Assembly Bill (AB) 1470, the “Solar Water Heating and Efficiency Act of 2007” (the “Act”)² to clarify language that the Commission’s Energy Division staff (“Staff”) has interpreted as an unduly restrictive equipment eligibility requirement applicable to solar hot water heaters (“SWHs”). As explained in this

¹ EchoFirstTM is a registered trademark.

² Chapter 536, Statutes of 2007, codified as California Public Utilities Code § 2860-2867.

Petition, interpretation of the requirement in the Decision of the phrase "*shall have SRCC OG-300 certification*" is having an unintended consequence of excluding, or indefinitely delaying, participation in the CSI Thermal Program ("Program") by EchoFirst, and other similarly situated prospective Program participants, and it will likely continue to do so unless it is modified as requested in this Petition. Staff interprets "SRCC OG-300 certification" to mean that only the Solar Rating and Certification Corporation ("SRCC") may certify equipment as meeting the SRCC OG-300 standard, entitled "Operating Guidelines and Minimum Standards for Certifying Solar Water Heating Systems."³ EchoFirst agrees that all Program-eligible equipment should be certified to a single standard, the SRCC OG-300 standard, but requests that any approved Nationally Recognized Testing Laboratory ("NRTL") or American National Standards Institute ("ANSI") accredited laboratory that certifies solar energy products, such as the International Association of Plumbing and Mechanical Officials ("IAPMO"), be considered a qualified certifying body allowed to certify to the SRCC OG-300 standard, much the same way as ETL⁴ has authority to certify to Underwriters Laboratories, Inc. standards. A competitive market for certification services should provide (i) stability to the Program, (ii) more timely certifications that are critical to an emerging industry, and (iii) greater benefits to California ratepayers.

As described in detail in the Declaration of Richard Reed, attached to this Petition as Attachment 1, EchoFirst has dedicated substantial resources to prepare for active participation in the Program thus far on the reasonable good faith assumption that the Commission would not deliberately confer monopoly provider status on SRCC for certification of compliance with OG-300. Rather, EchoFirst, along with IAPMO and others, have presumed applicability of the standard solar industry practice of allowing any qualified certifying body to certify compliance with standards promulgated by other bodies that have developed standards of general application, such as SRCC OG-300. Such an intuitively reasonable interpretation should have the practical effect of assuring reliability, durability, safety, installation, performance, operation and maintenance of SWH systems, and should therefore be permitted as part of the Program.

This Petition could not have been filed within one year of the effective date of the Decision (January 21, 2010), and should therefore be deemed filed timely in accordance with

³ For purposes of this Petition, the same principles discussed herein apply to the related OG-100 Standard.

⁴ "ETL" was originally a trademark of ETL Testing Laboratories, and now is a trademark of Intertek Testing Services.

Section 16.4(d) of the Rules because the need to modify the Decision only became apparent upon recent discovery of an unduly restrictive interpretation of the Act by the Staff.

II. THE COMMISSION SHOULD DEEM THIS PETITION TIMELY FILED BECAUSE THE NEED FOR MODIFICATION OF D.10-01-022 ONLY BECAME EVIDENT VERY RECENTLY.

EchoFirst did not become a party to this proceeding earlier given that there was absolutely no hint whatsoever that participating actively, and incurring such a considerable expense, might be needed. The sudden abrupt reversal of Commission policy by the Energy Division compelled EchoFirst to file this Petition now in order to allow them the opportunity for the Commission to correct an arbitrary and unduly restrictive limit on EchoFirst and other participants in the Program in a procedurally correct manner, consistent with Rule 16.4(e) of the Commissions Rules.

Since the Decision was issued on January 21 2010,⁵ the Staff held a workshop and the Program Administrators and stakeholders published a final version of the “California Solar Initiative-Thermal Program Handbook” (“Handbook”).⁶ At no time during the lengthy process of implementing the Decision by producing the Handbook was there ever any suggestion that SRCC OG-300 (and OG-100) standards would be interpreted to mean that SRCC could be the only certifying body allowed to “certify” SWH systems such as those manufactured by EchoFirst. Nothing in: (a) the legislative history of the Act⁷, (b) the comments filed by parties on the Proposed Decision that preceded the Decision⁸, (c) the Handbook development process⁹ or (d) EchoFirst’s communications with Staff and the Program Administrators gave EchoFirst any reason to believe that this Petition would be necessary.

⁵ An extension of time to comply with certain Ordering Paragraphs in the Decision was allowed by an *Administrative Law Judge’s Ruling Granting Extension Requests for CSI Thermal Program*, issued March 13, 2010.

⁶ The entire process of implementing the Act is detailed on the Commission’s web site at: <http://www.cpuc.ca.gov/puc/energy/solar/swh.htm>

⁷ AB 1470 was amended seven times and was the subject of ten Committee and Floor analyses, but there is no mention of any distinction being drawn in the legislative history to help determine the intent of the legislature in enacting the Act. *See also*, May 23, 2011 Letter from Assembly member Jared Huffman to Commission President, Michael Peevey, attached as Exhibit A to Attachment 2 to this Petition.

⁸ A Proposed Decision was issued on November 5, 2009, and Opening Comments and Reply Comments were filed on November 25, 2009 and December 30, 2009, respectively.

⁹ The Handbook became effective by the Commission’s approval of Advice Letters 3102-G/3637-E and 31020G-A and 3637-E-A submitted by PG&E on behalf of the Program Administrators on May 5, 2010.

As described in detail in the Declaration of Karen Dzienkowski, attached as Attachment 2 to this Petition, in a meeting at the Commission on January 7, 2011, Staff stated that the Commission's Law Department had determined that neither the Act nor the Decision required modification to allow the IAPMO OG-300 product listing and that Staff would proceed with diligence and good faith to work with the Program Administrators and recognize the listing once it had determined that it was in conformance with the SRCC OG-300 standard. EchoFirst provided to Staff, under a nondisclosure agreement, detailed computer modeling results to allow Staff to compare the IAPMO product listing with the OG-300 standard. EchoFirst also provided Staff with contact information for the independent consultant who performed similar investigation and review for Arizona utilities. On April 4, 2011, nearly six months after EchoFirst's initial requests for clarification, Staff indicated that this Petition would be needed for the Program to recognize IAPMO certifications, reversing its earlier position that modification of the Program was not necessary.

III. THE COMMISSION SHOULD DIRECT THE STAFF AND THE PROGRAM ADMINISTRATORS TO ACCEPT CERTIFICATION OF SRCC OG-300 COMPLIANCE BY ANY QUALIFIED CERTIFICATION BODY.

California Public Utilities Code § 2864 requires that the Commission, in consultation with the California Energy Commission ("CEC"), shall establish eligibility criteria for SWH systems receiving customer-funded incentives. Specifically relevant to this Petition, Section 2864 states: "The criteria should specify and include all of the following: (1) Design, installation, and energy output or displacement standards. *To be eligible for rebate funding, a residential solar water heating system shall, at a minimum, have a SRCC OG-300 Solar Water Heating System Certification* [Emphasis added]". Section 2864 is unfortunately ambiguous in its use of the terms "standard" and "certification." Whether OG-300 is applied to a SWH system by SRCC or another body with equal or greater standing is not addressed in Section 2864 or elsewhere in the Act. There is, however, simply no valid public policy reason to allow ambiguity in the wording of the Act to be interpreted to confer monopoly status on SRCC. The following three compelling points support use of multiple certifying bodies:

First, Assembly Member Jared Huffman, author of AB 1470 which gave rise to the Act and the Decision, makes clear in a letter to Commissioner Peevey that he intended the SWH

eligibility requirements to apply to the SRCC standard and not the SRCC entity, and that he never intended to sole-source certification when drafting AB 1470¹⁰.

Second, the United States Environmental Protection Agency (“EPA”) has recognized IAPMO for the third-party certification of SWHs, which must be certified to the SRCC OG-300 standard, to the ENERGY STAR[®] product labeling system¹¹. IAPMO currently certifies the safety, reliability and performance of SWHs. Recognizing IAPMO’s qualification to certify to the SRCC OG-300 standard allows manufacturers to also certify the energy-saving capabilities of their ENERGY STAR[®] products through IAPMO.

Third, the Arizona Corporation Commission (“ACC”) on June 27, 2011 approved solar water heaters certified to SRCC OG-300 by NRTL or ANSI accredited certifying organizations to participate in the Arizona Public Service Company’s Distributed Energy Administration Plan¹². The Salt River Project Agricultural Improvement and Power District, in administration of its Earthwise[™] Residential Solar Energy Program, also recognizes IAPMO certification of SWHs to the SRCC OG-300 standard.¹³

The unintended consequence of Staff’s recent unduly restrictive interpretation of the Act is made abundantly clear by posing the question: What would happen to the program if SRCC were to cease doing business? Multiple certifying bodies are required to accommodate the SWH industry’s growth and development. This logical outcome is simply a matter of distinguishing standards (*e.g.* OG-300) from certification bodies (*e.g.* SRCC/IAPMO). SWH manufacturers should have the latitude to decide whether to seek certification from IAPMO, the SRCC, or any other qualified certifying body. This is the uniform industry practice in all major consumer product categories, including Solar PV, where UL, ETL, and others certify systems to a single uniform standard (UL 1703 for modules and UL 1741 for inverters). Multiple certification pathways to market have served the PV industry very well while continuing to ensure safety, quality and performance.

¹⁰ See, May 23, 2011 Letter from Assembly member Jared Huffman to Commission President, Michael Peevey, attached as Exhibit A to Attachment 2 to this Petition.

¹¹ See, April 12, 2011 email message from EPA to IAPMO, and attached press release attached as Exhibit B to Attachment 2 to this Petition.

¹² See, June 27, 2011 Arizona Corporation Commission Decision 72432, Dockets E-1345A-10-0166 & E-01345A-10-0262, attached as Exhibit C to Attachment 2 to this Petition.

¹³ See, May 17, 2011, SRP EARTHWISE[™] Residential Solar Water Heater Program – Program Requirements, attached as Exhibit D to Attachment 2 to this Petition.

IV. ECHOFIRST RECOMMENDS MODIFICATIONS TO D.10-01-022, AS SET FORTH BELOW.

A. Amendment to the Text of the Decision:

The text of the Decision should be modified as follows:

“Another key issue parties raise is whether we should offer incentives to non-SWH solar thermal systems, or combination systems that are not currently SRCC certified, and whether we should consider paying these systems on a performance basis based on actual system output over a longer time period. We agree with CALSEIA and PG&E that our initial focus should be providing incentives for SWH systems that have SRCC OG-100 and OG-300 certification rendered by a qualified certifying body. Indeed, for the portion of the program funded by AB 1470, the statute explicitly requires residential systems to have SRCC OG-300 certification and multifamily residential, commercial, and industrial systems to have SRCC OG-100 certification by a qualified certifying body. Therefore, we will authorize SWH incentives only for electric- and gas-displacing SWH systems that have SRCC certification rendered by a qualified certifying body.” (p. 27).

“Regarding certification requirements, we reiterate that we cannot deviate from the statute’s requirement that all systems have either OG-300 or OG-100 certification rendered by a qualified certifying body to be eligible for incentives funded by the gas-displacing portion of CSI Thermal.” (p. 75).

B. Amendment to Finding of Fact Number 16:

The Findings of Fact Should be modified as follows:

“Sections 2864 and 2865 establish criteria for SWH systems receiving SWH incentives, including SRCC certification rendered by a qualified certifying body, warranty, metering and installation requirements and conditions involving siting, performance, energy efficiency, and rating standards.” (p. 78).

C. Amendment to Conclusion of Law Number 5:

The Conclusions of Law should be modified as follows:

“The requirements of Sections 2864 and 2865, including OG-300 or OG-100 rendered by a qualified certifying body, should be incorporated into the Program Handbook and apply to all systems, both gas- and electric-displacing.” (p. 79).

V. **CONCLUSION**

For the reasons stated herein, EchoFirst respectfully requests that the Commission grant this Petition and modify D.10-01-022 as set forth above as expeditiously as possible.

Respectfully submitted,



Donald C. Liddell
DOUGLASS & LIDDELL
2928 2nd Avenue
San Diego, California 92103
Telephone: (619) 993-9096
Facsimile: (619) 296-4662
Email: liddell@energyattorney.com

Counsel for
ECHOFIRST INC.

July 18, 2011

ATTACHMENT “1”

ATTACHMENT “1”

DECLARATION OF RICHARD REED

1. My name is Richard Reed. I am the President of SunEarth, Inc., (“SunEarth”) a leading American manufacturer of solar thermal collectors and packaged solar water heating (“SWH”) systems since 1978. SunEarth has significant business interests in California and has worked closely over the years with a number of prominent distributors and contractors in California. My business address is:

SunEarth, Inc.
8425 Almeria Avenue
Fontana, CA 92335

2. I am either a current or a former Director of the California Solar Energy Industries Association (“CALSEIA”), the Solar Energy Industries Association (“SEIA”), the Solar Rating and Certification Corporation (“SRCC”), the Hawaii Solar Energy Association (“HSEA”), and the Hawaii Renewable Energy Alliance (“HREA”). I hold degrees from Claremont McKenna College, Claremont, California and the University of Hawaii, Manoa.

3. The purpose of this declaration is to provide information in support of the Petition of EchofirstTM Inc. for Modification of D.10-01-022 establishing the California Solar Initiative Thermal Program to provide SWH incentives.

4. In my capacity as President of SunEarth, I am actively involved in developing and marketing new solar thermal technologies that provide greater benefits to SunEarth customers. I provide strategic and technical support to SEIA, CALSEIA, SRCC and HREA to support their efforts to deploy new solar thermal projects, supporting their business objectives as well as SunEarth’s.

5. SunEarth fully supports the recognition of International Association of Plumbing and Mechanical Officials (“IAPMO”), and other qualified certifying bodies, such as a Nationally Recognized Testing Laboratory (“NRTL”) or an American National Standards Institute (“ANSI”) accredited laboratory, as an independent third-party certifying body for SRCC Standard OG-300. I have made SunEarth’s position clear on this matter in previous correspondence with the SRCC’s Executive Director and Board Chair, as well as other agencies at both the state and federal level.

6. SunEarth products and systems are presently certified (or listed) by both IAPMO and the Solar Rating and Certification Corporation (“SRCC”). SunEarth is listed in accordance with the Uniform Solar Energy Code (“USEC”) promulgated by IAPMO and also SRCC Standards OG-100 and OG-300. I have many decades of experience with both listing agencies.

7. SunEarth has one of the most extensive, if not the most extensive, set of SRCC OG-300 listings in the industry. In recent years the protracted time it has taken the SRCC to make even the simplest additions or changes to our existing listings has hurt our national business interests. The issuance of new listings has taken up to half a year.

8. It is my view that multiple listing agencies are standard industry practice in the solar industry and are required to accommodate the industry’s growth and development. I strongly oppose, however, multiple standards. This is simply a matter of separating standards (OG-300) from certification agencies (SRCC/IAPMO). SWH manufacturers should have the latitude to decide whether to list with IAPMO, the SRCC or both. This is the business model in all major consumer product categories including Solar PV where UL, ETL, CSA and TUV all list to a single uniform standard (UL 1703 on modules and UL 1741 on inverters). Multiple

certification pathways to market have served the PV industry very well while continuing to ensure safety, quality and performance.

9. IAPMO has decades of experience with the rigorous ANSI accreditation process that requires evaluation and certification to relevant third-party standards, such as OG-300. I can think of no administrative or technical reason why the Commission should not have complete confidence in the SRCC Standard OG-300 as certified by IAPMO.

I hereby affirm, under penalty of perjury, that the information provided in this declaration is true and correct to the best of my knowledge and belief,

Dated this 18th day of July, 2011 at Fontana, California.



Richard Reed

ATTACHMENT “2”

ATTACHMENT “2”

DECLARATION OF KAREN DZIENKOWSKI

1. My name is Karen Dzienkowski. I am the Director of Business Development and Advocacy of EchoFirst, Inc. (“EchoFirst”), a leading American manufacturer of solar thermal collectors and packaged systems. My business address is:

EchoFirst, Inc.
34760 Campus Drive
Fremont, CA 94555

2. A true and correct copy of a letter, May 23, 2011 Letter from Assembly Member Jared Huffman to Commission President, Michael Peevey, was written at my request and is attached as Exhibit A to this declaration. In Assemblymember Huffmann’s letter to Commission President Peevey he states that he intended SWH eligibility requirements to apply to the SRCC standard and not the SRCC entity, and that he never intended to sole-source certification when drafting AB 1470.

3. I personally attended a meeting at the Commission on January 7, 2011, at which Energy Division Staff stated that the Commission’s Law Department had determined that neither the Act nor the Decision required modification to allow the IAPMO OG-300 product listing and that the Staff would proceed with diligence and good faith to work with the Program Administrators to recognize the listing once it had determined that it was in conformance with the SRCC OG-300 standard. Josh Plaisted, Chief Technical Officer at EchoFirst, provided to Staff under a nondisclosure agreement detailed computer modeling results to allow Staff to compare the IAPMO product listing with the OG-300 standard. Mr. Plaisted also provided Staff

with contact information for the independent consultant who performed similar investigation and review for Arizona utilities. I am aware that on April 4, 2011, nearly six months after EchoFirst's initial requests for clarification, Staff indicated that a Petition for Modification would be needed for the Program to recognize IAPMO certifications, reversing its earlier position that modification of the Solar Heating Program was not necessary.

4. A true and correct copy of an April 12, 2011 email message from EPA to IAPMO and attached press release, attached as Exhibit B to this declaration, was sent by the United States Environmental Protection Agency ("EPA"), and recognized IAPMO for the third-party certification of SWHs, which must be certified to the SRCC OG-300 standard, to participate in the ENERGY STAR® product labeling system IAPMO currently certifies the safety, reliability and performance of SWHs. The letter states that IAPMO's qualification to certify to the SRCC OG-300 standard allows manufacturers to also certify the energy-saving capabilities of their ENERGY STAR® products through IAPMO.

5. A true and correct copy of the Arizona Corporation Commission Decision issued on June 27, 2011 is attached as Exhibit C approved solar water heaters certified to SRCC OG-300 by NRTL or ANSI accredited certifying organizations to participate in the Arizona Public Service Company's Distributed Energy Administration Plan.

6. A true and correct copy of the the Salt River Project Agricultural Improvement and Power District, in administration of its Earthwise™ Residential Solar Energy Program, attached as Exhibit D, also recognizes IAPMO certification of SWHs to the SRCC OG-300 standard.

I hereby affirm, under penalty of perjury, that the information provided in this declaration is true and correct to the best of my knowledge and belief.

Dated this 18th day of July, 2011 at Fontana, California.

A handwritten signature in black ink, appearing to read "Karen Dzienkowski", written over a horizontal line.

Karen Dzienkowski

EXHIBIT A

STATE CAPITOL
P.O. BOX 942849
SACRAMENTO, CA 94249-0006
(916) 319-2006
FAX (916) 319-2106

DISTRICT OFFICE
3501 CIVIC CENTER DRIVE, SUITE 412
SAN RAFAEL, CA 94903
(415) 479-4920
FAX (415) 479-2123

<http://democrats.assembly.ca.gov/members/a06>

Assembly California Legislature



JARED HUFFMAN
ASSEMBLYMEMBER, SIXTH DISTRICT

COMMITTEES
CHAIR, WATER, PARKS AND
WILDLIFE
BUDGET
NATURAL RESOURCES
UTILITIES AND COMMERCE

BUDGET SUBCOMMITTEE NO.3
ON RESOURCES

May 23, 2011

Michael R. Peevey, President
California Public Utilities Commission
505 Van Ness Ave
San Francisco, CA 94102

RE: Commission Decision (D.) 10-01-022 and Clarification of Author's Intent – AB 1470 (2007)

Dear President Peevey:

It has come to my attention that there has been some confusion regarding a provision of the Solar Water Heating and Efficiency Act of 2007 and whether it requires all solar water heaters to be Solar Rating and Certification Corporation (SRCC) certified.

The specific code section in question is Public Utilities Code section 2864, which reads:

“To be eligible for rebate funding, a residential solar water heating system shall, at a minimum, have a SRCC OG-300 Solar Water Heating System Certification. Solar collectors used in systems for multifamily residential, commercial, or industrial water heating shall, at a minimum, have a SRCC OG-100 Solar Water Heating System Certification.”

As the author of AB 1470 (Chapter 536, Statutes of 2007), I would like to clarify that the section is intended to state it is the SRCC standard, not SRCC as a certifying entity, that is required for solar water heating system eligibility. Entities other than SRCC are authorized to do the certification to ensure a solar water heating unit meets the OG-300 or OG-100 standard. I never intended to sole-source solar water heating certification when drafting AB 1470. “*SRCC OG-300 Solar Water Heating System Certification*” means all solar water heating systems shall be certified to SRCC OG-300 (or OG-100, respectively).

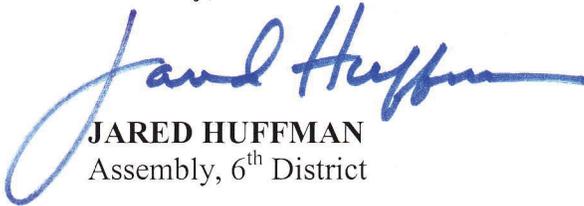
It's also important to note that regardless of the entity certifying a solar water heating unit, all certification entities should produce *the same test results* when testing a solar water heater for eligibility against the SRCC OG-300 or OG-100 standard.

Letter to Michael Peevey
May 23, 2011
Page 2

Thank you for taking the time to rectify any misunderstanding of the law as it was intended to be construed as it relates to Commission Decision 10-01-022.

Lastly, I also note the lack of marketing of the CSI Thermal program to the general market, and the low-income program has not been fully initiated. I am concerned about the progress of the program. I would very much appreciate follow up information on the timeline for ensuring that this program is well publicized.

Sincerely,



JARED HUFFMAN
Assembly, 6th District

cc: Administrative Law Judge Dorothy Duda
Bernadette Del Chiaro, Environment California

EXHIBIT B

Subject: FW: EPA recognition to certify solar water heaters for ENERGY STAR
Date: Tuesday, April 12, 2011 3:05:04 PM PT
From: Shirley Dewi
To: Anish Desai

-----Original Message-----

From: Monahan.Eamon@epamail.epa.gov [<mailto:Monahan.Eamon@epamail.epa.gov>]

Sent: Friday, March 18, 2011 10:10 AM

To: Shirley Dewi

Cc: Jin Luo; Anish Desai; ENERGYSTARVerificationProgram; jforgotson@icfi.com; Kennerly, James; Vokes.Kathleen@epamail.epa.gov

Subject: EPA recognition to certify solar water heaters for ENERGY STAR

Shirley,

Thank you for the information you provided yesterday regarding IAPMO's experience with solar powered products in general and the OG-300 requirements in particular. With this information, and the fact that your current ANSI Guide 65 scope includes "solar energy products," EPA is pleased to grant IAPMO recognition to certify solar water heaters for the ENERGY STAR program. I know that you are participating in ANSI's ENERGY STAR pilot program, so please be sure to request that solar water heaters be included in their assessment.

I understand that the current solar water heater spec sites SRCC certification. Be assured that this will be revised in the next spec update, and that EPA never intended to sole-source water heater certification when the Agency implemented its third party certification procedures. Solar water heaters will be added to the list of products IAPMO is recognized to certify on the EPA website, but that update may take a few days. In the meantime, please use this email for clients or anyone else that inquires about your recognition status.

Thank you for your participation in the program. Talk to you soon.

Eamon Monahan
Environmental Protection Agency
ENERGY STAR Program
202-343-9589
monahan.eamon@epa.gov

FOR IMMEDIATE RELEASE

Contact: Shirley Dewi
(909) 230-5530
shirley.dewi@iapmort.org

**U.S. EPA Recognizes IAPMO R&T to Certify
ENERGY STAR® Qualifying Solar Water Heaters**

Ontario, Calif. (March 22, 2011) — Manufacturers of solar water heaters can now fulfill all of their product certification needs through IAPMO R&T — a third-party certification body fully accredited by the American National Standards Institute to do so.

The United States Environmental Protection Agency (U.S. EPA) has granted recognition to IAPMO R&T for the third-party certification of solar water heaters to the ENERGY STAR® product labeling system. This recognition provides a perfect complement to IAPMO R&T's ANSI-accredited certification for solar energy products, including the OG 300 and SRCC 100 standards.

“In addition to certifying the safety, reliability and performance of their solar water heaters, manufacturers may now also certify the energy-saving capabilities of their products that meet ENERGY STAR® qualifications through IAPMO R&T,” said GP Russ Chaney, CEO of The IAPMO Group.

Manufacturers obtaining multiple certifications, for instance OG 300 and ENERGY STAR®, receive a special bundled price that provides added value to the widely recognized mark of conformity, quick turnaround time and industry-leading customer service that come with IAPMO R&T certification services.

IAPMO R&T, North America's premier plumbing and mechanical product certification agency, has for more than 30 years provided certification services to manufacturers of such solar equipment as heat exchangers, solar water heater systems and solar thermal collectors to the requirements of the Uniform Solar Energy Code (USEC) and applicable standards. IAPMO R&T's USEC mark of conformity tells consumers and inspectors alike that the products bearing it meet all the standards necessary to ensure such products' performance and safe, reliable operation.

For more information on having your solar water heater certified, direct your Web browser to www.iapmort.org or contact Karen Snowden or Brenda Madonna at (909) 472-4100. For more information on the ENERGY STAR® program, visit www.energystar.gov.

#

IAPMO R&T certifies and lists plumbing, mechanical, electrical and solar products according to established US and Canadian codes and standards, ensuring continuous compliance to such documents. IAPMO R&T is part of The IAPMO Group's family of companies.

Ph: 909.472.4100 • Fax: 909.472.4150 • Web: www.iapmort.org

5001 East Philadelphia Street • Ontario, California 91761-2816 – USA



EXHIBIT C



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BEFORE THE ARIZONA CORPORATION COMMISSION

GARY PIERCE
Chairman
BOB STUMP
Commissioner
SANDRA D. KENNEDY
Commissioner
PAUL NEWMAN
Commissioner
BRENDA BURNS
Commissioner

Arizona Corporation Commission

DOCKETED

JUN 27 2011

DOCKETED BY *nr*

IN THE MATTER OF ARIZONA PUBLIC
SERVICE COMPANY FOR APPROVAL OF
SCHOOLS AND GOVERNMENT
RENEWABLE PROGRAM AND FOR
APPROVAL OF ITS RENEWABLE
ENERGY STANDARD AND TARIFF
IMPLEMENTATION PLAN FOR 2011

DOCKET NOS. E-01345A-10-0166
E-01345A-10-0262

DECISION NO. 72432

ORDER

Open Meeting
June 21, 2011
Phoenix, Arizona

BY THE COMMISSION:

FINDINGS OF FACT

1. Arizona Public Service Company ("APS" or "the Company") is certificated to provide electric service as a public service corporation in the State of Arizona.
 2. On June 8, 2011, Arizona Public Service Company ("APS") filed a Request for Approval of Modification to its Distributed Energy Administration Plan ("DEAP") in the 2011 APS Renewable Energy Standard and Tariff ("REST") Implementation Plan.
 3. The APS request addressed the need to allow additional authorized entities to determine if a solar water heater technology meets the standards to qualify for APS' renewable energy incentives.
 4. APS indicated that an increased volume of new technologies and products has resulted in the need to utilize more than one organization to certify the performance of solar
- ...

1 water heating systems. Currently, the only certifying organization allowed for solar water heaters
2 per the DEAP is the Solar Rating and Certification Corporation (“SRCC”).

3 5. APS reports that SRCC has not been able to promptly process the increased number
4 of requests for solar water heater certification. This has resulted in a back-log and delay in
5 certification of new systems. The delay means that the un-tested systems are not eligible for APS
6 solar incentives.

7 6. APS has proposed that a Nationally Recognized Testing Laboratory (“NRTL”) or
8 an American National Standards Institute (“ANSI”) accredited laboratory that has been approved
9 by APS be authorized to certify solar water heating technologies to the Operating Guidelines-300
10 (“OG-300”) Standard. Certification of solar water heaters meeting the OG-300 Standard is
11 required for the solar water heaters to be eligible for renewable incentives.

12 7. APS claims that SRCC has a waiting list of up to one year for solar water heater
13 system testing and certification. This delay has become a roadblock for some customers who wish
14 to install the new uncertified systems. APS attached to its filing wording changes to its July 1,
15 2010, DEAP that would allow APS to accept the solar water heating system certifications by
16 NRTL and ANSI accredited laboratories. APS is requesting approval of the DEAP modifications
17 on an expedited basis.

18 8. Currently, the International Association of Plumbing and Mechanical Officials
19 (“IAPMO”) is ANSI-accredited and is providing solar water heating system certifications. This
20 approval would allow IAPMO systems to be eligible for the APS incentive program.

21 9. We have reviewed the filing by APS. We concur with APS that the proposed
22 modification to the DEAP should be approved. We believe that such an approval will help
23 alleviate the one-year backlog and help bring more competitive technologies to the solar water
24 heating marketplace.

25 10. We recognize that IAPMO is ANSI-accredited and has an excellent reputation in
26 certifying plumbing equipment. Inclusion of IAPMO-certified equipment would increase
27 competition in the solar water heater market and would benefit customers. We approve the
28 proposed changes to the APS DEAP, with one minor wording change.

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Equipment Qualifications

- The system will utilize OG-100 certified collectors and will be tested and certified to the OG-300 by the SRCC or an APS-approved NRTL or ANSI accredited certifying organization and have a rating that is accompanied by the certified system design schematic.

IT IS FURTHER ORDERED that this Decision become effective immediately.

BY THE ORDER OF THE ARIZONA CORPORATION COMMISSION

CHAIRMAN

COMMISSIONER

EXCUSED
COMM. KENNEDY

COMMISSIONER

COMMISSIONER

IN WITNESS WHEREOF, I, ERNEST G. JOHNSON, Executive Director of the Arizona Corporation Commission, have hereunto, set my hand and caused the official seal of this Commission to be affixed at the Capitol, in the City of Phoenix, this 27th day of June, 2011.

ERNEST G. JOHNSON
EXECUTIVE DIRECTOR

DISSENT: _____

DISSENT: _____

SMO:RTW:lh\CH

1 SERVICE LIST FOR: Arizona Public Service Company
2 DOCKET NOS. E-01345A-10-0166 and E-01345A-10-0262

3 Ms. Deborah Scott
4 Pinnacle West Capital Corporation
400 North Fifth Street
5 Post Office Box 53999, MS 8695
6 Phoenix, Arizona 85072

7 Mr. C. Webb Crocket
8 Fennemore Craig, PC
3003 North Central Avenue, Suite 2600
9 Phoenix, Arizona 85012-2913

10 Mr. Steven M. Olea
11 Director, Utilities Division
12 Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007

13 Ms. Janice M. Alward
14 Chief Counsel, Legal Division
15 Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007

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EXHIBIT D



EARTHWISE™ RESIDENTIAL SOLAR WATER HEATER PROGRAM PROGRAM REQUIREMENTS

If you have any questions, please contact the SRP EarthWise™ Residential Solar Water Heater Program at (602) 236-4662, or by e-mail at SolarSWH@srpnet.com.

SECTION I: GENERAL

1. Applicant (“Customer”) must be an SRP account holder.
2. The solar water heating system (the “Solar System”) must be installed in SRP’s electric service territory.
3. Solar Systems installed before January 1, 2011, are not eligible for an EarthWise™ Solar Energy Incentive (the “Incentive”).
4. SRP may reject any application that does not meet the requirements of the EarthWise™ Residential Solar Water Heater Program (the “Program”) or SRP’s Rules and Regulations.

SECTION II: INCENTIVE

1. An annual spending cap is set for the Program.
2. SRP reserves the right to adjust the Incentive level and Program spending cap at any time.
3. SRP reserves the right to discontinue or suspend the Program or to modify the Program requirements at any time by posting a notice on the Program website.
4. The maximum amount of the Incentive is as specified on the Program website. The actual Incentive is prorated for performance as specified in paragraph 13 below.
5. SRP will reserve the Incentive after a completed application package is received by SRP as outlined in the EarthWise™ Residential Solar Water Heater Checklist (the “Checklist”).
6. Customer has six months from the date the Incentive is reserved for the Solar System to be installed and pass an SRP performance audit. After six months, Customer’s Incentive reservation will automatically expire. If Customer plans to continue with the project, Customer must submit a new application package and will be eligible for the then current Incentive, which may be lower than the original reserved Incentive.
7. If Customer’s account with SRP has a past due balance, the Incentive amount payable to the Customer will be reduced by the past due amount plus any interest and fees. SRP will apply the withheld amount against the Customer’s account and remit the balance of the Incentive to the applicable recipient.
8. Only the Customer can cancel the Incentive reservation.
9. Direct Forced Circulation systems (also known as open-loop systems) that utilize automatic freeze drain valves are not eligible to receive an Incentive.
10. Solar pool heating systems are not eligible to receive an Incentive.
11. The Incentive will only be provided for one Solar System per SRP account.
12. The Incentive will be calculated based on the OG-300 rating at the time the application package is processed by SRP.
13. The Incentive will be prorated as outlined below. For the purposes of this requirement, tilt is defined as the angle in degrees to which the solar collector panels are tilted from a horizontal placement. Azimuth is defined as the horizontal distance the solar collector panels are facing from due north in a clockwise direction measured in degrees (for example, panels facing due south would have an azimuth of 180 degrees).

Incentive	Tilt (in degrees)	Azimuth (in degrees)
0%	Greater than 0	0-90
80%	0-33	90-150
80%	0-18	150-210
100%	18-48	150-210
80%	48-75	150-210
80%	0-33	210-270
0%	Greater than 0	270-360

14. SRP will pay the Incentive after the Solar System passes an SRP performance audit, all paperwork as outlined in the Checklist has been verified and all Program requirements have been met.

SECTION III: INSTALLATION AND EQUIPMENT

1. Customer must use a properly licensed dealer and installer to qualify for this program. Eligible license classifications for dealers include: B-, C-05 (Solar), C-37, C-37R (Solar), KB-1, KB-2, KO- (Solar), K-05 (Solar), K-77, K-78, or other license approved by SRP. Eligible license classifications for installers include: C-05 (Solar), C-37, C-37R (Solar), K-05 (Solar), K-61, K-77, K-78, or other license approved by SRP.
2. SRP shall not be responsible for any damages or other problems resulting from the installation or operation of the Solar System.
3. Solar Systems must be permitted and inspected as required by applicable law. If no permit or inspection for installation of or modification to a Solar System is required, then the Customer and installer must sign an SRP-provided Certificate In-Lieu of Plumbing Clearance for Solar Thermal Projects.
4. All Solar Systems must comply with applicable construction codes and safety standards.
5. All Solar Systems must have the following minimum warranty requirements.
 - A. A 10-year warranty from the manufacturer for all solar collectors against defect, component breakdown or degradation of more than 15% of system performance during the 10-year period.
 - B. A six-year warranty from the manufacturer for the storage tank against defect or component breakdown during the six-year period.
 - C. A five-year warranty from the manufacturer for the heat exchanger, water pump, and controller against defect or component breakdown during the five-year period.
 - D. The manufacturer warranty required in Sections A, B, and C above must include no-cost repair or replacement of the covered items during the warranty period.
 - E. A two-year warranty from the installer that covers roof penetration leaks from date of completed installation.
 - F. A five-year warranty from the installer against defects in the overall installation of the Solar System that result in degradation of system performance of more than 15% from the applicable OG-300 system rating during the five-year period. The warranty must provide for no-cost repair or replacement of affected components, including any associated labor during the warranty period not otherwise provided by the manufacturer.
6. Solar Systems must be OG-300 certified by a third party entity approved by SRP and must be installed per the rating agency's qualifications and standards.
7. Integral Collector Storage ("ICS") systems must have a minimum collector piping wall thickness of 0.058 inches. When specifying an ICS system, please enclose documentation to support this requirement.
8. SRP reserves the right to modify equipment qualifications at any time.
9. If any material changes to the information provided in the Residential Solar Water Heater Incentive Application occur, the Customer must update such information by submitting a Residential Solar Water Heater Addendum.
10. Solar collector panels must be substantially unshaded between the hours of 9:00 a.m. and 3:00 p.m.