



Solar Rating & Certification Corporation
The Industry Standard Since 1980.

March 17, 2011

Damon Franz
California Public Utilities Commission

Dear Mr. Franz:

Thank you for the excellent work you are doing to promote the use of solar water heating in California. The entire country will benefit from your efforts.

SRCC would like to express its interest in participating in the development of the standards you need for accepting additional solar thermal technologies in the CSI Thermal Program. We have had many of these standards in our Strategic Plan and want to proceed with their development. The difficulty, of course, is finding time and funding to work on these tasks.

Your incentive program provides an excellent opportunity for us to collaborate on these new standards. Please keep SRCC in mind as you contemplate how to move forward.

SRCC is very interested in developing a standard for combination space and water heating systems. Interest in a certification program for this system configuration is growing in colder climates. We understand that installation of these systems may not be that common in the California climate. However, if you decide to pursue a standard for combi-systems, we would certainly like to lead the effort. A certification program for space-heating-only systems could easily be derived from a combi-system certification, if not be incorporated within it.

A more promising technology for California appears to be process heating. SRCC considered developing a standard for commercial/industrial systems several years ago. We decided not to develop one at that time because of the difficulty in defining a rating for the wide variety of system designs found in this arena. There are, of course, a few applications where a generic system design might be useful, like laundries, multi-family housing, etc. It will still be difficult to design a rating for these systems because of the wide range of sizes, but the basic system design could be the same. This concept leads to the thought that while a rating may not be possible for these large solar thermal systems, perhaps a process could be developed for reviewing system designs with the intent of approving the basic configuration of the system, without analyzing the details of component selection and sizing.

With regard to steam generation and cooling/dehumidification systems, we have to question whether these technologies are really market ready. We could spend a lot of effort developing a certification program for an emerging technology that may be ahead of its market. While having a certification program in place as the technology develops

could be a very good approach, someone would have to be willing to fund this activity with the understanding that it could be a long time before the technology becomes commercially available and requires certification.

Guidelines for metering systems are needed by all of the above technologies. The SRCC Board and Standards Committee have been discussing the need to develop these guidelines for some time now. If funding could be found, SRCC is prepared to coordinate this task immediately.

We feel that your intent to base the rebate for all technologies except domestic water heating on metering of displaced energy is a good idea. Computer modeling of these newer solar thermal technologies is being developed along with the technology itself. Validation of models for predicting savings will improve as more data becomes available from installed systems for comparison with the predicted results. We understand the need to estimate how much you need to reserve for rebates, but we question whether that is something that can be accurately predicted at this time. Additionally, since each system is different, the amount of savings as well as the computer model itself will be different. Individually modeling each system for predicted savings could become expensive.

Something else SRCC is working toward is reinstating our ability to conduct inspections of solar collector manufacturing facilities and solar water heating system installations. We feel this is a very important part of any certification program and regret that funding and staff availability have limited our activity in this area the last few years.

Please feel free to call on either of us to discuss any of this further. We wish you all the best in your endeavors to promote the use of solar thermal energy. We look forward to working with you.

Sincerely,



Eileen Prado
Executive Director



Jim Huggins
Technical Director

