IEA-SHC Task 43 Testing and Certification Technical Meeting Summary Johannesburg, South Africa 16-17 October 2009

Summary/Background

The meeting was held immediately after the International Solar Energy Society Conference in Johannesburg, attended by several Task 43 participants. ISES was followed by a meeting of ISO/TC180 which deals with testing standards for solar thermal collectors and systems. After the ISO/TC180 meeting, the same group stayed to participate in Task 43 to develop roadmaps for Subtask A on collector testing standards and certification and Subtask B on systems testing standards and certification.

The IEA SHC Program is one of several collaborative R&D Agreements established within the IEA under which eighteen member countries have been conducting a variety of joint projects in the application of solar heating and cooling technology for building applications. The Executive Committee approved a U.S.-led task to harmonize existing testing and certification requirements between Europe, the U.S. and the rest of the world and investigate new testing and certification procedures required for new collector and system designs, Task 43. This meeting was important for establishing a liaison with ISO/TC180 which has the lead in developing international standards for SHC testing standards. It was also the first technical meeting of Task 43 participants, which was focused on developing roadmaps of activities and deliverables for task participants. The meeting also helped engage other potential participants, including South Africa. The Task 43 meeting also made plans for communications (a meeting with certification bodies and a workshop for industry) and discussed a new concept for an international certification body.

Meeting Results

The ISO meeting and the Task 43 Technical Meeting were held at the South Africa Bureau of Standards in Pretoria from 9:00 AM to 5:00 PM. The meeting included reports from subcommittees that are currently revising or developing new testing standards for collectors and systems, and coordinating efforts with CEN, the European Standards organization. The technical information and the participants in the subcommittees was very useful for Task 43 because many of the same issues, people and organizations are involved in both. The next full TC180 meeting was scheduled for the second week in October, 2011, with plans to coordinate with the Solar Keymark meeting in Brussels, Belgium. This will facilitate coordination with CEN/TC312 and continued liaison with Task 43, which intends to send a representative to the meeting.

The Task 43 meeting convened at 10:00 AM on Friday, October 16th immediately following the ISO/TC180 meeting. A short presentation provided the background on Task 43 to those who were unfamiliar, then explained the day's objectives for amending the draft roadmap for Subtask A on collectors and Subtask B on systems, followed by a discussion of next steps for the overall task. The following are key results from the meeting:

• Subtask A roadmap for collectors was amended to assign topics in the roadmap. The relationship between Europe's QAIST research projects and Task 43,

- particularly in round-robin testing, was explored in some detail. A webinar will be scheduled to engage other Task participants and to confirm details of assignments.
- Subtask B roadmap for systems was amended to assign topics in the roadmap and revise deliverable dates for key analyses.
- Jan-Erik Nielsen presented a concept for engaging certification bodies in the task, with the objective of eventually developing a framework for international certification that would serve to coordinate the activities of the various national and local certification bodies now involved in SHC testing and certification. The proposal was well-received, and will be developed more fully through further discussion.
- The Wiki tool for communications was discussed and the group made suggestions for making it more effective, for example by setting up notification capabilities to inform people when new material is posted. Eventually the Wiki tool will be integrated with the SHC work area for Task 43 on the IEA website.
- The next task meeting was tentatively scheduled for February 8, 9 and 10 in Stuttgart, Germany. One of the days, preferably the 8th, will be dedicated to a workshop on testing and certification for industry that will introduce them to the process and to the objectives of Task 43.

Participants in the IEA/TC180 meeting and the Task 43 meeting included:

- Max Maffucci, Australia
- Ken Guthrie, Australia
- Sarah Miller, Australia
- Harald, Drueck, Germany
- Stephan Fischer, Germany
- Stefan Albrecht, Germany
- Korbinian Kramer, Germany
- Jan Steinmetz, Germany
- Peter Kovacs, Sweden
- Bengt Perers, Sweden
- Herman Strauss, South Africa
- Karl Deist, South Africa
- Sanj Lutchman, South Africa
- Solly Peter, South Africa
- Enric Mateu, Spain
- Jan-Erik Nielsen, Denmark
- Les Nelson, USA
- Jim Huggins, USA
- Kevin DeGroat, USA
- Robert Hassett, USA
- Doug Tucker, USA