

# U.S. Solar Heating & Cooling Alliance

- a Division of  **SEIA** Solar Energy Industries Association®

SEIA SHC Alliance Conference Call – Minutes from July 14, 2014

Attending – 28 participants, including these:

| Speaker            | Company                     |
|--------------------|-----------------------------|
| Chip Bircher       | SEIA                        |
| Joel Dickinson     | SALT River Project          |
| Katherine Stainken | SEIA                        |
| Laurent Meillon    | COSEIA                      |
| Rebecca Cantwell   | COSEIA                      |
| Shawn Martin       | ICC                         |
| Name               | Company                     |
| Adam Chrisman      | SunEarth                    |
| Alonso Morlesin    | SRCC                        |
| Bob Danielson      | Sun Earth                   |
| Bob Leckinger      | FAFCO                       |
| Dan Gretsche       | SOLARHOT                    |
| Daniel White       | DC Dept. of the Environment |
| Darrell Blakeway   | Perennial Energy Consulting |
| Edmond Murray      | Aztec Solar                 |
| Eileen Prado       | SRCC                        |
| Henry Vandermark   | Solar Wave                  |
| Hugo Aquilar       | IAPMO                       |
| James Wilson       | Financial Risk Solutions    |
| Jay Granat         | Jays Energy                 |
| Jim Cranston       | American Reliant Corp.      |
| Jim Huggins        | SRCC                        |
| Les Nelson         | IAPMO                       |
| Mark Thornbloom    | SRCC                        |
| Matt Carlson       | Sunnovations                |
| Mike Kozlowski     | UMA Solar                   |
| Peter Bliss        | SunEarth                    |
| Ramsey Brown       | Hawaii Energy Efficiency    |
| Victoria Hollick   | Conserval Systems           |

## Action Items:

- **Replay of July 14 phone call available:** [Click here to download the audio .mp3 file](#)
- **Mon. Aug. 11:** Next SHC Alliance conference call, 3 p.m. Eastern.
- **Mon. Aug. 11:** Deadline for comments on ICC/SRCC solar thermal standards.

**Minutes:****1) SEIA antitrust reminder was read.****2) New Participants**

- [Darrell Blakeway](#), Perennial Energy Consulting
- [Mike Koslowski](#), UMA Solar

**3) COSEIA Update**

[Rebecca Cantwell](#), Executive Director of [COSEIA](#) and [Laurent Meillon](#), Capitol Solar in Denver, provided an update on SHC initiatives in Colorado. Rebecca explained that although Colorado has a strong solar incentive program, SHC has been largely omitted. COSEIA has proposed a number of SHC programs, including development of a solar water heating pilot that would target low-income electric and propane customers in rural areas. These areas are often served by rural electric associations (REAs) and have access to Rural Utilities Service (RUS) funding. NOTE: If anyone can recommend people with experience with RUS funding, please contact Rebecca. Laurent reviewed COSEIA's intervention in a recent "DSM Strategic Issues" docket with the Colorado PUC. COSEIA partnered with Colorado Renewable Energy Society/ASES and Sierra Club, and their effort resulted in three positive developments for SHC. First, Xcel's requests for incentive budget cuts and "bonus incentives" were denied. Second, the PUC opened the door for use of the societal cost test (SCT) instead of just the Total Resource Cost (TRC) test. SCT is more favorable for solar thermal than TRC because it includes the societal benefits of a proposed program. Third, the PUC ruled that Xcel, the electric and gas utility, can use a lower discount rate for valuing future energy savings. The PUC ruled that instead of the 7.6% weighted average cost of capital (WAC) rate, a lower bond rate (~ 4%) for interest in these tests. Again, this favors solar because it discounts future benefits less. Fourth, the PUC ruled that gas utilities can value carbon offsets at \$20/ton for measures that don't initially pass the TRC. See these links for more information on Colorado initiatives:

- [Solar Thermal Alliance of Colorado \(STAC\)](#)
- [Go Solar Colorado](#)
- [Solar Communities](#)

**4) ICC/SRCC Solar Thermal Standards**

[Shawn Martin](#) from [International Code Council \(ICC\)](#), [Solar Thermal](#) and [Jim Huggins](#) from [SRCC](#) updated the group on the work underway to achieve ANSI accreditation for the SRCC 100 and 300 standards for collectors and systems. Shawn mentioned that the 2015 ICC residential code issued recently references SRCC 100 and 300 standards. As part of the ANSI process, public comments are invited, and they are due by Mon. August 11 (see link below). During the ANSI process, several changes were made:

- Several code officials participated, which resulted in the addition of some new materials as well changes in the systems standard that aligns the standard more closely and consistently with codes.
- All collector types, including flat-plate, concentrating and passive were consolidated into one comprehensive standard instead of separate standards (SRCC 100 and 600). ICC also has a swimming pool code.

Shawn also mentioned that the ICC Green Code is also open for public comment until July 16. Contact Shawn for more information.

Ed Murray from Aztec Solar raised the issue of duplication between IAPMO/ANSI standard S1001 and the ICC/SRCC's 300 standard. Everyone agreed further discussion is needed, and the SPI conference might be an appropriate venue.

- [Click here](#) to download both draft ICC/SRCC solar thermal standards documents and the public comment forms and instructions for submission.
- [Click here](#) to sign up for the Interested Parties List to receive regular updates.

**5) Topic: Heat Transfer Fluid Condition after five years in Phoenix**

[Joel Dickinson](#), Salt River Project provided an overview of the Phoenix utility's project to analyze the durability of 25 solar water heating systems in Phoenix. These SunEarth systems were installed in

2008 on 25 Habitat for Humanity single-family homes in Guadalupe near Phoenix. The closed-loop glycol systems included a 40 sq. ft. collector with an 80-gallon tank, and the collectors were mounted flush to the roof at a tilt angle of about 18 degrees. The heat transfer fluid (HTF), Dowfrost HD, was mixed with 50% tap water. The HTF on all 25 systems was tested five years later. The pH of the fluid was found to be 8.2 – 8.4 (alkaline), and refractometer results showed protection down to -10 F. [Adam Chrisman](#), SunEarth added that the collectors installed in these systems have painted surfaces (as opposed to selective surfaces), so the stagnation temperature is 290 F and the HTF's high-temperature rating is 325 F. A question was raised about steam-back and the expansion tanks. Adam explained that the 2.1-gallon expansion tanks were installed with 30 psi pressure, and Adam doubted that the systems were steaming back. Joel pointed out that the initial plan specified replacement of the tanks' anode rods, but the contractor could not remove them due to sediment deposits on the threads. That's a concern for low-income households that might not be able to replace the tanks. Bob Danielson from SunEarth mentioned that some companies do make a hot-service, segmented anode that could be installed to protect the tank. Laurent Meillon mentioned that Capitol Solar removes all nipples that are not copper or brass. Laurent also mentioned that a 20% glycol might be sufficient in the Phoenix. Jim Wilson from Financial Risk Solutions mentioned that a program in Hawaii required anode replacement, and the insurance company paid the contractor

## 6) SHC Alliance Update

[Katherine Stainken](#) updated the group on SHC Alliance activities. With the [Shaheen-Portman bill](#) on hold for now, SHC Alliance, along with the trade associations for geothermal and bioenergy, shifted their focus to the House Energy & Commerce Committee (HECC) to introduce a measure to include solar thermal in the federal minimum purchase requirement. There is one final mark-up of this bill that should occur next week, and the hope is that solar thermal will be included. Since this all hinges on the EPA's definition of renewable energy from 2005, a compromise is being proposed that would allow **new** thermal installations to qualify.

In Massachusetts, SB 2214 (formerly 1970) is moving forward to the House Ways & Means Committee. This bill would include solar thermal in the alternative energy standard. Other energy issues may get attached to the bill, and SEIA's proposals may be able to piggyback with them. In New York, SEIA is waiting for feedback from the NYSERDA Board meeting with regards to SEIA's proposal to make the state's solar water heating incentive program fuel-neutral and to add other solar thermal technologies. NYSERDA did agree that if there are any extra REGI funds, they could go towards a fuel-neutral SHC program. SEIA is also requesting that the remaining \$7M funds in the existing solar thermal program be allocated to a fuel-neutral program. SEIA will keep members updated.

The last topic was the EPA Clean Power Plan announced on June 2 that proposes reducing carbon pollution from power plants 30% below 2005 levels by 2030. Proposed under [Clean Air Act Sec. 111 \(d\)](#), these regulations would give states flexibility to develop customized plans to meet the requirements. SEIA is collaborating with other stakeholder organizations to develop strategies and potentially share resources. A SEIA staff person is attending the NARUC summer meeting to establish relationships that will help utility commissioners to consider solar when developing their 111 (d) compliance plans. SEIA will be submitting comments, focusing on Building Block 3, the renewables component. SEIA is to target states and markets that offer the best opportunities to increase solar deployment. EPA will be holding four public meetings on the proposed regulations, and SEIA is looking for industry representatives to attend. Laurent Meillon requested talking points. Katherine will provide an update on the SHC plans for Solar Power International conference.

## 7) Articles and Publications

- 1) [Ohio Freezes Renewable Energy Progress](#), June 18, Spratley, W. Solar Citizen
- 2) [Support Massachusetts Solar Expansion](#), July 1, Solar Citizen/Solar Today
- 3) [Massachusetts Solar](#), 2014, Solar Energy Industries Association
- 4) [Critics Say Massachusetts' New Solar Bill Would Create an Unfair Exchange](#), July 3, Trabish, H., Greentech Media
- 5) [Illinois Funds Solar Purchases](#), July 1, Solar Today Magazine
- 6) [SEIA Applauds New Solar Law in Illinois](#), June 28, Solar Energy Industries Association

- 7) [Colorado: Property Tax Exemption for Community Solar Gardens](#), June 25, Database of State Incentives for Renewables & Efficiency (DSIRE)
- 8) [Colorado: Greening of State Government](#), June 6, Database of State Incentives for Renewables & Efficiency (DSIRE)
- 9) [Will Renewable Energy Ever Meet Global Demands?](#), June 17, Wall Street Journal
- 10) [2014 IEA SHC Solar Heat Worldwide](#), July 2014, Mauthner, F. and Weiss, W. International Energy Agency, Solar Heating & Cooling Division
- 11) [Renewables 2014: Global Status Report](#), June 2014, Renewable Energy Policy Network
- 12) [REN 21: Solar Thermal Contributes Significantly to Hot Water Production](#), June 30, Epp, B., SolarThermalWorld.com
- 13) [A Regulator's Guidebook: Calculating the Benefits and Costs of Distributed Solar Generation](#), October 2013, Rabago, K. and Keyes, J. Interstate Renewable Energy Council
- 14) [National Landmarks at Risk: How Rising Seas, Floods, and Wildfires Are Threatening the United States' Most Cherished Historic Sites](#), May 2014, Holtz, D. et. al., Union of Concerned Scientists
- 15) [The Rise of the Residential Solar PV Customer](#), July 3, Mints, P., RenewableEnergyWorld.com

### 8) Upcoming Conferences & Webinars (updated for August 2014)

- 1) SEIA Webinars:
  - [Doubling Down on Sustainability: All About the Solar Industry Commitment to Environmental and Social Responsibility](#), July 22 (open to public)
  - [SEIA Startup Innovation Webinar Series](#), July 17 (open to public)
  - [I LIKE SOLAR: Using Social Proof to Accelerate the Adoption of Residential Solar](#), July 15 (members only)
- 2) [Solar Heating & Cooling 2014](#), Oct. 13-15, Beijing, China [See agenda](#) and [Register online](#)
- 3) [Solar Power International 2014](#), Oct. 20-23, Las Vegas, [See agenda](#) and [Register online](#)
- 4) [Forum 20/20: Innovations and the Future of Cleantech](#), Oct. 29, Boston, MA. [See agenda](#) and [Register online](#)
- 5) [Total Energy USA](#), November 11-13, Houston
- 6) [Renewable Energy World Conference & Expo: Power Generation Week](#), Dec. 9-11, Orlando, [See agenda](#) and [Register online](#)
- 7) [ACEEE Hot Water Forum](#), Feb. 22-24, 2015, Nashville, [See website](#)
- 8) 2015 Solar Power Colorado, Feb. 23-25, 2015, Broomfield, CO; [See website](#)

### 9) Other Program/Industry Updates

- Victoria Hollick asked about a new renewable plan being developed in Virginia. Katherine S. mentioned that Mike Healy of Skyline Innovations is involved, but SEIA is not directly participating.
- Ed Murray recently testified during the AB 32 hearings in California which addresses carbon cap and trade. Ed made the point in his testimony that solar thermal is particularly well-suited for offsetting carbon emissions, even better than PV.

### 10) Date for Next SEIA SHC Alliance Meeting

Next conference call will be held on **Monday, August 11, 3 p.m. Eastern**

Chip Bircher



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