

# Arizona Solar Energy Advisory Council

March 20, 2007

10 a.m. to Noon

Executive Tower, Arizona State Capitol

1700 W. Washington, Ste 220

Phoenix, AZ

## Draft Minutes

Submitted by Michelle Bermudes

Meeting called to order at 10:20 AM

Kate Maracas

Associate Chairwoman's Welcome and Introductions

Kate Maracas & All

Attendance:

Members - Mark Wilhelm (Chairman), Bud Annan, Chuck Backus, Katharine Kent, Bob Liden (phone),  
Kate Maracas, Larry Medlin, Lori Singleton, Chuck Skidmore

Staff - Jim Arwood (Sr. Director, AZ Department of Commerce Energy Office), Michelle Bermudes,  
Debby Tewa

Guests - Harvey Bryan (ASU, membership pending), Lane Garret

Motion by Katharine Kent to approve Draft Minutes from 1/23/07 meeting as official minutes

Seconded by: All members present; unanimously passed.

Energy Office Update/Climate Change Initiative

Jim Arwood

Within the Climate Change Action Plan there are two main categories that affect the Energy Office: Energy Efficiency/ Renewable Energy and Transportation. The Energy Office was given 14 different sub-group assignments in conjunction with RUCO, DEQ, DoRevenue, DoHousing, and Water Resources, where recommendations of actions the Governor can take are to be made. The deadline for submitting these recommendations is 4/30/07. Upon review of these recommendations the Governor will choose which actions to take, hopefully late summer 2007.

RCI-7: Distributed Generation/ Renewable Energy Applications, Point 1: Information & education

-Develop Brochures, Web based information

Katharine Kent: What are the certification levels being considered?

Jim Arwood: we will discuss that in just a few minutes

-Solar Homes: Promotional material for the program •previously it was a billboard, however this was quite expensive, •maybe in the future advertisements could be done in movie theaters, it has been shown that people who go to the movies have disposable income as well as are at a slightly higher than average level of intellect (info from Harkins?)

Katharine Kent: Could a Logo be created for those builders to display for those which have solar as part of their required developing, vs. those builders which only include solar as a building option?

Bud Annan: is this exercise (of writing recommendations for the Governor) one about creating a budget? Recommends that the State meet with Utilities to coordinate recommended actions such that programs being suggested for the Governor to be implementing do not overlap with existing utility based programs.

Jim Arwood: No this is not a budgeting exercise, we are just coming up with ideas for the Governor, and some will ask to be put into the budget for following years. Like with the solar homes, a working group can be formed and this request can be included in the recommendations to the Governor.

Katharine Kent: TEP has a 'guaranteed home program' where they check systems, and do a blower door test and much more, as well as promoting solar for homes as well.

(Chairman Wilhelm arrives)

Bob Liden (on phone): With the projects we (Stirling Energy Systems) have currently in progress in southern California, we have been able to do calculations regarding estimated GHG reductions regarding the installations of the solar farms, and we have estimated those numbers to be approximately 4mil. metric tons of GHG savings, whereas RCI-7 claims only to be at 2.1MMt by 2010 if all bullets are implemented. This doesn't seem correct if all suggestions are being implemented.

Debby Tewa: Training Program, NABSAP – also possibly refrigeration training – please provide us with comments

Katharine Kent: The State has certain requirements for electricians which include a 77 or 78 license, or even a more general one called the 05 license for installing misters/shutters, however there is no requirement for PV installers to have a special license or for them to even have any testing done to have them recognize the NEC. For SHW there is a special certification that must be taken, either a full plumbers licensing or a restricted SHW installer's license. The 77/78/05 electrical licenses do not qualify installers at a high enough quality, and this will not give consumers confidence in the industry.

Jim Arwood: We will include wording to the effect: The Governor should ask the SEAC to give recommendations for training. This will help get the SEAC some recognition, as well as improve the consumer confidence, and in turn can potentially increase market demand.

Motion by Mark Wilhelm to form an ad-hoc committee regarding requiring training for PV installers.

Seconded by: All members present; unanimously passed.

RCI-7: Distributed Generation/ Renewable Energy Applications, Point 2: Technical Assistance

Chuck Skidmore: A place to begin may be with recognizing solar rights – could write into recommendations for the Governor to make sure this topic is being addressed

Kate Maracas: This law was written about in the WGA report that was written. It may be able to be addressed by asking for a Solar Czar to be created within the Governor's office.

Larry Medlin: Models could be provided for alternative methods of addressing this issue or possibly provide a resource of "how to"

Bud Annan: Can we 'copy'/follow the CA program – maybe find a way to use their set-up and find a way to do it cheaper, now that they've laid out the ground-work? We don't have funding/staff/infrastructure like in CA to cover all of the huge programs, but maybe from their leg-work, we could find methods to introduce the appropriate/relative programs for AZ.

RCI-7: Distributed Generation/ Renewable Energy Applications, Point 3: Funding mechanisms & incentives -Demonstration/ pilot projects, so that AZ can say that "We have a Solar Capital" and if all goes well we may be able to put PV systems on the House and Senate buildings as well. Still currently in discussions with procurement regarding the Game and Fish PV project.

Mark Wilhelm: A PV canopy approach is a good place to start. Suggested trying alternative technologies, not just focusing on one type of system, specifically covered parking PV structures as well as roof top systems. Getting the pilot/demonstration projects highly visible.

Jim Arwood: We are planning to suggest the Capitol Executive Tower South Wing as first system, then the House and Senate buildings.

Kate Maracas: The Mall Commission is very interested in PV Parking structures throughout the Capitol Mall area.

## Solar Roadmap

Jim Arwood & Others

### Initiative #1: Sustainable Partners Award

Several options have been suggested by this subcommittee via email discussions:

#1. The Governors Innovation Awards – may be able to include 1 award, possibly the Grand Prize winner from the state, but we don't know at what cost.

#2. Valley Forward – Currently a Phoenix Group trying to move the Phoenix area forward in all aspects, but is growing and expanding to be a more regional group; Lori Singleton: Yes, this group is interested in including a Sustainability Award, up to 3 awards and is willing to allow a different group to do the judging.

#3. Governor's Energy Efficiency Awards – it is already a very large/long conference; we may be able to create another type of lunch banquet to be just for the Sustainable Partners Awards.

#4. Sustainable Arizona and Grand Canyon Foundation are established programs in Northern AZ

#5. Sonoran Institute is well established and highly respected in Southern AZ with an annual banquet and 250-300 attendees at the last conference; Katharine Kent: they said they are interested in including an award for Sustainability to their program.

This could be a great way to keep the awards to the northern, central and southern regions of the state to make them more personal to the awardees. It could also create some competition within the state, and then possibly include a Grand Prize winner at the one of the Governor's banquets, with her presenting it if possible.

#### Initiative #2: Marketing & Outreach Mission

All members present agreed that due to time constraints this topic will be discussed more among the subcommittee members and presented at the meeting in Tucson in April.

#### International Trade Poster/Booth

2 sides of the booth were shown. Comments and suggestions had already been made by members of the council for suggestions of wording for International Trade in Commerce to update and make text more factual. One further suggestion was using a solar contour map for the US map, instead of just an outline of the US with AZ highlighted. A second suggestion was made for wording to state "In the Heart of the US' Solar Energy Belt" instead of "In the *Center* of the US' Solar Energy Belt".

- It could possibly be used again by the SEAC or Energy Office, if there is going to be the Green Build 2009 conference in Phoenix, or it could be left in Germany to continue promoting AZ.

#### Next Steps

Mark Wilhelm & All

#### Schedule SEAC meetings (bring calendars)

The next meeting date has already been set: Wednesday, April 25<sup>th</sup>, 2007 from 10:00 AM to 12:00 PM at University of Arizona's Architecture Building in the Arcon Conference Room. Lunch will not be provided.

#### Announcements

- Harvey Bryan: - ASU – has received 2 parts of the SAI Grant \$19mil with BP and \$14 mil with Amonix
  - AZ Science Foundation is under way: they focus on Micro Grid and Distributed Generation and work with PSERC
  - ASU – will be hosting a residential Solar Workshop, SMUD from CA will be there, Date will be in the next 4-6 weeks
  - NY Times article focuses on AZ and solar capacity, will try to get/ make available an electronic copy for members.
  - Study that was completed – 'Tackling Climate Change in the US', also focuses on AZ and solar capacity
  - AZ Solar Energy Society (ASES) has an annual conference and are very open to having one here in Phoenix in the next couple of years.

Mark Wilhelm: Technology in a Carbon Constrained Society – talks about Utilities, Energy and Power Research, very informative.

Jim Arwood: -Energy Office and ETA and ASU PTL recently hosted Debby Tewa's PV training workshop, focused primarily on tribal electricians, but open to anyone interested, included a mock system installation as well as technical and theory training.

- Energy Office recently hosted the Energy Services Coalition Phoenix Chapter kick-off meeting

#### Adjourn

Meeting adjourned at approximately 12:20 PM