

SOLAR ENERGY ACTION COMMITTEE

Agenda

Date: March 24, 2016

Start time: 9:30AM **End time:** 1:30PM

Location: UL, Brea Office
2929 East Imperial Highway Suite 100,
Brea, CA 92821

GoToWebinar Call in: <https://attendee.gotowebinar.com/rt/7801171707912829441>

Draft SEAC Mission Statement:

We produce recommendations to safely and efficiently expand the use of solar energy in our communities.

Main purpose of meeting:

- To discuss Residential Utility Issues

Agenda Items	Who	What
1. Welcome	Hector Bordas / 2 min	
2. Draft meeting summary Feb 18, 2016	Paula Mellon / 5 min	Discuss/Agree
3. Energy Storage and the future of PV	Paul Dailey / 30 min All / 10 min	Presentation Discussion
4. Utility Issues	Paula Mellon / 2 min Israel Juarez / 15 min Jim Cahill / 15 min All / 120 mins	Information/Discussion
5. Re-Roofing a Solar Roof – Future topic	Mostafa Kashe Hassan Alameddine / 10 min	Information/Discussion
6. UL2703 – Status Update	Hector Bordas / 10 min	Information/Discussion
7. Open forum and feedback	All / 5 min	Information/Discussion
8. Closing	Paula Mellon / 2 min	

*Please note – Hector Bordas and Paula Mellon will be available for about 15 minutes at the end of the meeting for one-on-one time with members and guests

**Solar Energy Action Committee
Meeting Summary
Meeting March 24, 2016**

Agenda item # 1: Welcome

- Hector Bordas welcomed everyone to the eleventh Solar Energy Action Committee meeting.
- The formalities of today's meeting have been removed in order to dedicate majority of the meeting time to the Utility Issues.

Agenda item # 2: Draft meeting summary February 18, 2016

- Draft Meeting Summary of February 18, 2016 was approved.

Agenda item # 3: Energy Storage and the future of PV Presentation by Paul Dailey

- Paul Dailey presented an overview on energy storage that is facilitating the further growth of PV. The grid-tied market is growing and will continue to grow mainly because battery technology has gotten cheaper and easier to use.

- The benefits of PV:
 - offset fossil fuel power
 - create cost effective and reliable energy productionThis is only during the day when the sun is shining.
- The benefits of PV plus energy storage:
 - Energy storage creates reliable and dispatchable energy production you can turn on and off at will.
 - It can be consumed on site; therefore, net metering becomes optional.
 - Another benefit of energy storage is the fact that you can be operational during a grid outage.
- Paul made mention of the key drivers of adoption and the key drivers slowing adoption.
- Paul highlighted the pros and cons of the different types of battery technologies.
- Distributed energy storage market is still in its infancy.
- Energy storage is still a small market now and most systems are utility owned.
- RMI report shows potential market and demand for energy storage.
- Energy storage will kick off the moment there is a savings and it'll kick off in markets where solar is most saturated.
- A video of Paul's presentation he gave at the AEE dealer conference will be available in a few weeks. His presentation from today's meeting will be shared with everyone over the course of the next week.

Agenda item # 4: Utility Issues

- Paula Mellon provided a summary of what was noted at the last meeting on our Utility issue work as follows:
 - Everyone agreed that it is best to move towards improving and streamlining existing processes.
 - It was also noted that residential interconnection processes and procedures vary from utility to utility. In addition to this, it was noted that often this process involves

- jurisdictions too from the permitting side, and even the jurisdictions processes and procedures vary.
- It became clear throughout the discussion that the biggest issue was trying to understand what the process is.
 - It was agreed that aiming towards the writing up of a best practice checklist based on what can work would help both sides – installers and utilities.
 - The committee concluded that at our March meeting we hear from both sides as to what is currently working and what is currently not working, so we can identify and understand the problems and work towards finding workable recommended practices.
 - Today we will have the installer and utility group present on what is currently working and not working by Jim and Vaiva of SolarCity representing the installer group, and the Utility group will be represented by Tiffany of SDG&E, Gilbert of SCE, and Peter of LADWP.
 - The aim after today's meeting is to start collaborating in google docs so we can conclude the issue statements and to develop the recommended practices in the form of a best practice checklist.
- Tiffany of SDG&E described their processes for solar installation.
 - They need to pay careful attention to rewires/upgrades. Their RMA's have helped.
 - One of their biggest pain points is the large amount of service orders that contractors submit without a customer requesting solar. They believe the contractors do this to try speed up their sales process but it wastes a lot of their time to go out and inspect when no solar has been requested.
 - Jeff Spies commented that he will put the message out to CALSEIA to educate contractors on this.
 - Mostafa and Pete made mention that they have come across some service orders that have signatures on them that are not the home owners. It was highlighted that this is a felony.
 - Peter of LADWP described their solar steps and processes. He will share his flow chart with everyone.
 - Jim and Vaiva of SolarCity made mention that:
 - SDG&E have set the bar for Utilities.
 - Digital signatures would help.
 - Data validation for online apps also helps reduce errors - PG&E have done this in Northern California.
 - Allow contractors to request meter spots or if this is too challenging, to have the meter spot information forwarded to the contractor too. LADWP are now emailing this to the contractor which is a huge help.
 - Using photo's or videos like San Bernardino's Virtual Inspection process would also help in regards to meter spots and would save the Utility a trip out to site.
 - In regard to flimsy lock rings, allow contractors to remove it. Maybe implement a certification where utilities allow certified contractors to remove flimsy lock rings. This will reduce utility from making two trips to one where they only come out to lock again.

- Allow contractors to install RMA. Tiffany responded to say that the utility owns and installs the RMA - we do not allow non-utility workers to perform work on our equipment.
- MPU's cause big delays where customers eventually cancel orders. RMA's have been noted to help in these cases. Great to see SCE are moving in this direction too.
- Bezhad mentioned that there are some issues too with property address and meter address conflicts. Also believes that we need better communication between inspectors and contractors.
- Sparky mentioned that a user friendly process be made available online for all applicants to clearly understand the utility processes.
- Gilbert of SCE announced that if installers have any questions, to please compile them and forward to him to answer. SCE management are open to a conference call to discuss how we can all work together.
- Hector mentioned that this discussion has provided a good indication of what could or could not work. He encourages all parties to take these suggestions back to their respective management so we can get feedback on what could be allowed or not allowed and if not allowed, please explain why so we can fully understand.
- The utility discussion was concluded on the following understanding:
 - Our present utility collaborative document contains many recommendations on multiple topics that pertain to different issues.
 - In order to clearly write up the issue statements and recommended practices, we need to split these topics into their respective subject matter.
 - Jim agreed that he would attempt to neaten the existing document into its respective subject matter and would endeavor to have this made available in one week.
 - Hector advised that we would therefore take the current documents offline until Jim shares the new document.
 - The new document will therefore be shared with everyone in google docs to continue our collaboration.

Agenda item # 5: Reroofing a Solar Roof – future topic

- Mostafa Kashe opened this discussion explaining that they are receiving a lot of reroofing that has exiting solar on it, and they need to know what they are looking at. So the County of Los Angeles have put together this policy (print out was handed out to all attendees), they call it Building Code Manual 1510. It has Part I and Part II. The policy is not concrete. They are looking for feedback.
- Mostafa commenced with Part II – roof that has existing solar where they are doing a reroof and will be removing the solar system, do the roof and put the solar system back on.

Case 1: (solar system plans are available)

- They will not charge any electrical/building fees because the fee that is being paid for the reroof should take care of their services when it comes to electrical as well. The permit will include the electrical and building together with the reroof.

- If there are existing weeb clips, which the County of Los Angeles do not recognize, we will honor that but cannot use the existing weeb clips as they have been listed for one-time use.
 - Grounding and bonding will be verified.
 - Where the home owner / contractor can show the original set of plans and follow these plans, it will be honored.
- Case 2: (solar system plans are not available)
 - We are asking the installer to take a video or pictures showing the PV module #'s, quantity and location. Conductors, cables and conduit types and sizes. And of course bonding and grounding for the modules and racking systems.
 - We are attempting to do one inspection for the roof and solar system.
- Mostafa asked everyone to please read through the policy and provide feedback.
- Behzad suggested that inverter/equipment be included as d. in the policy document.
- A question was raised about what happens in the event that the solar system requires replacement of equipment? Mostafa mentioned that is a different issue. This policy pertains to the disassembly and reassembly of like for like solar system parts.
 - It was suggested that in this instance the policy include what happens if parts are replaced.
 - Pat mentioned that in theory he likes the policy a lot, however he would be careful and would add a disclaimer. Mostafa commented that the reason they didn't include a disclaimer is because in the code it talks about re-using existing equipment. A follow on comment was that you will always have someone contest this.
- Hector concluded this discussion by asking that comments and suggestions be shared with him and Mostafa. When they modify the policy they'll bring it back to SEAC for further discussion.

Agenda item # 6: UL2703 - Status Update

- Hector Bordas provided a status update as follows:
 - The County of Los Angeles were provided feedback on their 15 points by Don Massa representing Mounting Systems Manufacturer's Committee (MSMC).
 - The County of Los Angeles have now prepared a final draft that has been shared with Don and Jeff and are now awaiting their comments.
 - Hector mentioned that a copy of the final draft will be shared with everyone.
 - Hector stated that he is hopeful that the final draft may simply require some minor wordsmithing.
 - Jeff made mention that 10 of the items are fine but 4 of the items require more discussion which him and Mostafa are going to discuss this afternoon after the SEAC meeting. He is positive they will have something drawn up by next week.
 - Mostafa emphasized that they hope this will simplify and make it easy for installation instructions to be followed so that all of them: installers; manufacturers; testing laboratories; may all be on the same page.
 - Mostafa announced that the County of Los Angeles have recognized another two companies for UL2703 on their 14 items: SunPower and Unirac. They now have Zep,

Underlay Solar, Ironridge, Unirac and SunPower. Next week they should have another three so everyone is coming online.

Agenda item # 7: Open forum and feedback

- Pat stated that last month was the first time he attended the SEAC monthly meeting online and it's good to know that those online can submit questions instead of talking.
- Mostafa asked the question to testing labs about batteries being listed. It was stated that UL9540 certifies the system including the battery. John provided the following url to read up on energy storage systems: UL.com/database – category code: ftbw (FTBW.GuideInfo Energy Storage Systems and Equipment. Details on UL9540 can be found at <http://ulstandards.ul.com/standard/?id=9540>
- Next meeting will be on April 28, 2016 at the County of Los Angeles.

Agenda Item # 8: Closing

- Meeting was adjourned

Action Items

1. Paula Mellon: send out Paul Dailey's Energy Storage and the future of PV presentation within the next week.
2. Paula Mellon: send out Peter Liang's Solar steps and process flow chart.
3. Jim Cahill/Paula Mellon: Jim Cahill to neaten the existing Utility document into its respective subject matter over the next week. The current Utility Issues google docs will be taken offline. Once the new Utility Issues documents are ready, Paula Mellon will share them online and notifications will be emailed to everyone to start collaboration in the google doc folder.
4. All: provide comments and suggestions to Mostafa and Hector regarding the County of Los Angeles Building Code Policy 1510 – re roofing on roofs with or without solar energy systems.
5. Paula Mellon: send out final draft County of Los Angeles UL2703 Installation Instruction requirement document.
6. Hector Bordas/Don Massa: to conclude the County of Los Angeles UL2703 Installation Instruction requirements within the next week. An update will be provided at the next meeting on April 28,2016.
7. Paula Mellon: send out draft meeting summary March 24, 2016 within next week.
8. Paula Mellon: start marketing SEAC Webinar Apr 20,2016 within next week.
9. Paula Mellon/Hector Bordas: Conduct SEAC Webinar April 20, 2016 on: Methods to reduce follow-up inspections for Small Residential Rooftop Solar Energy Systems.
10. Hector Bordas: Put together Commercial and industrial scale solar group to commence the scoping, planning and execution of the development of the Commercial and Industrial scale solar projects manual.
11. Paula Mellon: send out draft agenda by April 14, 2016
12. Paula Mellon: send out meeting invitation, final agenda and board packs by April 21, 2016.