



Solar Workgroup of Southwest Virginia

Conference call Summary

April 16th, 2019

Background

A webconference call of the Solar Workgroup took place on April 16th, 2019. The Solar Workgroup of Southwest Virginia (Workgroup) is a group of nonprofit and community action agencies, colleges, state agencies, planning district commissions, and other interested citizens and businesses seeking to develop a renewable energy industry cluster in the seven coalfield counties of Southwest Virginia (SWVA). The workgroup was co-convened in 2016 by the UVA-Wise [Office of Economic Development & Engagement](#), [People Inc.](#) and [Appalachian Voices](#), with facilitation assistance from [Dialogue + Design Associates](#). Additional background information is available at www.swvasolar.org.

Read more about the [Solar Workgroup background and progress](#) here, and check out the [timeline and accomplishments infographic](#) here. Here is the link to the last [meeting summary](#) from the last meeting on March 8th, 2019.

Meeting highlights

The call focused on updating the participants on the progress of RFP #2, an update on the latest grant proposal submissions to ARC POWER and GO Virginia, a debrief of the Brightfields Conference, a utility roundtable discussion, and a solar energy storage presentation and discussion. Christine Gyovai facilitated the call, and participants introduced themselves at the beginning of the call. The RFP #2 has received great press coverage related to the pre-bid meeting and site tour. Adam Wells updated the group on the new Solar Workgroup grant proposal submissions. Then, Vince, Nick, Christine, and Joey gave an encouraging report from the Brightfields Conference which took place in mid-April in Richmond, VA. Then, Brad Kreps with The Nature Conservancy has offered to organize a roundtable discussion with utilities and is currently conducting outreach. Then, Todd Olinsky-Paul with the Clean Energy Group shared a presentation on solar energy storage possibilities for Southwest Virginia, which opened up a short discussion on how the Solar Workgroup could help facilitate a pilot project in SWVA around solar+storage.

Request for Proposals (RFP) #2 Update

Chelsea Barnes with Appalachian Voices provided an update on the release of RFP #2 for developing commercial-scale solar sites in SWVA through a group-purchase RFP. The RFP was

released April 1st and has already received strong press coverage. Appalachian Voices (AV) recently conducted site tours with six interested developers that also got to meet with RFP site representatives. More than 20 people participated in the mandatory pre-bid meeting that was held, which shows indicates strong interest in the RFP. Next, the Planning Team will be responding to the participants questions that were submitted during the pre-bid meeting. The developers' bids are due May 21st; then they will work with the property owners on May 28th to review the bids. The Selection Committee (comprised of site representatives) will interview the top developers on June 4th, and then the group will make a decision as a group that will be facilitated by AV and Christine. More information is available [on the website](#).

ARC and GO Virginia grants

Adam Wells shared an update on both grant proposals that were due and submitted in recent weeks. The ARC POWER proposal was a \$50,000 technical assistance request to execute a third round of RFPs for later in 2019. The longer term view of the program would be to apply with partners across the region to roll out a larger scale RFP process, hopefully funded by a larger POWER implementation grant with an application in 2020. The Solar Workgroup of SWVA would continue as a partner in this regional collaboration with additional groups.

The GO Virginia was a \$70,000 technical assistance request made in partnership with the Solar Foundation and Ascent Virginia. This would fund a solar manufacturing and jobs playbook for SWVA that zones in on supply chain manufacturing and large/utility scale on post-mined lands and brownfields. The program would also provide local leaders with guidance and resources on how to leverage those investments. GO Virginia has been asking some detailed questions, which is a good sign that they're taking the proposal seriously. The regional council meets in about a month, so feedback should be expected soon after.

Brightfields conference debrief

Christine gave an overview of the Brightfields Conference which took place in Richmond, VA on April 9-10 where the Solar Workgroup received some positive attention. The conference focused on solar development on brownfields at various scales, looking at reuse and rehabilitation. The Solar Workgroup was mentioned several times with a lot of excitement. Nick Polier with DMME and Joey James at Downstream Strategies gave presentations. Christine Gyovai with D+D and Kate Boyle with Appalachian Voices stood in for Adam to represent the Solar Workgroup.

Nick Polier described how the Solar Workgroup was generating a lot of conversation and questions with different contractors. Paul Kern with DQ Energy and Jim Bernard with Groundwater Services expressed interest in the work. Jim Bernard does solar work on landfills and has a list of landfills across the state. Good connections were made for utility-scale solar as well. Vince Maiden with VA DEQ said they had 150 participants in the conference, and the Solar Workgroup was the shining star of the conference. Vince kept hearing a lot of excitement about solar in SWVA in the capacity of smaller and mid-scale solar. The negative part is Virginia is not quite read policy-wise; there is a need to create solar-friendly policies in Virginia.

Joey James, who also attended the last Brightfields Conference, commended Vince and Meade for a job well done. Secretary Strickler gave the plenary session talk, putting SWVA in the spotlight. Joey kept hearing that solar in the coalfields makes sense and the time is right to reach

out to decision-makers to discuss the policy changes that are needed.

Next steps in organizing a utility roundtable discussion: Nick mentioned that getting a utility roundtable set up would be a great next step and getting utilities involved and at the table. There are large obstacles to tackle, but this is probably a good time to do that. It would be good to see how the Workgroup might facilitate addressing those issues. Nick will pass information from contacts made at Conference. Brightfields Conference seems to be a good catalyst for expanding the work beyond SWVA into central and northern Virginia to widen the scope.

Christine added that the Planning Team of the Solar Workgroup has talked about different ways to organize a roundtable with utilities. Brad Kreps offered to pull together a roundtable in the coming months. Brad noted the need to engage the utilities to gauge opportunities and perspectives. Dominion has provided useful insights on siting criteria. AEP is interested in learning more and participating. Brad is continuing outreach to other utilities to see if we can get them together for a roundtable. The hope is to have a roundtable in May and figure out what role the Workgroup can play in enabling coordination in development.

Solar + Storage - presentation

Chelsea Barnes introduced solar + storage concept and background. The Workgroup has been focused on economic savings of solar, and energy storage is usually too expensive to be considered an effective investment, but the costs of energy storage have been declining. The applications of energy storage are becoming more cost effective and energy companies and communities are becoming more interested in more resilient energy sources so more programs are being launched on energy storage projects. Chelsea introduced Todd Olinsky-Paul who shared a presentation on the basics of energy storage. His presentation can be found [at this link](#). Todd is an expert on energy storage and is the project director of the Clean Energy States Alliance/Clean Energy Group. He directs the energy storage and technology advancement program. Both groups are related nonprofits in Vermont, but look in other clean energy across the country, especially with state energy offices. Within the Clean Energy Alliance, they have a program ESTAP (Energy Storage Alliance Technology Advancement) which is supported by the US Department of Energy. Todd manages this program; it supports large scale storage deployment all over the country at the utility scale. He also works on the Resilient Power, a Clean Energy Group project, focusing on using battery storage for solar behind the meter to provide resilience. Todd noted several highlights around solar + storage.

- There are many kinds of energy storage, but battery storage is the focus. Battery storage has the best power over the longest time. Within the range of batteries, the market is dominated by lithium ion batteries. The large marketing base has allowed prices to drop 79%.
- There are three types of battery energy storage: customer services, ISO/RTO transmission services, or the utility. The two main values for customers are resiliency and cost savings.
- Hurricane Sandy really motivated this resiliency work. If you put batteries behind the meter, if the grid goes down, you have an islanding switch that disconnects behind the meter to the battery inverter where you have a microgrid. The cost of setting this up can be prohibitive. The monetizable value of storage is partly due to the high costs of our oversized grid.
- Peak demand is costly (top 10% of hours = 40% of total annual cost). Battery storage can even out the peak/trough and increase efficiency, lowering the demand charges. Demand

charges are high in SWVA and WV, and energy storage is a more attractive option for institutional and commercial scale clients.

- Several case studies were then shared that utilized solar + storage.

Discuss around possible applications for solar + storage in SWVA

Since there are high demand charges in SWVA, a lot of utilities could benefit from energy storage. One facility from the RFP process, the Norton Rescue Squad, has voiced interest in being able to use battery storage during outages to be a shelter during emergencies. This could be a pilot project in the region for other projects such as hospitals and other critical facilities that would be great candidates for energy storage. Todd has been working with the Solar Workgroup Planning Team on facilitating growing conversation in the region.

A participant asked if the Workgroup has reached out to wastewater treatment systems or other high energy users that would be good candidates for solar as well as energy storage? Chelsea answered that the newest RFP has the Pennington Gap wastewater system involved, but there hadn't been discussion of energy storage, but that is a good idea. Todd noted that Schneider Electric used to market a product specifically for wastewater systems where they would place a battery on the property and manage it, selling services to the facility and the utility. Todd will explore if there are still offering this product.

Next steps for the Workgroup in creating opportunities for solar energy storage

Since cost is a barrier, what would be the lowest hanging fruit? Todd answered that it depends on what the rates are like and those dynamics, and then would have a lot to do with the capacity cost of utilities and co-ops. In most places, the state has some kind of grant program to get one or two demonstration projects in the field (Vermont, Massachusetts, and Connecticut), but requires a champion at the state level to push for it. The other way to go about it is to have the utility incorporate it into a program such as a demand response program or an energy efficiency program for smaller systems. If there was an interested utility, they could start with state-level approval. The third option is that the utility builds something at a substation on their own, which is better than nothing but doesn't allow a lot of learning opportunities for the rest of the community. Todd reminded the group that their website includes a lot of additional resources: <https://cesa.org/>

The next in-person Solar Workgroup meeting will be on Monday, June 3rd in the afternoon at UVA-Wise. The meeting will likely include a presentation from Dominion on pump storage, and Josh Sawyers is likely to share about youth enegaments at UVA at Wise. Call participants were invited to sign up for Solar Workgroup emails at the website www.swvasolar.org.

Call Attendees

Meade Anderson	VA DEQ (Department of Environmental Quality)
Joey James	Downstream Strategies
Hannah Coman	Southern Environmental Law Center

Chelsea Barnes	Appalachian Voices
Samantha Brook	Suntribe Solar
Todd Olinsky-Paul	Clean Energy Group
Kevin Comer	Antares Energy
Austin Counts	Appalachian Voices
Christine Gyovai	Dialogue + Design Associates
Brad Kreps	TNC (The Nature Conservancy)
Lena Lewis	The Nature Conservancy
Vince Maiden	VA DEQ
Jan Canterbury	Ascent Virginia
Adam Wells	Appalachian Voices
Derek Moretz	Encore Renewable
Randy Williams	NCi