

Solar Workgroup for Solar Development in Southwest Virginia

April 11, 2017 Meeting Summary

Background

The fourth in a series of meetings of a Solar Workgroup around Solar Development in Southwest Virginia was held on April 11, 2017 at the LENOWISCO Planning District Commission office in Duffield, VA. Three previous in-person meetings of the Workgroup were held in February 2017, November 2016, and October 2016. Two conference calls of the Workgroup were held in the winter of 2016-2017 around prioritizing sites for solar development in SWVA. Meeting summaries can be found on the website: <u>http://swvasolar.org</u>.

Before this Workgroup meeting was held, participants were invited to join a tour of the Duffield Jail solar thermal system, which was installed to save a significant amount of money on heating and hot water costs since they previously only had propane to run the boiler. Additional information about the installation may be found at <u>this news piece</u>¹ or by contacting Solar Workgroup meeting organizers.

Meeting overview

Meeting participants (listed at the end of the summary) discussed the clear next steps of the Workgroup, focusing on action items. The question, "How are we going to get more solar in SWVA?" remained central to the Workgroup conversation. Solar Fair planning, solar policy, RFP proposals, and site prioritization were the main topics of discussion during the meeting.

Christine Gyovai of Dialogue + Design Associates welcomed the participants and gave a recap of past Workgroup meetings and events. She relayed that the purpose of this Workgroup is to promote the economic development and job creation potential of solar development in SWVA. During the February Workgroup meeting, the Workgroup addressed the priorities of community outreach and the importance of getting solar ambassador sites in on the ground. Since then, the Workgroup has created a list of potential prioritized solar sites and has organized the Solar Fair to kick-start community engagement. Participants were reminded that this Workgroup emerged from the UVA of Wise Economic Development Forum of May 2016 as an action group. Matt Wasson of Appalachian Voices added that the Workgroup was awarded a POWER Implementation Grant, allowing them to bring contractors into the project to assist with project development. Adam Wells, also of Appalachian Voices, mentioned that People Inc. and UVa-Wise are co-conveners in the Solar Workgroup as well.

¹ http://e-edition.timesnews.net/article/9062911/sw-va-jail-unveils-states-largest-rooftop-solar-panels

The group agreed to the following guidelines for the meeting:

- All ideas are welcome
- Acronym explanation
- Phones on silent / calls outside of the room

Solar Fair Update: May 9th 5-7pm

The Workgroup Planning Team gave an update on the Solar Fair, which will be held on Tuesday, May 9th from 5-7 pm following the next Solar Workgroup meeting. Adam reminded the group that the Solar Fair will be the kick-off of the Solarize Wise program, the residential program for homeowners, but also the immediate kick-off for the Economic Forum at UVa-Wise, which is happening the next day. The youth elements of the Solar Fair include the creation of solar ovens and a mini-grant challenge for area youth and schools. The mini-grant winners will give a brief show-and-tell style presentation of their project. Other Solar Fair features include: Music with the Empty Bottle String Band, Lydia will be doing a Solar 101 demonstration, SPARC-E will be powering the bounce house (a second inflatable might be needed).

Action Items and next steps for the Solar Fair include:

- Need to determine if a second inflatable needs to be rented and if SPARC-E can handle the power output
- Finalize food for the Fair
- Print banners/programs for Fair
- Identify Workgroup members to staff table at Fair
- Make sure SWVA delegates are invited

Solar Policies and Legislation in Virginia

After the Solar Workgroup discussed the Solar Fair, Will Cleveland of the Southern Environmental Law Center (SELC) was introduced to share information about current solar policies and legislation in Virginia. Will began by telling the group that SELC has been working on several fronts in Virginia to advance solar policies that will help all Virginians. He agreed with the Solar Workgroup's focus on savings and economic development in terms of solar development, focusing on "dollars and sense." Will pointed out that the price of solar keeps dropping alongside with battery innovation, and that solar is a work-intensive enterprise that offers multiple opportunities for employment. He pointed to North Carolina as being ahead of Virginia in renewable energy policy. Virginia has 400 megawatts installed but is still far behind, but there are several efforts working to expand that.

Will also noted that right now, the legal landscape in Virginia is pretty good for solar: VA has utility scale solar where utilities are buying all the solar power currently generated where the utility then sells it back to the customers. The utilities are the largest purchasers of solar power in VA at the present. Some example projects exist where they sell the solar power back to the customer base, such as Microsoft buying their power from the utility "sink" as entirely solar. (More examples exist with wind energy.) Currently, net metering policies are experiencing some push back in Virginia, and policies may change in the future. As it is now though, residential systems can install as much as solar power in their array as they use, and the utility must buy the excess power. The solar array produces energy for the utility during peak production (when most people are at work and not using power), and the utility then provides the electricity in off-peak hours and buys back any excess electricity. There are three types of net metering: residential, commercial (up to one megawatt in size), and agricultural which can aggregate multiple meters on the farm.

A participant asked Will about applicability of solar policies in the Old Dominion territory since it is an out-of-state utility (which VA policies still apply to out-of-state utilities was the reply). There is a current group working on proposing additional solar policies and legislation in Virginia mediated by Mark Rubin. In 2017, the "Rubin Solar Group" (as it has informally become known) put forward three pieces of legislation that addressed agricultural metering, steam-lining approval processes, and around community solar. The Rubin Solar Group asked SELC to work in their community solar group, which it has participated in.

Practical residential scale considerations:

- At the end of a residential utility billing cycle, the rate at which the customer is paid back for their solar production is in wholesale dollars.
- You can only install as much solar as you can use; even if you have room for a 20Kw system, you can only install a system as large as your tracked usage.
- Each service territory can only meter up to 1% of their total sales; this cap isn't an issue yet, but it could be in the future.
- Some net metering territories cross state lines and may create issues/opportunities.
- Standby charges are a possible negative policy development and considered to dampen solar development by charging solar users to maintain the grid on a state-by-state basis.

Community scale considerations:

- A bill recently passed that was designed to increase the type of customer that can access solar in spite of impediments (such as poor exposure and cost inhibition) around community scale solar that involves the utility. The utility would sign long term agreement with community scale solar farm. In this arrangement, the utility buys the power from the system and sells subscriptions for solar energy to the customer base with no financial commitment (upfront or long-term). If they are a subscriber, the customer would get billed for solar-produced electricity first. Renters and multi-family dwellings can subscribe as well, and if a customer moves, they take the subscription with them. Finally, the solar rate should be cheaper than the regular rate eventually. As soon as program is approved by utilities, an individual could sign up, and they utility handles the whole process.
- Institutions such as schools and municipal buildings could benefit from community solar.
- Third party financing is possible, but sometimes it is questionable with long-term commitments.
- Apart from community solar bill, Dominion and Appalachian Power have solar pilot programs with a 7 megawatt cap.
- Will says the "sweet spot" is community scale solar on less than one megawatt systems.

Action Items:

- Explore feasibility of manufacturing solar panels in VA.
- Showcase existing solar success stories such as the Duffield jail.
- Will committed to reviewing policy recommendations from the Workgroup and updating the SELC document "State of Solar in Virginia."

Other Points of Discussion:

- There are opportunities around where tech companies are pressuring states to develop a robust solar grid for them to locate in that state which is in itself is a huge economic opportunity. It might be helpful to research into such companies' (such as Google, Microsoft etc.) solar procurement goals.
- Local stories such as the practical win-win story of the solar installation at the jail need to be showcased!
- A group member suggested that environmental advocacy is not the best face for promoting solar. Need to be apolitical and focused on economic development.
- The Rubin Solar Group is working for 2018 to preserve existing solar bills under attack and addressing storage possibilities as lithium ion battery costs drop. Batteries negate the need for net metering.
- Utilities are having a difficult time keeping pace with the quickly changing solar technology, but we need utilities to maintain the grid.

Roadmap Progress and RFPs

The Roadmap is a working, living document that will be developed and refined over the coming months with the goals and actions of the Solar Workgroup. The Planning Team welcomes edits and feedback on the Roadmap at any point from Workgroup members. During the last inperson Workgroup meeting, participants noted that the Roadmap should focus more explicitly on economic development and job creation. As a result, two Request-for-Proposals (RFPs) were created around conducting an economic analysis for solar in SWVA as well as around solar site assessments, and five proposals total were received for both the site assessment and the economic development RFPs by the April 10th deadline.

Christine introduced consensus decision-making for the group for use which was described (and supported by Workgroup members as):

Consensus-decision making: All members of the Solar Workgroup will have equal status and voice in Workgroup operations. Decisions about overall actions will be made by consensus. This means that all members can live with and support a decision. While consensus may entail compromise, a participant who consents to a proposal does not compromise interests or core values of fundamental importance to him/herself or his/her constituents. If you are concerned that a proposal is asking you to compromise a fundamental interest or value – and you will thus be unable to actively support it outside of the meeting – it is important that you speak up so that your interests may be fully understood and addressed. Consensus means that:

- A participant who consents will actively work to support the proposal.
- A participant who consents will support all of the proposal, and not just the parts

she/he likes best.

Additionally, the Steering Committee will test for consensus by using the following method:

- Raising three fingers will indicate full support.
- Raising two fingers will indicate support with some questions and concerns.

• A "one finger" position by one or more participants indicates that consensus has not been reached and more discussion is potentially needed.

The Workgroup used consensus decision-making reached a decision of support on a proposal for the consultant selection process comprised of a committee of Nick, Mary, Matt (advisory) and Jimmy would finalize the selection criteria as well as the select the consultants. The suggested selection criteria for the contractors included location, experience, ability to attend Solar Workgroup events/meetings, interviews, and scoring on pre-selected criteria from the selection committee. The selection committee decided they would review the proposals by early next week (April 16) before deciding if interviews would be necessary. Meeting participants noted support for in-person interviews for possible contractors.

Additional changes and considerations for the Solar Roadmap included:

- Use Virginia's Southwest or Southwest Virginia (confused with southern WV; also consider regional branding work with Southwest Virginia).
- The group agreed the Roadmap looks good, and that the selected consultant will move elements of it forward and a few sections will be expanded (such as policy) by the Workgroup.

Potential Solar Sites Update

Christine reviewed the prioritized potential sites for solar via the Google sheet that the Solar Workgroup developed over the winter 2016-2017. A few new sites were added to the Google sheet based on Workgroup suggestions, which included:

- The Constitutional Oaks Shell Building in Lee County which is owned by the IDA, visible from the highway, and unoccupied.
 - School system possibilities exist in Lee Counties as well.
- Adam will discuss possibilities in Big Stone Gap with the new town manager Steve Lawson.
- Secure Mountain 15 acres.
- Scott County Business and Technology Park and the Daniel Boone Interpretive Center.
- A potential site is in Western Lee County on Debusk farmland (Harregot) in partnership with LMU Vet School/forest animal teaching center from TN (Powell Valley Coop is the utility provider).

Then the group discussed next steps for gathering needed key background information for priority sites for possible solar development and consideration by the selected contractor, which included:

1. Owner Status

Accessibility of owner interaction: Easy to reach: yes/no Difficult to reach: yes/no Ownership of site: Single owner: yes/no Owner owns multiple sites? Legal embroilments: yes/no Public ownership or highly cooperative: yes/no

2. Fundability

Eligible for financial resources (tax credit/loan/grants): yes/no Which resources: _____

3. Public Accessibility

High public visibility: yes/no Public access permitted: yes/no Number of estimated beneficiaries: Educational/Outreach potential: yes/no Demonstrates money savings: yes/no How much?

4. Economic Development Impact

Facilitates economic development: yes/no At what scale? Number of short term jobs created: Number of long-term jobs created:

5. Site development

Type of solar installation (solar thermal/ photovoltaic)? Length of time for installation to take place Utility Site considerations Return-on-investment potential

Next steps for solar site development included shepherding the list development and build community liaisons. The group discussed the possibility of one person being the main liaison/consistent point of contact which might include Jeff with AV or Emily with D+D or others. Workgroup members noted that the representative should represent Solar Workgroup, not a specific organization/company. Finally, the Workgroup noted that the selected contractor will be given the first top 5 sites to get started, while the group decides on the next 15 priority sites (for a total of 20 sites to be considered). The consultant's product will be a tool for solar development and should be given a short timeline for product turnaround.

The Workgroup then concluded the meeting with a discussion around next steps around solar policies and legislation and furthering opportunities with SELC moving forward. Next steps included:

- Will will update the "State of Solar in Virginia" document.
- Recommendations on how policies could make solar more beneficial for users.
- Identify what policies could be used or expanded for financing opportunities and making solar an easy, justifiable sell at different scales.
- First sites for solar development may need to be subsidized in order to inspire other

businesses to invest in solar.

- It will be helpful in the future to "market" solar opportunities to specific audiences: maybe a short video, or a funneled website with audience options: farmer, landlord, homeowner, etc. especially on the Workgroup website.
- The Workgroup agrees that we should focus on policy recommendations specific to economic development in the region.
- The group mentioned the possibility of integrating some of SELC's "State of Solar in Virginia" document into the Solar Roadmap.

Upcoming Solar Workgroup Meetings and Events

- Tuesday, May 9 from I 4 pm Solar Workgroup meeting at the David Prior Convocation Center at UVa-Wise
 - Solar Fair! To be held after the Solar Workgroup meeting from 5 7 pm at the Football Stadium at UVa-Wise <u>http://swvasolar.org/solar-fair/</u>
- Wednesday May 10, 2017 SWVA Economic Forum at UVA-Wise

Meeting Participants

Stan Botts, SWVA Technology Council

Glen Gannaway, Post

Jimmy Adkins, LENOWISCO Planning District Commission

Will Cleveland, guest presenter, Southern Environmental Law Center

Mary Trigiani, Spada

Matt Wasson, Appalachian Voices

Lydia Graves, Appalachian Voices

Adam Wells, Appalachian Voices

Roger Greene, Mountain Empire Community College

Bryce Shular, Mountain Empire Community College

John Kilgore, Scott County EDA

Nick Polier, Dept. of Mines, Minerals and Energy

Christine Gyovai, facilitator, Dialogue + Design Associates

Emily Carlson, assistant facilitator, Dialogue + Design Associates