



Appendix A

Solar Legislative and Regulatory Landscape in Southwest Virginia

April 2, 2020

The Solar Workgroup of Southwest Virginia (SWG) seeks to utilize the development of solar energy as an economic catalyst in the seven-county region of far Southwest Virginia. The SWG is co-convened by the UVa-Wise Office of Economic Development & Engagement, People Incorporated and Appalachian Voices, with facilitation assistance from Dialogue + Design Associates, policy and legal analysis from Southern Environmental Law Center, and technical assistance from paleBLUEdot. This document provides an overview of solar policy and regulations relevant to commercial- and industrial-scale customers in Southwest Virginia, for context as part of the 2020 Solar Co-Developer Request for Interest, available online at: <http://swvasolar.org/solar-rfi/>. This information is offered as reference only and is subject to change and correction. Respondents to the RFI should independently verify all information.

The Virginia General Assembly passed monumental energy and solar legislation in 2020. Although there is still more work to be done to increase solar access for all Virginians, the new legislation reflects a major shift in Virginia solar policy and provides much more opportunity for solar development in Virginia, and in particular SW Virginia, than ever before. These legislative changes, as they apply to solar policy in Virginia, are reflected below.

Please also note that many of these legislative changes from the 2020 General Assembly will go into effect in July 2020. However, in many cases the State Corporation Commission (Commission) will need to update or promulgate regulations and guidelines to reflect these legislative changes. Conservatively we estimate that many of these regulations will not be finalized until the end of 2020.

Five utilities operate in the coalfield region of Southwest Virginia:

- Appalachian Power Company -- investor-owned utility, part of American Electric Power -- **"APCo"**
- Old Dominion Power Company -- investor-owned utility, part of Kentucky Utility -- **"ODP"**
- Powell Valley Electric Cooperative -- electric cooperative, buys energy wholesale from Tennessee Valley Authority (TVA) -- **"PVEC"**

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- Richlands Municipal Utility - non-jurisdictional utility (meaning the Commission does not have jurisdiction over their rates), buys energy wholesale from American Municipal Power -- “**Richlands**”
- Bristol Virginia Utility - non-jurisdictional utility, buys energy wholesale from TVA -- “**BVU**”

A Note about Non-Jurisdictional Customers in Virginia

In Virginia, the Commission does not have the authority to set electricity rates for governmental customers of investor-owned utilities. These customers, referred to as “non-jurisdictional” or “public authorities,” negotiate a tariff as a group with the investor-owned utility directly. Old Dominion Power and Appalachian Power’s rates for these “non-jurisdictional customers” are not publicly available but over time, some details of these tariffs have been made public.

APCo & ODP

Net Metering

- Customers can net meter in both APCo territory and ODP territory. Virginia credits customers who net meter at the retail rate.
- Virginia does not allow virtual net metering.
- The net metering statute is Va. Code Section 56-594 (<https://law.lis.virginia.gov/vacode/title56/chapter23/section56-594/>). Please note that this statute only applies to jurisdictional customers. Non-jurisdictional customers (schools, government buildings, etc.) negotiate their contract separately and that contract may contain additional restrictions on net metering.
- Legislation that passed the Virginia House and Senate in March is expected to be signed by the Governor in April. The legislation, referred to at the Virginia Clean Economy Act (VCEA), amends Va. Code Section 56-594 (available at <https://law.lis.virginia.gov/vacode/title56/chapter23/section56-594/>; or see SB 851/HB 1526 at <https://lis.virginia.gov/cgi-bin/legp604.exe?201+ful+HB1526ER>).
- Net metering limitations on jurisdictional customers in APCo and ODP territories (as amended by the VCEA):
 - Customers must own and operate or contract with other persons to own, operate, or both an electrical generating facility.
 - **System Caps:** Upon the effective date of regulations established by the Commission, residential customer facilities will be capped at facility size of 25 kW and non-residential customers are capped at facility size of 3 MW. Conservatively, we estimate those new size caps will go into effect at the end of 2020. Until that date, residential customers are limited to 20 kW and commercial customers are limited to 1 MW.
 - Solar facility capacity shall not exceed expected annual energy consumption based on the previous 12 months of billing history or an annualized calculation of billing history if 12 months of billing history is not available.

- **Aggregate Net Metering:** In the VCEA, solar facilities must be located on the premises of the customer-generator. Changes in HB 572/SB 710 also awaiting the Governor’s signature would allow for net metering from adjacent properties for agricultural customers only. This discrepancy will likely be resolved in April of 2020.
- **Standby Charges:** In the VCEA, standby charges apply to residential facilities exceeding 15 kW. However, separate legislation that also passed the General Assembly and is awaiting the Governor’s signature (HB 572/SB 710) prohibits standby charges on ODP and APCo residential customers beginning July 2020. This discrepancy will be resolved in April. Currently, legislation allows ODP and APCo to charge customers with residential systems exceeding 10 kW to be charged a standby charge.
- **Program Caps:** Net metering is available on a first-come, first-served basis until the rated generating capacity owned and operated by customer-generators reaches 6% of APCo’s/ODP’s respective adjusted Virginia peak-load forecast for the previous year. Of that 6% cap, 1% is reserved only for low-income utility customers. “Low-income utility customers” are defined as “any person or household whose income is no more than 80% of the median income of the locality in which the customer resides. The median income of the locality is determined by the U.S. Department of Housing and Urban Development.” This program cap is an increase from the current 1% net metering cap.
 - 6% of APCo’s adjusted Virginia peak-load forecast for 2020 is approximately 240 MW.
 - 6% of ODP’s adjusted Virginia peak-load forecast for 2020 is approximately 14.4 MW.
- Net metering limitations on non-jurisdictional customers in APCo Territory:
 - Customers must own and operate the electrical generating facility.
 - Net metering is available on a first-come, first-served basis until 3 MW of capacity is reached for non-jurisdictional net metering customers in APCo territory.
 - Additionally, for non-jurisdictional customers, the tariff requires that “Net Metering Service Customers must take service under a rate schedule that includes an on-peak demand charge.”
 - These tariffs are being actively negotiated and Appalachian Power has expressed a willingness to negotiate individual tariffs for customers interested in installing solar.
- Net metering limitations on non-jurisdictional customers in ODP Territory:
 - Since non-jurisdictional customers are not subject to jurisdiction of the Commission, it appears that ODP contracts directly with the non-jurisdictional customers.
 - We expect that any contract with a non-jurisdictional customer for net metering service will be consistent with the applicable terms of the net metering statute and generally follow the terms and conditions for service shown in the

jurisdictional Standard Rate Rider NMS tariff. That being said, the individually negotiated contracts may vary.

Power Purchase Agreements

- A PPA Pilot Program exists in APCo and ODP territory as amended in the VCEA. (SB 851 / HB 1526 available at <https://lis.virginia.gov/cgi-bin/legp604.exe?201+ful+HB1526ER>). APCo takes the position that their PPA pilot prior to the effective date of the VCEA only applies to “nonprofit, private institutions of higher education.” ODP takes the position that PPAs are not legal prior to the effective date of the VCEA. Conservatively, we estimate the new PPA pilot programs will go into effect at the end of 2020. Until that date, APCo and ODP will generally not allow PPAs in their territories.
 - **Program Cap:** Aggregated capacity of all generation facilities that are subject to PPAs at any time shall not exceed 40 MW in APCo territory and 40 MW in ODP territory. However, note that this amount counts towards the 6% cap under net metering, assuming the projects are net-metered. As amended by the VCEA, the PPA cap for ODP is actually larger than the net metering cap for ODP.
 - **System Size Requirements:** Under the new programs created by the VCEA, systems must be a minimum 50 kW capacity size and not more than 3 MW in size. However, if the customer is a low-income utility customer (same definition as above) or an entity with tax-exempt status in accordance with Section 501(c) of the Internal Revenue Code, as amended, then the facility is exempt from the 50 kW minimum size requirement. The capacity limits of 25 kW for residential customers and 3 MW for nonresidential customers that are set forth in the net metering statute (above) still apply to net energy metering generation facilities regardless of whether they are subject to a PPA.
 - A generation facility subject to a PPA under the new pilot programs can only serve one customer and the PPA cannot serve multiple customers.

Leases

Leases are not explicitly prohibited and are presumed to be legal.

Solar Self-Generation Agreement (SGAs)

SGAs are similar to a PPA, but instead of selling electricity, it is selling solar as a service. The Commission has never ruled on whether SGAs are legal.

- APCo has previously allowed a project that was financed through a self-generation agreement, but it is unclear whether they will allow additional projects in the future.
- ODP has not taken a position on a possible Customer Self-Generation Agreement. ODP would want to review the draft documents proposed for the transaction and know who owns the limited liability company.

Loans

- Loans are often available through local banks to purchase solar outright.
- C-PACE financing is legal in Virginia, but localities in Southwest Virginia have not yet established programs.
 - Legislation introduced at the Governor's request, HB 654, authorizes DMME to sponsor a statewide C-PACE program, allowing DMME to engage a private entity through a competitive selection process to develop and administer the program.
 - DMME plans to release an RFP for a statewide administrator on July 1, 2020.
 - Additional resources regarding C-PACE in Virginia:
 - <https://virginiapace.com/>
 - <https://www.dmme.virginia.gov/de/PACE.shtml>

Community Solar

- APCo is required to offer a pilot community solar program pursuant to a 2017 law (SB 1393): <http://lis.virginia.gov/cgi-bin/legp604.exe?171+sum+SB1393>. However, they have yet to apply to the Commission for approval of the program.
- SB 710/HB 572 (the Solar Freedom Act) pending the Governor's signature requires Old Dominion Power to offer a community shared solar program for multi-family customers.

PVEC & BVU

PVEC is a Virginia electric distribution cooperative organized under the laws of the Virginia Commonwealth, with certificated service territories in Virginia and Tennessee. PVEC purchases wholesale power from a federal government agency, the TVA, and, due to this arrangement, it is unique among Virginia electric cooperatives and governed by a combination of federal and Virginia law concerning its electric distribution operations. Its rates are regulated by its federal wholesale power supplier, TVA. PVEC is regulated as to service, but not as to rates, by the Virginia Commission. BVU is a non-jurisdictional utility, but since BVU also purchases wholesale power from TVA, the following also applies to BVU.

Net Metering

PVEC views the issue of net metering to be an issue of rates and not of service. PVEC views federal laws, its wholesale contract with TVA, and its tariff to be the governing authorities on the issue of net metering within its certificated Virginia service territory, as opposed to the Virginia net metering rules. PVEC's contract with TVA requires that it purchase 100% of its power for distribution from the TVA and prohibits it from taking power from any other source, including from individual customers. As a result, PVEC takes the position that Virginia net metering rules do not govern any part of these transactions. BVU takes the same position.

Power Purchase Agreements

PVEC takes the position that the requirements for electric cooperatives to offer PPA programs in Virginia does not apply to them for the reasons stated above. Virginia law does not require BVU to allow PPAs.

Solar Programs

TVA used to offer a “Green Power Providers” program that allowed customers to generate solar through a tripartite contract wherein the individual customer would generate power and sell it to TVA, and TVA would then, in turn, sell that power back to PVEC for distribution to the individual customer. As of December 31, 2019, TVA is no longer accepting applications to this program. A new clean energy program is expected to become available in 2020, but the details are not yet available. TVA periodically issues RFPs for large-scale solar projects. This impacts the availability of solar programs offered by PVEC and BVU.

Town of Richlands

Currently, the Town of Richlands does not offer any solar programs to its customers.

Additional Legislative Changes to Solar Policy in Southwest Virginia

In addition to the VCEA (discussed above), the following legislation is currently pending in Virginia, awaiting the Governor’s signature or amendments:

Net Metering and PPAs

All of these bills have passed the General Assembly and are awaiting the Governor’s signature or veto.

- HB 1647: This bill increases the net metering cap to 6%, with 1% reserved for low-income customers, as in the VCEA. Additionally, it expands the PPA program for Appalachian Power customers and added a new PPA program for Old Dominion Power customers. It is expected that this bill will be vetoed by the Governor to allow the more aggressive bills to be enacted.
- SB 710/HB 572 (the Solar Freedom Act): This bill also increases the net metering cap to 6%, with 1% reserved for low-income customers. Additionally, it expanded the PPA program for Appalachian Power customers and added a new PPA program for Old Dominion Power customers. The PPA program in this set of bills has a higher program limit than those set in HB 1647. The PPA program is available to nonprofits and low-income customers of any size are eligible, and other customers with systems of 50

kW or higher are eligible. There is a 40 MW cap for Appalachian Power, and a 40 MW cap for Old Dominion Power.

Aggregate Net Metering and Community Solar

All of these bills have passed the General Assembly and are awaiting the Governor's signature or veto.

- SB 710/HB 572 (the Solar Freedom Act) and HB 1647 both include provisions to allow agricultural customers to net meter multiple meters on adjacent (connected) sites.
- SB 710/HB 572 (the Solar Freedom Act) includes a community shared solar program for multi-family customers in Old Dominion Power territory. If enacted, this program would not become available until October 2021.

Renewable Portfolio Standard

The VCEA creates an RPS for Appalachian Power and Dominion. They must issue RFPs to procure renewable resources (the resources do not have to be located in their specific utility territory). APCo must reach 100% by 2050 and Dominion must reach 100% by 2045.

Procurements of solar and wind must be completed through RFPs issued at least once per year. The RPS includes a requirement that requires 1% of the Dominion's clean energy procurements must come from systems 1 MW or less, creating a REC market (incentives) for solar, wind, and other resources.