The Virginia Clean Economy Act

April 2020

The Virginia Clean Economy Act of 2020 (SB 851)

***Status*:** Enacted on 4/12/2020

The wide-ranging clean energy legislation includes a 3,100 MW energy storage target by 2035, making Virginia's storage target the largest in the nation. Key provisions include:

- A requirement that utilities procure 3,100 MW of new energy storage by 2035;
- At least 35% of storage MW must be procured from third parties;
- A notional goal of behind-the-meter storage to meet 10% of the storage target; and
- Direction to the state's utility regulators to implement interim targets, programmatic support, and planning reforms germane to the energy storage target.

HB 1526/SB 851, the Virginia Clean Economy Act of 2020 (the "VCEA"), was enacted on April 12, 2020. This law contains numerous provisions supporting a requirement of 100% clean energy by 2050, including an energy storage procurement mandate of an additional 3,100 MW by the end of 2035. At least 35% of energy storage must be procured from third parties, either as service contracts or build-transfer, and the bill specifies a "goal" of 10% behind-the-meter energy storage. The state is also directed to adopt regulations by January 1, 2021, for interim targets, supporting programs, and integrated resource planning (IRP) reforms in line with its energy storage mandate.

Legislative Summary

100% Renewable Power by 2050

The law establishes a renewable portfolio standard (RPS) of 100% that would apply to Appalachian Power by 2045 and to Dominion Energy Virginia by 2050, with specific targets for energy storage, solar, and wind power. It additionally includes a provision for nearly all coal-fired power plants to close by the end of 2024. The RPS applies to renewable energy from sunlight, wind, falling water resources (e.g. a combined pumped-storage and run-of-river generation facility), biomass, energy from waste, landfill gas, municipal solid waste, geothermal power, as well as wave motion and tides.

3,100 Storage Procured by 2035

The law establishes a requirement of 3,100 MW of new energy storage procurements by 2035, with Dominion Energy Virginia required to procure 2,700 MW and Appalachian Power required to procure 400 MW. The utilities must submit annual plans and may construct or acquire more if approved by the Virginia State Corporation Commission (SCC), the regulator of the state's investor-owned utilities. Other key details include:

- A maximum of 500 MW from a single storage project can count towards the mandate, with the exception for one 800 MW pumped hydro project expected to be procured by Dominion Energy.
- At least 35% of storage MW (1,085 MW) must be procured from third parties, as opposed to self-build by a regulated utility.
- The law states a goal of behind-the-meter storage systems accounting for 10% of storage MW deployed. However, the statute does not specify any requirement to do so, nor any means by which the goal would be realized.
- By January 1, 2021, the SCC is directed to:
    - Set interim energy storage procurement targets;
    - Update existing utility planning and procurement rules for energy storage resources; and
    - Adopt regulations to include programs and mechanisms to deploy energy storage, including competitive solicitations, behind-the-meter incentives, non-wires-alternatives programs, and peak reduction programs.

Other Clean Energy Targets

The law requires that by December 31, 2035, Dominion Energy Virginia will need to petition the SCC for approval to acquire 16,100 MW of capacity from solar or wind resources, which includes:

- 1,100 MW of solar generation from projects of up to 3 MW in size; and
- 5,200 MW of offshore wind generation.

These other clean energy targets provide a potential additional avenue for storage deployment as a part of hybrid resource configurations. For example, the law defines rooftop solar as "a distributed electric generation facility, *storage facility*, or *generation and storage facility* utilizing energy derived from the sun, with a rated capacity of not less than 50 kW at a commercial building, multi-family residential building, school or university, or religious building." At least 1% of Dominion's RPS requirement in any given year must be met with projects with a nameplate capacity of 1 MW or less.

Appalachian Power is subject to a less prescriptive requirement of procuring 600 MW of onshore solar or wind by 2030 without any size restrictions. Like Dominion, 35% must be third-party owned.

Energy Efficiency Standards

The Act sets an energy efficiency resource standard, requiring third party review of whether energy companies meet savings goals. Specifically, the law requires that beginning in 2022, Appalachian Power is required to achieve annual energy savings of at least 0.5% of retail sales in 2019, increasing by 0.5% each year until reaching 2% of 2019 sales by 2025. Dominion Energy, beginning in 2022, is required to achieve annual energy savings of at least 1.25% of retail sales in 2019, increasing by 1.25% each year until reaching 5% of 2019 sales in 2025. Between 2026 through 2028, and every three-year period thereafter, the SCC will update the energy efficiency savings targets.

Market Opportunity

The establishment of a storage mandate is expected to catalyze energy storage deployment in Virginia, although the pace of that development remains to be seen.

- A critical factor in the overall opportunity will be the SCC's development of interim targets. Frontloading or backloading of MW will have significant impact on the investment and development timeline for storage developers. Additionally, a gradual increase in interim targets over time may lead to rapid saturation. Also, it is unclear whether dates for interim targets will require only that projects be procured (i.e., with a signed contract), or whether they will require projects be operational.

- Dominion Energy Virginia is in the process of developing its next IRP to be consistent with the requirements of the VCEA. The previous 2018 IRP by Dominion indicated that it expects to be capacity-short starting during 2021, suggesting that any forthcoming RFPs are likely to seek project delivery on or after that year. Similarly, Appalachian Power is not expected to be capacity-short until 2027, according to its most recent 2019 IRP. The IRP reforms implemented by the SCC could be significant in modifying these timelines and thus the development of RFPs.

- Storage procured by Virginia utilities for resource adequacy will be required to follow the rules on capacity accreditation instituted by PJM, the regional grid operator. PJM presently qualifies energy storage facilities at their output over 10 continuous hours, although PJM is developing revisions of the capacity accreditation method for energy storage in response to FERC examination. The outcome of that process will significantly affect the requirements of future storage procurements.

- The requirement that 35% of storage MW be procured from third-parties is useful for ensuring market opportunities for all developers. However, Virginia utilities are not required to seek power purchase agreements or other service contracts and could choose to meet the requirement simply by buying projects developed by 3rd parties. Implementing regulations by the SCC could have some bearing on this.

- The 10% behind-the-meter goal, while welcomed, is not a requirement of the law, and statutory language is ambiguous about how it will be accounted for. Realization of this component of the target is likely to rely on programmatic support developed by the SCC as part of implementing regulations, as well as some measure of rooftop solar-storage hybrids deployed for reasons other than target compliance.

Further Information

The full text of the legislation is available here.

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