

October 20, 2020

**VIA ELECTRONIC FILING**

Mr. Joel H. Peck, Clerk  
c/o Document Control Center  
State Corporation Commission  
Tyler Building -First Floor  
1300 East Main Street  
Richmond, Virginia 23219

RE: Virginia Electric and Power Company's Integrated Resource Plan filing pursuant to Va. Code § 56-597 *et seq.* (Case No. PUR-2020-00035)

Dear Mr. Peck,

Please find enclosed for filing in the above-mentioned case public comments by the Energy Storage Association on the Virginia Electric and Power Company's 2020 Integrated Resource Plan.



Jason Burwen  
Vice President, Policy  
Energy Storage Association

**COMMONWEALTH OF VIRGINIA  
STATE CORPORATION COMMISSION**

**COMMENTS OF THE ENERGY STORAGE ASSOCIATION**

Pursuant to the State Corporation Commission’s (“Commission”) April 6, 2020 Order Establishing Schedule for Proceeding, the U.S. Energy Storage Association (“ESA”) respectfully submits these comments on Virginia Electric and Power Company (“Dominion”) 2020 Integrated Resource Plan (“IRP”).

ESA commends Dominion for incorporating into its 2020 IRP a path for achieving the Commonwealth of Virginia’s ambitious energy and environmental goals. This is an important first step to bring together key stakeholders to ensure that the Commonwealth’s goals are conducted in the most cost-effective and efficient manner and align with the system’s needs. While this IRP serves as an important first step, several crucial refinements to the IRP would serve the best interest of ratepayers. In our comments below, ESA outlines recommendations for IRP improvements employed by other utilities to better incorporate storage and for updating Dominion’s IRP to match PJM’s new method for resource adequacy accreditation of storage and other resources.

**I. ABOUT THE ENERGY STORAGE ASSOCIATION**

ESA is the national trade association dedicated to energy storage, working toward a more resilient, efficient, sustainable, and affordable electricity grid—as is uniquely enabled by energy storage. With more than 200 members, ESA represents a diverse group of companies, including independent power producers, electric utilities, energy service companies, financiers, insurers, law firms, installers, manufacturers, component suppliers, and integrators involved in deploying energy storage systems around the globe. Our members work with all types of energy storage technologies and chemistries, including lithium-ion, advanced lead-acid, flow batteries, zinc-air, liquid air, compressed air, and pumped

hydro among others. A number of ESA members have operations or are presently developing grid energy storage projects in the Commonwealth.

## II. COMMENTS ON THE 2020 INTEGRATED RESOURCE PLAN

ESA commends Dominion for incorporating modeling of energy storage resources in its 2020 IRP. While Dominion has made progress in incorporating energy storage in this year's IRP, ESA notes that IRP modeling will need to evolve further to better take into account the operational characteristics and benefits of storage. Indeed, the Virginia Clean Economy Act requires "the Commission shall adopt regulations to achieve the deployment of energy storage for the Commonwealth..., including regulations that set interim targets and *update existing utility planning* and procurement rules" (emphasis added).<sup>1</sup>

ESA has previously provided a number of recommendations for updating utility IRPs in order to incorporate energy storage into prudent planning, which are contained in our comments in Case No. PUR-2020-00120 and consist of:<sup>2</sup>

- Use up-to-date storage cost estimates and forecasts to better identify near-and long-term opportunities for various storage technologies and durations;
- Employ sub-hourly intervals in modeling to quantify the value of both capacity and flexibility benefits provided by energy storage;
- Institute a "net cost" analysis of capacity investment options to more accurately compare energy storage with traditional capacity resources;
- Incorporate system flexibility needs into reliability metrics to better account for the characteristics of the future supply mix; and
- Analyze demand resources as distinct resource options separate from load forecasts to seek the widest range of cost-effective resources.

More significantly for the present IRP, Dominion's modeling of the resource adequacy contribution of storage needs to be updated to match changes to resource adequacy accreditation in the PJM Interconnection, of which the Commonwealth is a part. Specifically, in its IRP, Dominion assumes that energy storage must be modeled using a capacity accreditation according to the maximum output that

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<sup>1</sup> Va. Code § 56-585.5 E 5

<sup>2</sup> *Comments of the U.S. Energy Storage Association*, Case No. PUR-2020-00120, filed July 29, 2020, available at [https://scc.virginia.gov/docketsearch/DOCS/4\\_pd01!.PDF](https://scc.virginia.gov/docketsearch/DOCS/4_pd01!.PDF)

can be sustained for 10 continuous hours. However, PJM's Board of Directors recently approved reforms to the capacity accreditation of energy storage, which will also update how storage participates in PJM's capacity market.<sup>3</sup> Specifically, PJM is moving to an accreditation process that will attribute significant resource adequacy contributions to storage resources based on their sustained output over 4 hours, 6 hours, or 8 hours. The reforms are being drafted into tariff language and are expected to be submitted to the Federal Energy Regulatory Commission for approval shortly.

ESA therefore respectfully recommends that Dominion's IRP be revisited and revised to account for the increasing contribution of storage to resource adequacy in the PJM balancing area. Accurate modeling of energy storage for resource adequacy is all the more important since the IRP is informing discussions on interim targets for the storage target in Case No. PUR-2020-00120.

### **III. CONCLUSION**

The Energy Storage Association appreciates the opportunity to provide these comments for the Commission's consideration in case number PUR-2020-00035. ESA looks forward to supporting the Commission and engaging with other stakeholders to further the goal of the Commonwealth in this proceeding.

Respectfully submitted this 20<sup>th</sup> day of October, 2020.



Jason Burwen  
Vice President, Policy  
Energy Storage Association

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<sup>3</sup> See draft language revisions under the Reliability Assurance Agreement (RAA) related to the Joint Stakeholder Package for Effective Load Carrying Capability endorsed by stakeholders at the September 17 MRC and MC, available at <https://www.pjm.com/-/media/committees-groups/task-forces/ccstf/2020/20201008/20201008-item-03-rra-language.ashx>