BEFORE THE UTILITIES AND TRANSPORTATION COMMISSION OF WASHINGTON

IN THE MATTER OF RULEMAKING FOR INTEGRATED RESOURCE PLANNING	**)** **)** **)** **)** **)**	**DOCKET U-161024**

COMMENTS OF THE ENERGY STORAGE ASSOCIATION

The Energy Storage Association ("ESA") appreciates the opportunity to submit these comments in response to the Notice of Opportunity to File Written Comments on as requested by the Washington Utilities and Transportation Commission ("Commission") in Docket U-161024 on April 17, 2018. In our comments below, ESA provides recommendations for implementation of a distribution resource planning process to enable competitive, cost-effective solutions and for input on designing a Proof of Regulatory Concept program to pilot new regulatory constructs.

I. ABOUT THE ENERGY STORAGE ASSOCIATION

The Energy Storage Association 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 160 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.

II. COMMENTS ON PROPOSED DRAFT REGULATIONS

ESA applauds the Commission for its leadership and vision outlined in its Report and Policy Statement on Treatment of Energy Storage Technologies in Integrated Resource Planning and Resource Acquisition filed on October 11, 2017. In its Policy Statement, the Commission recognized the unique role energy storage has to play in resource planning – both at the distribution and system level – as well as the complementary nature of the distribution resource planning ("DRP") and Integrated Resource Planning ("IRP") processes. ESA notes that a better assessment of what resources are available at the distribution level further enhances the IRP process and can serve to save ratepayer funds by mitigating the need for additional capacity.

Distribution resource planning offers the potential for ratepayer saving by providing the market with clear guidance on what the distribution needs are so that utilities, customers, and third-parties may offer lower-cost and more efficient solutions to traditional investment in the distribution system. Energy storage in particular can be deployed as a cost-effective solution for deferring or avoiding costlier distribution system upgrades, increasing power quality on distribution circuits, and increasing circuit and substation hosting capacity to meet the system demands posed by increasing proliferation of distributed energy resources (DERs), particularly non-dispatchable generation. Utilities outside of Washington have begun to demonstrate the use of energy storage as a distribution asset, for example:

- In Massachusetts, Eversource has received regulatory approval to procure one 5 MW battery and one 12 MW battery, both of which enable the utility to defer or avoid upgrades to existing transmission and distribution facilities.[1]

[1] See pages 489-495 of Massachusetts Department of Public Utilities, *Order Establishing Eversource's Revenue Requirement*, Docket No. 17-05, 30 Nov 2017, http://170.63.40.34/DPU/FileRoomAPI/api/Attachments/Get/?path=1705%2f1705_Final_Order_Revenue_Requi.pdf

- Arizona Public Service purchased a 2-megawatt (MW), 8-megawatt-hour (MWh) battery-based energy storage system for less than half the cost of the traditional investment of a wires alternative in August 2017.[2]
- National Grid has proposed a 6 MW, 48 MWh battery for Nantucket, Massachusetts, to delay the need for the construction of another submarine cable to bring electricity to support the island's growing demand.[3]
- New York's Con Edison is deferring a $1.2 billion substation upgrade through its non-wires alternative program, the Brooklyn-Queens Demand Management Program, by contracting for 52 MW of demand reductions and 17 MW of distributed resource investments, including energy storage.[4]

If developed effectively, distribution resource planning can facilitate a dynamic, transparent, resilient and sustainable distribution system. The key components of a robust and successful distribution system planning process are (1) transparency and availability of information on the distribution system, including the development of hosting capacity maps, (2) clear identification of distribution needs that can be addressed through the use of DERs with the development of suitability criteria, and (3) the development of mechanisms to enable DERs to address those needs, either through programs, tariffs, contracts or solicitations.

[2] APS Press Release, 9 August 2017, APS Brings Battery Storage to Rural Arizona, available at: https://www.aps.com/en/ourcompany/news/latestnews/Pages/aps-brings-battery-storage-to-rural-arizona.aspx.

[3] National Grid Press Release, 6 November 2017, National Grid Develops Innovative Solution for an Island's Community's Unique Energy Challenges, available at: https://news.nationalgridus.com/2017/11/nationalgriddevelops-innovative-solution-island-communitys-unique-energy-challenges/.

[4] Con Edison, Distributed System Implementation Plan (DSIP), 30 June 2016, available at: https://www.coned.com/-/media/files/coned/documents/our-energy-future/our-energyprojects/ceconydsip.pdf?la=en.

i. Effective distribution planning starts with transparency and data access

Ensuring transparency and access to data is one of the most important first steps to modernize the distribution system and increase effective and efficient deployment of energy resources. The draft regulations recognize that by not only requiring an assessment of the needs of the distribution system but also a description of how the utility is improving the visibility and transparency of the distribution. ESA notes that this process should facilitate improved hosting capacity mapping, which is a critical component of efficient deployment of distributed energy resources in optimal locations where they are most needed. The Interstate Renewable Energy Council has identified best practices and provides guidance that would be useful for the Commission on developing hosting capacity analysis in their recently published *Optimizing the Grid: A Regulator's Guide to Hosting Capacity Analyses for Distributed Energy.*[5]

ii. Stakeholder process should determine suitability criteria for distribution needs that can be met with DERs

ESA notes that there is an opportunity to refine the definition and guidance around "major distribution capital investment" through identification of suitability criteria. ESA recommends that the Commission work with stakeholders to determine appropriate suitability criteria that would trigger a review of the ability of DERs to meet the needs of distribution system identified in the plan. New York's non-wires alternatives suitability criteria is a useful model to lean on for this proceeding.[6] These criteria include consideration of investment cost thresholds that are appropriate for consideration of DER solutions, types of project or applications needed to ensure that only projects where DERs are well-positioned to address, and timeline considerations in order to ensure

[5] Interstate Renewable Energy Council, *Optimizing the Grid: A Regulator's Guide to Hosting Capacity Analyses for Distributed Energy*, December 2017, available at: https://irecusa.org/publications/optimizing-the-grid-regulatorsguide-to-hosting-capacity-analyses-for-distributed-energy-resources/.

[6] See *Joint Utilities' Supplemental Information on the Non-Wires Alternatives Identification and Sourcing Process and Notification Practices.* (http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId=%7B5DA604B3-9CDA-45D3864292A4C4171787%7D)

that the timeline for solicitation for and deployment of DER solutions to a distribution need are aligned with the timing of the utility's need. Of the areas where the utility identifies a needed distribution system network upgrade that meet the threshold test, the utility would describe in its distribution plan which distribution investment need can potentially be filled by DERs, including both utility-owned and customer- or third-party owned DER assets on the distribution grid.

iii. Consideration of mechanisms for attaining DER solutions for those identified needs should to be included in the plan

In addition to identifying the needs of the distribution system that DERs can serve, DRPs should also include consideration of tariffs, contracts, solicitations, or other mechanisms that would meaningfully ensure that DER providers are able to compete for solutions to address the needs of the distribution system identified in the plan. The development of these mechanisms should be done through a robust stakeholder process and will differ between jurisdictions. Within this discussion, developing clear rules around utility ownership and the utility compensation is critical.

iv. Piloting of new and innovative regulatory and commercial constructs is appropriate

ESA strongly recommends that pilots focused on regulatory constructs, not technologies, can facilitate learnings that will increase deployment of energy storage as distribution solutions, increase competition, and lower costs. Energy storage technologies are commercially viable technologies and therefore do not require pilots to test out the capabilities of the technologies themselves. Rather, ESA supports the development of a limited-duration and targeted program that tests innovative commercial and regulatory constructs for the deployment of storage, which has the additive benefit of jumpstarting the learning-by-doing process that can help utilities, regulators, developers and other stakeholders streamline the process for deploying energy storage.

As the Commission considers various regulatory constructs that could facilitate greater competition for storage procurement, including new commercial arrangements and regulatory constructs that can encourage greater deployment of DER solutions to address the needs of the

distribution system and drive competition, a Proof of Regulatory Concept program may be appropriate. The program objectives would be to (1) test new regulatory mechanisms that are either currently not possible or where there is ongoing ambiguity about their applicability in the State of Washington; (2) advance understanding of regulatory mechanisms in the Commission's toolbox to develop a competitive framework to complement ongoing efforts in Washington to incentivize energy storage deployment; (3) create a "learning-by-doing" process that allows all stakeholders to identify and recommend adjustments to any regulations and permitting obstacles for smooth deployment of energy storage in the future; and (4) facilitate collection of data from the program and (to the extent possible) make it publicly available in order to maximize the benefits for policymakers and ratepayers.

The program should include clear objectives, project selection criteria, and metrics for evaluating the success of these commercial and regulatory constructs. Clear program objectives ensure that the program is designed to safeguard the ratepayers' interest and that the program is effective and limited in duration. Under a Proof of Regulatory Concept program, the Commission could identify and approve a list of regulatory mechanisms and commercial structures for the utilities to pilot over a period of 2-3 years. Some examples of the type of regulatory and commercial constructs include:

- Multiple Use Project: The purpose here is to test multiple applications of energy storage. For this project, a utility would be able to lease a rate-based distribution grid asset to a third-party developer when it is not being used for grid support. The additional lease revenues would be used to drive down costs for ratepayers.
- Ownership Model Project: For this project, the Commission would test out an alternative compensation mechanism that allows utilities to earn a similar return for contracting services from a third-party owned energy storage resource as if they rate-based the asset directly. One proposal discussed in the working group provides for a rate of return on the

contract value, but there are alternative mechanisms that can be considered. Different arrangements regarding operational controls can also be tested for this project.

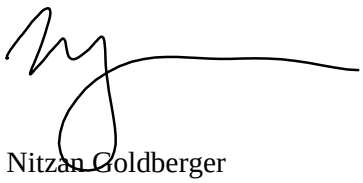
- Virtual Power Plant Project: This project would enable a utility to contract with third-party developers who own and operate a portfolio of behind-the-meter resources and synchronize them as a larger, unified, and flexible resource to meet the utility's needs. Different arrangements regarding operational controls can also be tested for this project.

For any pilot program to be effective, timelines and next steps should be clearly identified for implementation. The Proof of Regulatory Concept program would provide the Commission with an opportunity to test regulatory constructs that, if proven effective through the pilot program, should be considered more broadly to better facilitate effective DER solutions to distribution needs.

III. CONCLUSION

ESA commends the Commission for working to enhance the distribution planning process in the State of Washington and believes these steps will help facilitate a more flexible and resilient electric grid. ESA thanks the Commission for the opportunity to provide these comments and looks forward to further participation in this proceeding.

Respectfully submitted this 17th day of May 2018.



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