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February 18, 2021

VIA ELECTRONIC FILING

Ms. Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
2nd Floor, Room-N201
400 North Street
Harrisburg, PA 17120

Re: **Utilization of Storage Resources as Electric Distribution Assets**
Docket No. M-2020-3022877

Dear Secretary Chiavetta:

Enclosed please find Duquesne Light Company's Comments for filing in the above referenced proceeding.

If you have any questions regarding the information contained in this filing, please feel free to contact me or Chris Johnson at 412-393-6496 or cjohnson@duqlight.com.

Sincerely,

A handwritten signature in blue ink, appearing to read "LBQ", is positioned below the word "Sincerely,".

Lindsay A. Baxter
Manager, State Regulatory Strategy

Enclosure

Cc (w/ enc.):

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**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Utilization of Storage Resources as Electric :
Distribution Assets : Docket No. M-2020-3022877
:

**COMMENTS OF
DUQUESNE LIGHT COMPANY**

I. INTRODUCTION

At the November 19, 2020 Public Meeting of the Pennsylvania Public Utility Commission (“Commission” or “PUC”), a motion introduced by Chairman Brown Dutrieuille was adopted initiating a policy proceeding regarding potential utilization of electric storage within electric utility distribution resource planning. On December 3, 2020, the Commission issued a Secretarial Letter formally seeking input from interested stakeholders on this topic. The Secretarial Letter included three specific questions for stakeholder comment. Interested parties were invited to submit written comments to the Secretary of the Commission within thirty (30) days of publication in the *Pennsylvania Bulletin*. The policy proceeding was published December 19, 2020, 50 Pa.B. 7259. On December 28, 2021, the Office of Consumer Advocate requested an extension for comments. A Secretarial Letter was issued December 30, 2020, granting this request, and extending the deadline to February 18, 2021. Pursuant to the published schedule, Duquesne Light Company (“Duquesne Light” or “Company”) hereby submits these comments for consideration.

II. BACKGROUND

Duquesne Light is a public utility as the term is defined under Section 102 of the Public Utility Code, 66 Pa.C.S. § 102, and is certificated by the Commission to provide electric

distribution service in portions of Allegheny County and Beaver County in Pennsylvania.

Duquesne Light provides electric service to approximately 604,000 customers in and around the City of Pittsburgh.¹ As an electric distribution company (“EDC”), Duquesne Light is subject to this policy proceeding.

The time is right to explore how energy storage can be utilized to benefit customers and the grid. The instant Secretarial Letter is an appropriate initial step. However, as described in greater detail below, the Company encourages the Commission to initiate a full policy proceeding, including Comments and Reply Comments, to more fully explore this topic and build the record.

III. INITIAL COMMENTS

The electric utility sector is at the convergence of three emerging priorities: 1) an increasing need for reliability; 2) a growing demand for clean energy and decarbonization; and 3) a focus on affordability. Pennsylvania EDCs are challenged by the need to reinvest in the 120+ year old grid, to improve reliability and resiliency in the face of increasing weather impacts and cybersecurity risks, and to integrate new clean energy technologies, all while keeping rates affordable. The COVID-19 pandemic has amplified these priorities, as many Pennsylvania utility customers are working and attending school remotely, while the current economic crisis has increased the need for affordability.

Energy storage deployed as a distribution asset can be a powerful tool to support all three of these priorities. Storage can present a cost-effective means of supporting reliability and resiliency, and is increasingly cost-competitive with traditional approaches. Furthermore, energy

¹ Duquesne Light is a member of the Energy Association of Pennsylvania, which is also submitting comments at this docket. In addition to the positions stated herein, Duquesne Light generally supports the positions articulated in EAP’s comments to the extent they are consistent with the comments submitted by the Company.

storage can be an important tool to enable greater use of renewable energy and other decarbonization strategies, which aligns with the goals of the Commonwealth.²

As an initial matter, the Company observes that energy storage does not fit the traditional conceptions of either a “distribution asset” or a “generation asset.” Rather, energy storage is a different type of utility asset altogether; to try to fit it narrowly into one or the other category artificially constrains the benefits it can provide to the grid and to customers. As a new type of asset, energy storage will require its own definition and regulatory guidance.

The fact that energy storage is a newer technology that does not neatly fit into existing definitions should not prevent the Commission from allowing electric utilities to evolve in their service of Pennsylvania utility customers. The Pennsylvania PUC has a strong track record of evolving its processes and regulations to meet the needs of a rapidly evolving world and is well-equipped to develop new guidance to unleash the benefits of energy storage as part of EDCs’ distribution systems. Since its founding in 1907, the Commission has continued to adapt to meet every new challenge, from times of energy scarcity during the World Wars, to the evolution of nuclear power generation in the 1970s, through deregulation in the 1990s. The rapid expansion of personal electronics and dependence on the internet, increased interest in clean and distributed energy technologies, and a move towards more sustainable energy use will be the hallmarks of this current time. The PUC is well-qualified to develop any definitions or guidance necessary to ensure energy storage is deployed appropriately in the service of safe, reliable, and affordable power to the benefit of customers.

² Examples include *Pennsylvania’s Solar Future Plan*, November 2018; *Executive Order 2019-01*, signed by Governor Wolf January 8, 2019, setting climate goals, including increased use of renewable energy; *Pennsylvania Electric Vehicle Roadmap*, February 2019; and *Pennsylvania Climate Action Plan*, April 2019.

Any new regulatory guidance or processes must be crafted with the intention of delivering the greatest value to utility customers. As described in greater detail below in the responses to the specific questions in the Secretarial Letter, storage deployed as a distribution asset should be allowed to capture value through multiple streams, thereby reducing costs and improving affordability for customers. The Company contends that the Commission has the tools and expertise to regulate any market participation and to ensure that the corresponding costs and revenues are treated appropriately.

IV. RESPONSE TO SECRETARIAL LETTER QUESTIONS

1. What applications can electric storage provide as a distribution asset for utilities that would facilitate improved reliability and resiliency?

As a distribution system operator, Duquesne Light is committed to improving and maintaining the safety, reliability, and resiliency of the system now and in the years to come. Duquesne Light defines reliability as its ability to deliver electricity in the quantity and quality its customers need. Resiliency is the ability to respond to disruptions in service. Electric storage applications deployed as distribution assets can contribute towards both reliability, by minimizing interruptions, and resiliency, by restoring power more quickly when interruptions occur. The phrase “deployed as a distribution asset” is intended to describe those circumstances where the primary purpose of installation of storage is to provide distribution services. As stated elsewhere in the document, energy storage does not fit squarely into the traditional definition of a distribution asset, due to its ability to also provide market services. Examples of specific distribution applications include, but are not limited to, load management, including peak

shaving, demand side management, and integration of intermittent resources; voltage and power quality support; and improved reliability to customers that incur power outages due to typical disruptions, such as motor vehicle accidents and storms along highly exposed distribution feeders. Energy storage can also provide instant power to relieve grid congestion or act as a demand response resource. It should be emphasized that these are examples and the potential use cases for energy storage are growing as the technology evolves and the industry learns more about its capabilities. It is this versatility that makes energy storage such a valuable asset on the distribution grid. Any programs or regulations to be developed as an outcome of this proceeding must allow for flexibility rather than constraining energy storage to a narrow set of potential uses in order to fully take advantage of its capabilities now and in the future.

The ability of energy storage, when deployed as a distribution asset, to contribute to more cost-effective deployment of distributed generation deserves specific consideration. As noted earlier, both policymakers and customers support further growth of distributed generation, primarily from renewable and clean energy sources, across the Commonwealth. While distributed generation from renewable sources, such as rooftop solar, can reduce environmental impacts and improve reliability, it can also create new challenges by increasing two-way power flow, making the grid less predictable. Increases in intermittent generation can result in multiple re-configurations and upgrades throughout each day, ultimately requiring additional EDC resources and assets to operate the grid safely, reliably, and economically. The use of energy storage as a distribution

asset can balance some intermittency issues and add capacity to more confined portions of the grid, allowing greater DER integration at less cost.

2. What are the defining characteristics of electric storage used for distribution asset planning as distinguished from generation resources? What thresholds, if any, would classify electric storage as a generation resource and therefore outside permitted distribution ratemaking and recovery?

The phrasing of this question implies that an energy storage asset is *either* a distribution asset *or* a generation asset. As stated in its initial comments, Duquesne Light does not believe energy storage should be narrowly wedged into one definition or the other, but rather that energy storage represents a different type of utility asset altogether. However, in an effort to answer the question, Duquesne Light asserts that energy storage should be classified as a distribution asset (i.e., is eligible for inclusion in an EDC's rate base) if it is installed on an EDC's distribution system and its primary purpose is to provide distribution services.

An energy storage system which is installed as a distribution asset may also be able to provide energy-related services such as frequency regulation or demand response. These two uses are not mutually exclusive. As discussed above, the Commission should not prohibit EDCs from using its energy storage resources to provide such benefits. Such a prohibition would strip energy storage of a portion of its value and reduce EDCs' ability to optimize their systems.

Moreover, EDCs are the entities best positioned to provide energy-related services via batteries deployed on the distribution system. EDCs' existing

statutory obligations prioritize safe and reliable distribution service. Third-party battery operators, on the other hand, may be subject to different incentives and have less operational visibility into an EDC's distribution system. Therefore, where an EDC owns and operates the energy storage project, it can ensure that any market participation does not inhibit the provision of safe and reliable distribution service.

Allowing EDC energy storage assets to capture additional value through market participation is not in conflict with the intent of the Competition Act. The Competition Act, codified at Chapter 28 of the Pennsylvania Utility Code, required unbundling of generation, transmission, and generation services,³ but explicitly did not require EDCs to divest assets that may provide generation services.⁴ Further, the Competition Act, in part, intended to transfer any risks associated with generation from utility customers to the market. Market participation by an energy storage asset deployed to provide distribution services does not expose customers to additional risk, but rather adds value, and thus is not in conflict with the intent of the Competition Act.

There are not specific thresholds that would classify energy storage as a generation asset. Rather, as stated above, the primary purpose of the energy storage should dictate how it is classified. An energy storage asset installed on the

³ 66 Pa. C.S. 2804(3) (“The commission shall require the unbundling of electric utility services, tariffs and customer bills to separate the charges for generation, transmission and distribution. The commission may require the unbundling of other services.”)

⁴ *Id.* 2804(5) (“The commission may permit, but shall not require, an electric utility to divest itself of facilities or to reorganize its corporate structure.”)

EDC's system with a primary purpose of providing distribution services should be classified as a distribution asset.

The relevant question, therefore, is how such assets' costs and revenues should be treated for ratemaking purposes consistent with unbundling. As previously stated, the Commission has the tools to put an appropriate framework in place to ensure any benefits of market participation are realized by customers through reduced costs and improved reliability. The Commission should examine this question in a generic proceeding.

3. Is it prudent for utilities to include electric storage in their distribution resource planning and, if so, where and under what circumstances? Further, is it appropriate for utilities to include such investments in rate base?

Duquesne Light asserts that it is appropriate and prudent for Pennsylvania EDCs to include electric storage in distribution planning. Energy storage has not traditionally been included in distribution planning because the technology had not yet evolved to allow for technically feasible and/or cost effective deployment. However, as technologies advance, utilities have an obligation to evolve their planning accordingly. Now is the right time to explore how energy storage can be included in distribution planning to support reliability, grid resiliency, and affordability.

As stated above, the potential uses of energy storage as a distribution asset are varied, but could include load management, supporting integration of intermittent resources, providing voltage and power quality support, and improving reliability and resiliency. The regulatory process must recognize that

the value of storage lies in its versatility, and thus its use cannot be constrained to a narrow set of circumstances.

The EDC has the sole responsibility for distribution planning, and thus is the only entity qualified to plan for and implement energy storage as a distribution asset. The EDC's knowledge of the distribution grid will allow it to optimize location, size, and operation of the battery to maximize benefit. This work will include integrating storage into short- and long-term planning and coordinating deployment of storage with other grid assets.

Further, the potential uses for energy storage may evolve as EDCs innovate and share best practices. This is why it is crucial that the EDC own and operate energy storage with a primary distribution purpose to allow flexibility for evolving practices to derive the greatest value possible.

Energy storage, when designed, deployed, and operated for the primary purpose of delivering distribution services, should be eligible to be included in rate base just as any other piece of equipment would be. The Commission has experience assessing the prudence of utility investment. There is no reason to believe the Commission could not similarly assess utility investment in energy storage as a distribution asset through existing mechanisms.

In addition to its response to the specific questions in the Secretarial Letter, the Company wishes to note that utility-owned energy storage for distribution purposes is complementary to, and not in competition with, any deployment of energy storage through retail suppliers and other project developers. All energy storage applications have the potential to provide value to the energy system. However, only applications where the EDC has complete control over the asset

ensure that grid support will always take precedence over other uses. Finally, expansion of energy storage penetration will lead to continued reductions in costs that will benefit any deployment of the technology.

V. CONCLUSION

In closing, Duquesne Light reiterates its support for the use of energy storage as a distribution asset. It commends the Commission for its leadership on this topic. The time is right to explore how Pennsylvania EDCs can deploy energy storage to cost-effectively enhance reliability, resiliency, and support emerging clean energy technologies. The Secretarial Letter is a strong initial step; the Company urges the Commission to take the next step in initiating a formal proceeding on energy storage to more fully explore this topic. Duquesne Light looks forward to continued collaboration with the Commission, working together to evolve Pennsylvania utility operations for the energy system of the future.

Respectfully submitted,



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