



November 29, 2021

VIA E-File

Secretary Rosemary Chiavetta
Pennsylvania Public Utility Commission
Secretary's Bureau
PO Box 3265
Harrisburg, PA 17105-3265

**Re: Policy Proceeding – Utilization of Storage Resources as Electric Distribution Assets
Additional Questions; Docket No. M-2020-3022877**

Dear Secretary Chiavetta,

The Pennsylvania Utility Law Project (PULP),¹ in response to the Pennsylvania Public Utility Commission's (Commission) Secretarial Letter issued on August 12, 2021, and published on August 28, 2021 in the Pennsylvania Bulletin (51 Pa.B. 5505), hereby submits the following brief comments regarding the Commission's above named Policy Proceeding.

On December 3, 2020², the Commission issued a Secretarial Letter (December 2020 Secretarial Letter) requesting comment from stakeholders seeking information to help guide potential future regulatory policies related to utilization of electric storage within electric distribution resource planning. On December 19, 2020, the December 2020 Secretarial Letter was published in the Pennsylvania Bulletin, opening a public comment period. Twenty-one stakeholders responded, including the Office of Consumer Advocate (OCA), Clean Energy

¹ PULP is a statewide specialty legal services project within the Pennsylvania Legal Aid Network, dedicated to addressing the needs of low-income utility consumers across Pennsylvania. PULP provides individual and group representation in matters which affect the ability of low-income consumers to connect and maintain affordable utility service in their homes.

² See the Secretarial Letter issued on December 3, 2020 at Docket No. M-2020-3022877.

Advocates, PJM, the Independent Market Monitor, the Retail Energy Supply Association (RESA), the Energy Association of Pennsylvania (EAP), the Pennsylvania Department of Environmental Protection, several electric utilities, and other environmental and energy groups and associations.

The December 2020 Secretarial Letter included three primary questions, asking stakeholders to expound upon applications for energy storage as a distribution asset providing for improved reliability and resiliency; the defining characteristics of electric storage used for distribution asset planning as distinguished from generation resources and associated thresholds for storage to be considered a generation resource; and under what circumstances/if utilities should include electric storage in their distribution resource planning.

Commenters posited a range of ideas and provided feedback for what details and parameters may be included in a future policy. Commenters agreed that energy storage is a useful and versatile resource to enhance reliability and resiliency of the distribution grid. The fundamental difference of opinion among commenters was whether energy storage should be considered a distribution asset or a generation resource and who should own it.

A number of commenters addressed processes for review and determination of how to classify energy storage as distribution or generation. OCA responded to the directed questions and additionally advocated for a comprehensive planning process before the Commission would determine if electric storage would be established as a distribution or generation asset (OCA Comments at 3-4). Specifically, OCA encouraged the Commission to institute an Integrated Distribution Planning (IDP) process. Clean Energy Advocates discussed the benefits of energy storage as a distribution asset and requested “a fuller proceeding to develop specific guidance for utilities’ integration of storage into distribution planning.” (Clean Energy Advocates Comments at 8). Of note, the Clean Energy Advocates asked that the process maximize the ability of ratepayers from underserved communities to participate. Duquesne Light Company, noting how the “time is right to explore how energy storage can be utilized to benefit customers and the grid,” also encouraged the Commission to initiate a full policy proceeding to more fully explore this topic and build the record. (Duquesne Light Comments at 2).

On August 12, 2021, the Commission issued an additional Secretarial Letter (August 2021 Secretarial Letter) presenting seven follow up questions to interested stakeholders, building on the questions asked in the December 2020 Secretarial Letter. These questions were listed as follows:

1. What are the parameters that would allow for the use of energy storage on the distribution grid? For example, what factors should be used in the consideration of the energy-storage project? Should the energy-storage project meet certain thresholds and demonstrate certain requirements, e.g., demonstration of cost-effectiveness as compared to alternate measures, demonstration of need, required RFPs to solicit potential third-party providers, limitations on project size and scope, etc.?
 2. What EDCs have undertaken energy-storage initiatives as a pilot program and what were the results and lessons-learned?
 3. Under what circumstances is it appropriate to deploy energy storage as compared to traditional infrastructure upgrades?
 4. Who should own an energy-storage asset? EDCs, third-party vendors, or some combination of both?
 5. What processes should the Commission use to review requests to utilize energy storage as a distribution asset and recover associated costs?
 6. What cost recovery mechanisms should be implemented for the ownership and operation of energy-storage assets?
 7. What are the appropriate models and limitations necessary to allow energy storage to participate in wholesale power markets?
- (August 2021 Secretarial Letter, Attachment, Directed Questions)

In our brief comments, we will focus our response on questions 4, 5, and 6. As an overarching principle, we submit that energy equity must be a primary factor for consideration in review and approval of battery storage projects. It is critical for the Commission to ensure that projects are deployed in an equitable manner that does not perpetuate a further divide in energy access and affordability for low income communities, communities of color, and rural communities - which shoulder the highest relative energy burdens but are least able to invest in advanced energy technology and, at the same time, are often last to derive meaningful benefits.³

With this overarching principle in mind, and in response to question 4 regarding ownership of energy storage, we submit that the answer to the Commission's question is highly dependent on the size and purpose of the project – and is intimately linked to how the project will be financed (both up-front and on an ongoing basis) as well as who will benefit from deployment of battery storage assets (both financially and in terms of enhanced grid reliability). Ultimately, we do not believe that there is a one-size-fits all model for battery storage ownership, and suggest that the Commission utilize a statewide working group to develop further parameters for assessing

³ Brown, M. A. Soni, A., Lapsa, M.V., Southworth, K., and Cox, M., High Energy Burden and Low-Income Energy Affordability: Conclusions from a Literature Review, *Progress in Energy, Volume 2, Number 4*. <https://iopscience.iop.org/article/10.1088/2516-1083/abb954> (October 29, 2020); see also Lauren Ross & Ariel Dreihobl, ACEEE, The High Cost of Energy in Rural America: Household Energy Burdens and Opportunities for Energy Efficiency (July 18, 2018).

proposed grid-scale battery storage projects – as well as to facilitate smaller scale projects. We note again that our primary concern is that battery storage projects of all sizes not exacerbate existing disparities in access and affordability. This means that we must carefully consider questions of ownership for each project in the context of determining who will benefit from a particular battery storage project and who will pay for those investments. We recommend that the Commission develop factors – in consultation with the above recommended work group - that will guide decisions regarding ownership in the context of determining who pays and who benefits to ensure that investments in battery storage do not exacerbate existing disparities in energy access and affordability across low income communities, communities of color, and rural communities.

With regard to question 5, concerning the appropriate process to review requests of a utility for approval of an energy storage project, PULP supports a strong stakeholder engagement and planning process similar to that recommended by OCA. As noted above, in Comments to the December 2020 Secretarial Letter, OCA discussed the need for a more robust planning process than the existing Long-Term Infrastructure Improvement Plans (LTIIP) and recommends adopting Integrated Distribution Planning (IDP). (OCA Comments at 4). OCA discusses how “emerging technologies and resources must be considered in a holistic manner to meet the needs of future electric distribution systems.” (*Id.*) OCA recommends utilizing the IDP model to provide the Commission, EDCs, and interested stakeholders the opportunity to better evaluate new and emerging technologies to determine the value of these resources and the associated costs and benefits. (*Id.*)

PULP supports OCA’s recommendation for the Commission to institute IDP. To ensure that equity is infused in infrastructure decisions, we further recommend that the Commission incorporate equity as an explicit factor (or factors) in review of an EDC’s IDP. PULP recommends adding to the IDP model to allow for an equity and affordability assessment to be conducted in conjunction with Step 3 of IDP which studies the Locational Value of Distributed Generation (LVDG) “to understand and quantify where distribution system improvements are needed.” (Rakon Report at 13). Once needs are determined, utilities using energy storage as a distribution asset should be required to prioritize deployment low income communities, communities of color, and rural communities which are identified as underserved or are otherwise in need of enhanced grid stabilization. Adopting IDP and incorporating equity requirements in the planning process could help to ensure reliable and more affordable energy to vulnerable communities that face

demonstrably higher cost and less reliable and stable energy sources.⁴ This type of targeted assessment could help correct historic inequities in grid infrastructure investment that has resulted in outdated and inefficient electric power systems which are disproportionately located in low income communities, communities of color, and rural communities.⁵

As a final note here, we strongly recommend that the Commission incorporate a robust review process of battery storage projects (whether through the IDP model or on an individualized program or project basis) that is both transparent and allows for broad and meaningful public participation and engagement through a record proceeding. Consistent with our recommendation above, we suggest that the Commission deploy a statewide work group to develop an appropriate procedural process for review that ensures the public and stakeholders are able to provide meaningful input.

Last, in response to question 6 regarding cost recovery, we believe that it is too soon to fully assess how costs should be recovered. As noted above in response to question 4, the question of ‘who pays’ is inextricably related to questions of who will own the assets and who will derive a benefit from those assets. Consistent with our above recommendations, we suggest that the Commission establish a work group to further unpack these interrelated questions and to ensure that we fully understand the cost implications and quantify the benefits before determining how costs should be recovered. Again, our primary concern here is that equity considerations remain at the forefront of these decisions to ensure that deployment of these advanced technologies do not further the gap in energy accessibility and affordability for low income communities, communities of color, and rural communities which already face stark disparities in energy access and affordability. These communities often shoulder the costs of adopting advanced technology through rates, yet do not derive equitable benefits from those investments.⁶ We have a chance to rectify this pattern if we ensure that equity is part of the equation in determining how and under what circumstances battery storage will be deployed and financed in our state.

⁴ Tarekegne, B, O’Neill, R., and Twitchell, J., and Twitchell, J., *Energy Storage as an Equity Asset*, *Current Sustainable/Renewable Energy Report 8*, 149-155, <https://link.springer.com/article/10.1007%2Fs40518-021-00184-6> (May 20, 2021).

⁵ Reta, M., Gout, E., *Advancing Equity Through Grid Modernization*, <https://americanprogress.org/article/advancing-equity-grid-modernization/> (April 28, 2021).

⁶ Brown, M. A. Soni, A., Lapsa, M.V., Southworth, K., and Cox, M., *High Energy Burden and Low-Income Energy Affordability: Conclusions from a Literature Review*, *Progress in Energy, Volume 2, Number 4*. <https://iopscience.iop.org/article/10.1088/2516-1083/abb954> (October 29, 2020).

PULP appreciates the opportunity to comment on this Policy Proceeding and recommends that the Commission adopt a robust stakeholder engagement process to further advance an equitable and beneficial application of energy storage in Pennsylvania.

Respectfully submitted,

PENNSYLVANIA UTILITY LAW PROJECT



Elizabeth R. Marx, Esq., PA ID 309014

118 Locust Street

Harrisburg, PA 17101

717-236-9486

717-233-4088

pulp@pautilitylawproject.org

CC: Aspasia V. Staevska, Law Bureau, astaevska@pa.gov
Joe Cardinale, Law Bureau, jcardinale@pa.gov
David Edinger, Bureau of Technical Utility Services, dedinger@pa.gov