



November 24, 2021

Pennsylvania Public Utility Commission
Attn: Rosemary Chiavetta, Secretary
Commonwealth Keystone Building, 2nd Floor
400 North Street
Harrisburg, PA 17120

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

Dear Secretary Chiavetta:

The Pennsylvania Department of Environmental Protection (DEP) appreciates the opportunity to comment on the Pennsylvania Public Utility Commission's (PUC) Policy Proceeding—Utilization of Storage Resources as Electric Distribution Assets Additional Questions, Docket No. M-2020-3022877. DEP's comments focus on continuing support of the PUC's recommendations to explore the viability of utility investment in energy storage as a distribution asset for the purposes of enhancing or maintaining reliability of the electric distribution grid. Please find DEP's comments attached.

If you have any questions, please feel free to contact David Althoff, Jr., Director for the Energy Programs Office, by e-mail at dalthoff@pa.gov, or by telephone at 717.783.0542.

Sincerely,

A handwritten signature in black ink, appearing to read "Patrick McDonnell".

Patrick McDonnell
Secretary

Attached

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Policy Proceeding—Utilization of Storage Resources as Electric Distribution Assets
Additional Questions
Docket No. M-2020-3022877

**COMMENTS OF THE
PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION**

The Pennsylvania Department of Environmental Protection (DEP) appreciates the opportunity to comment on the Pennsylvania Public Utility Commission's (PUC) Policy Proceeding for the Utilization of Storage Resources as Electric Distribution Assets – Additional Questions. DEP's comments continue to focus on support of the PUC's recommendations to explore the viability of utility investment in energy storage as a distribution asset for the purposes of enhancing or maintaining reliability of the electric distribution grid.

DEP supports the PUC's investigation into the applicability and opportunities for integrating storage technologies within electric distribution systems. DEP also encourages the PUC to consider multiple solutions that will enable varying business and ownership models to proliferate within the state and result in cost-effective, broad implementation of energy storage to help Pennsylvania enable a clean energy economy, provide for enhanced resiliency and combat the climate crisis.

In April 2021, DEP published the *Pennsylvania Energy Storage Assessment: Status, Barriers, and Opportunities*¹ (the Storage Assessment) prepared by DEP's consultant, Strategen Consulting. The Storage Assessment took a thorough look at storage technologies and applicability across multiple use scenarios. In the Storage Assessment, Strategen Consulting concluded that a wide array of energy storage options and utilization scenarios deployed strategically across all major elements of the electric grid can result in substantial economic and emissions benefits ranging from reliability and resilience improvements to enabling greater integration of clean, renewable energy sources. Certainly, the barriers, performance levels, and cost-effectiveness of any storage utilization strategy or project will vary greatly depending on the use scenario and at what point within the grid it is deployed.

In the case of storage deployed as non-wire alternatives within distribution systems, Section 5.3 of the Storage Assessment identifies a number of potential barriers including: incomplete valuation of storage as compared to traditional distribution investments; lack of a planning framework that enables storage to be selected as part of the most efficient and cost effective solutions; potential lack of detailed data on distribution system loads; and lack of clear mechanisms for procurement and cost recovery.

¹ Strategen Consulting, Prepared for DEP, *Pennsylvania Energy Storage Assessment: Status, Barriers, and Opportunities*, April 2021, https://files.dep.state.pa.us/Energy/Office%20of%20Energy%20and%20Technology/OETDPortalFiles/EnergyAssurance/Strategen_PA_Energy_Storage_Assessment_April_2021.pdf

Section 5.3 of the Storage Assessment goes on to provide further analysis of these barriers and proposes several potential solutions that could be pursued to help overcome them. Solutions recommended include grid transformation planning and distribution integration plans to include processes for identifying storage needs, location analyses, and cost/benefit evaluations. Additional recommendations are provided related to determining system loads and identifying procurement and cost recovery strategies. DEP stresses that the PUC should fully evaluate and apply the recommendations identified in the report. Rather than repeating or translating the Storage Assessment's full analysis and recommendations here, we are providing, for your convenience, an attachment containing Section 5.3 of the *Pennsylvania Energy Storage Assessment: Status, Barriers, and Opportunities*.

Once again, DEP supports the PUC in its efforts to evaluate the options and potential for storage to play a significant role in improving the resilience and reliability of distribution systems. This will enable multiple grid and consumer benefits as identified above and as detailed in the Storage Assessment. DEP encourages the PUC to consider solutions that will result in a wide range of storage utilization scenarios.

DEP appreciates the opportunity to comment on this additional Policy Proceeding regarding the utilization of energy storage resources as electric distribution assets. DEP looks forward to the potential environmental benefits of this enabling technology as it allows greater flexibility and reliability of emissions free electricity generation.

Lastly, DEP looks forward to working with the PUC and providing any additional input if needed. Should you have additional questions, please contact David Althoff Jr., Director for DEP's Energy Programs Office, by e-mail at dalthoff@pa.gov or by telephone at 717.783.0542.