

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

**POLICY PROCEEDING –
UTILIZATION OF STORAGE
RESOURCES AS ELECTRIC
DISTRIBUTION ASSETS**

: DOCKET NO. M-2020-3022877

**COMMENTS OF THE
ENERGY ASSOCIATION OF PENNSYLVANIA IN RESPONSE TO
SECRETARIAL LETTER DATED AUGUST 12, 2021**

I. INTRODUCTION AND BACKGROUND

On August 12, 2021, the Pennsylvania Public Utility Commission (“PUC” or “Commission”) issued a second Secretarial Letter¹ (“August 12 Secretarial Letter”) in the above-captioned policy proceeding seeking additional “information from utilities and other stakeholders to clarify under what circumstance energy storage would be considered a distribution asset.” August 12 Secretarial Letter at p. 2. The Commission stated that nearly all commentators to its initial December 3 Secretarial Letter agreed “that energy storage has the potential to improve reliability and resiliency on a distribution grid.” *Id.* Responses to the seven (7) “Directed Questions” accompanying the August 12 Secretarial Letter will also assist the “Commission [to] better coordinate future storage policy with recent policy advancements at the federal level, namely the Federal Energy Regulatory Commission’s Order 2222.” *Id.* Comments were initially due thirty (30) days following publication of the August 12 Secretarial Letter in the *Pennsylvania*

¹ The Commission issued the initial Secretarial Letter in this proceeding on December 3, 2020 (“December 3 Secretarial Letter”), seeking responses to three (3) questions on issues related to the use of energy storage resources, such as batteries, as electric distribution assets. Comments to the December 3 Secretarial Letter were submitted to this docket in February 2021.

*Bulletin*², i.e., on September 27, 2021. The response date was extended until November 29, 2021 by the Commission at the request of a number of stakeholders. The Energy Association of Pennsylvania (“EAP” or “Association”) is a trade association that represents and promotes the interests of regulated electric and natural gas distribution companies operating in the Commonwealth. EAP submits these comments on behalf of its electric distribution company members³ to provide additional input in response to the “Directed Questions” attached to the August 12 Secretarial Letter.

EAP welcomes this opportunity to continue the discussion on energy storage technologies as distribution assets, focusing on what, if any, parameters or restrictions should be set forth in a future policy statement. As stated in its earlier comments, EAP believes energy storage technologies, particularly battery storage, are a means to address an array of variables impacting system reliability and resilience such as: worsening and more extreme weather conditions; managing the growth in distributed and renewable energy resources seeking to interconnect with the distribution grid and; generally improving EDCs ability to operate the distribution grid via voltage support and control. *See*, EAP comments to the December 3 Secretarial Letter at pp. 2 – 5.⁴

EDCs would have the Commission consider the proposed use for the asset as the key determiner of whether the energy storage system is a distribution/transmission asset as compared

² The August 12 Secretarial Letter was published in the Pennsylvania Bulletin on August 28, 2021.

³ Hereinafter referred to collectively as “EDCs”, the Association’s electric distribution company members include: Citizens’ Electric Company; Duquesne Light Company; Metropolitan Edison Company; PECO Energy Company; Pennsylvania Electric Company; Pennsylvania Power Company; Pike County Light & Power Company; PPL Electric Utilities; UGI Utilities Inc. – Electric Division; Wellsboro Electric Company; and West Penn Power Company. Metropolitan Edison Company, Pennsylvania Electric Company, Pennsylvania Power Company and West Penn Power Company are herein referred to collectively as “FE operating companies”

⁴ *See also*, UGI comments to the December 3 Secretarial Letter at p. 3; FE operating companies’ comments to the December 3 Secretarial Letter at pp. 3 – 4.

to a generation asset.⁵ Overall, EAP and its member EDCs seek a policy statement that provides flexibility for electric utilities to use energy storage systems as distribution assets and to seek cost recovery in traditional proceedings such as a base rate case and/or through a DSIC mechanism.

Additionally, EAP's responses below to the "Directed Questions" rest on a number of guiding principles detailed in its comments to the December 3 Secretarial Letter. Any final energy storage policy statement should clearly:

1. Enable full participation by EDCs in the ownership and/or operation of energy storage resources and allow flexibility for the utility to test, evaluate, and deploy such technology;
2. Ensure safe connection and operation of any energy storage system or device;
3. Ensure, for planning and operational purposes, visibility by EDCs, impact assessment, and some level of utility input into and control of third party owned energy storage resources that are connected to the distribution grid;
4. Ensure that retail ratemaking avoids cost-shifting from customers who own storage technology to customers who do not own storage technology;
5. Ensure fair and timely cost recovery of utility investment in energy storage technology;
6. Encourage optimal location as determined by the EDC, when possible, to increase the value that energy storage provides to customers, the electric grid and distribution system;

⁵ See, e.g., FE operating companies' comments to the December 3 Secretarial Letter at p. 5 and PPL comments to the December 3 Secretarial Letter at pp. 6 – 7 concluding that "if used by an EDC to solve distribution problems, provide benefits to distribution customers, and support the provision of safe and reliable service at a prudent and reasonable cost, then energy storage should be considered a distribution asset."

7. Encourage appropriate coordination among the transmission and distribution systems to the extent that energy storage systems will impact the transmission system; and
8. Encourage support for energy storage technology development and deployment in a manner which does not prescriptively preclude ongoing advancements.

Id. at p. 7.

EAP believes that the final energy storage policy⁶ adopted by the Commission will best serve customers if the policy is not only inherently flexible, but seeks to maximize the value that can be achieved through energy storage, allowing for both the continued evolution of energy storage resources and the innovative ways such resources may be used to enhance reliability and resiliency of the grid in the future. *Id.* at p. 2. As the technology matures and evolves it will be important that policies developed in the near term provide for EDCs to explore new ways to utilize improved technology and resources. EAP emphasizes that any policies considered now should not inhibit the innovative use of future technical improvements in energy storage that may further enhance grid reliability and resiliency for the benefit of all customers.

II. RESPONSES TO DIRECTED QUESTIONS

A. 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.?

In seeking a response to this series of questions, the Commission notes that while commentators to its December 3 Secretarial Letter agreed that energy storage systems provide an

⁶ EAP understands that the next step in this process would be the issuance of a tentative policy statement with an opportunity for public comments and reply comments. EAP and its members support that process.

additional tool to the EDCs to maintain distribution grid reliability and resiliency, many expressed the need for limits, rules, or at least guidance, regarding the appropriateness of deploying energy storage on the grid.⁷ EAP and its members maintain that in the context of the current policy proceeding, providing guidance – not prescriptive rules or requirements – is appropriate and lawful.⁸ Such an approach is particularly warranted here in dealing with an evolving technology which can address a number of challenges faced by EDCs as they seek to modernize and invest in the distribution grid to accommodate customer needs for increased reliability and resiliency.

EDCs seek a policy statement that encourages consideration of energy storage systems alongside traditional solutions and allows implementation of particular projects designed to meet the unique needs of their systems in terms of system configuration and control, location, and size. EAP asks the Commission to refrain from creating specific thresholds or limitations in the policy statement or from imposing a blanket requirement to solicit third-party providers for every proposed project. Such parameters are better addressed in the context of a particular project rather than in a generic policy proceeding. Further, creating a policy which favors a strict cost-benefit analysis as the sole determiner of whether a potential project classifies as a distribution asset subject to cost recovery could discourage innovation and force utilities to forgo advancements and rely solely upon traditional solutions to reliability and resiliency problems to the overall detriment of their customers. *See, for example*, PECO's comments to the December 3

⁷ PUC Directed Questions at p. 4.

⁸ Regulations carry the force and effect of law, with compliance implications such as civil penalties. Policy Statements, however, are nonbinding, providing guidance and insight as to how an agency may exercise its discretion. As such, policy statements are inherently flexible but are not enforceable as a matter of law. *See Pennsylvania Human Relations Commission v. Norristown Area School District*, 374 A.2d 671 (Pa. 1977).

Secretarial Letter at pages 9 – 10 which suggest a criteria list for the Commission to consider in the context of approving a particular project.

EAP and its member EDCs maintain that the key factor in determining whether the energy storage system proposed or deployed is a distribution asset suitable for cost recovery through distribution rates is how the electric utility proposes to use that storage system. In their comments to the December 3 Secretarial Letter, the First Energy operating companies state “whether recovery through distribution rates should be permitted must be viewed as related to the applications in which energy storage are used. That is, electric storage dedicated to use as a distribution asset should be limited to a storage asset that is deployed by a utility for its own operation, control and maintenance in a way that supports the deploying EDC’s distribution operations, which assets should be included in distribution ratemaking.” *Id.* at p. 5. Likewise, in its comments to the December 3 Secretarial Letter at page seven, PECO stated that energy storage applications should be categorized based on the primary function of those energy storage assets. Utility-owned or utility-contracted energy storage projects deployed “for the primary purpose of managing and supporting distribution grid operations (e.g., reliability and resiliency, peak load management, and power quality conditioning)” should be categorized as distribution assets “subject to the Commission’s ratemaking principles and cost recovery rules.” *Id.* at p. 7.

PPL comments to the December 3 Secretarial Letter provide that including energy storage in the distribution planning process alongside more traditional alternative solutions is prudent. “Energy storage is just one of the latest advances in smart grid technology available to EDCs. Therefore, an EDC should be permitted to include an energy storage system in its rate base, just like any other reasonable and prudent capital investment in the distribution system.” PPL Comments to the December 3 Secretarial Letter at p. 8. UGI concurs, listing a number of distribution issues an energy storage asset can address such as siting storage along segments of

radial distribution lines which are single feeds to load centers to improve reliability, or using energy storage to perform circuit load control, including overall peak shaving of demand for intermittent load peaks. In such cases, UGI opines that it is prudent for utilities to own energy storage assets, utilize them for system planning and seek “[c]ommensurate cost recovery through distribution rates based on the benefits they provide to distribution customers...” UGI comments to December 3 Secretarial Letter at pp. 2 – 3 and 5 – 6. Duquesne provided in its comments to the December 3 Secretarial Letter that deploying electric storage assets should be included in distribution planning, concluding that “[e]nergy 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.” Duquesne comments to December 3 Secretarial Letter at p. 9.

EAP and its EDC members assert that if the energy storage asset is used to solve distribution problems and support the provision of safe, reliable, and affordable service to customers then it is a distribution asset. Moreover, the current regulatory construct can address the issues posed by EDC ownership of energy storage systems, including issues of cost recovery, via current base rate proceedings.

B. What EDCs have undertaken energy-storage initiatives as a pilot program and what were the results and lessons-learned?

Pennsylvania projects, such as those owned by PPL⁹ or recently approved for UGI, are in the early stages and are likely too new to provide any results or lessons learned. PPL comments

⁹ PPL installed a 50kW battery storage device on its distribution system, improving reliability in a cost-effective manner.

to December 3 Secretarial Letter provide detail on its energy storage system installed in the Harrisburg area in 2018 to address outage restoration. The application was evaluated along with traditional alternatives to address the reliability/resiliency issues and PPL concluded that the deployment of an energy storage system was the most cost-effective solution. *Id.* at pp. 3 – 4. See also, UGI comments to December 3 Secretarial Letter at pp. 5 – 6.

In the United States today, electric companies are key partners in implementing energy storage technologies, accounting for about half of battery storage capacity deployed in 2019, and owning, procuring, or utilizing 97% of all energy storage installed.¹⁰ In 2019, the Maryland Public Service Commission created a pilot program for investor-owned utilities to start developing energy storage under various ownership frameworks. In November 2020, the Maryland Commission approved six energy storage pilots with an aggregate capacity of 7 MW over a ten-year period for the PECO affiliates in Maryland under a mix of ownership models. *See also*, FE operating companies’ comments to December 3 Secretarial Letter at p. 7 detailing the Energy Storage Pilot Project Act in Maryland. *See also*, EEI - Leading the Way – U.S. Electric Company Investment and Innovation in Energy Storage, June 2021 describing additional examples of storage projects across the country.¹¹

Ultimately, EAP encourages a policy statement that envisions energy storage deployment under various iterations, including pilots, in order to build a library of lessons learned and provide Pennsylvania EDCs with direct, firsthand experience for their own engineering, operating, maintenance, safety, and other personnel.

¹⁰*See*, EEI, Energy Storage Trends & Key Issues, June 2020.
https://www.eei.org/issuesandpolicy/Energy%20Storage/2020_June_Storage_Key_Trends_Solutions_FINAL.pdf

¹¹ *See*, EEI, Leading the Way – U.S. Electric Company Investment and Innovation in Energy Storage, June 2021,
https://www.eei.org/issuesandpolicy/Energy%20Storage/Energy_Storage_Case_Studies.pdf

C. Under what circumstances is it appropriate to deploy energy storage as compared to traditional infrastructure upgrades?

The Commission asks what other issues, “aside from cost-effectiveness,” need to be addressed to determine whether deployment of an energy storage system is preferable to using a traditional infrastructure upgrade to resolve a reliability or resiliency problem for the EDC’s distribution grid. Initially, EAP agrees that while cost-effectiveness is a factor, the Commission need not rely solely upon a formulaic approach to determine whether deployment of an energy storage asset is warranted in a particular circumstance. Analysis on a case-by-case basis is preferable to a policy which is prescriptive or establishes limits which discourage, rather than encourage, use of innovative energy storage systems. *See, supra.* at pp. 3 - 4 for other issues the Commission may consider in a specific proposal to deploy an energy storage system. By issuing a policy statement that allows for flexibility and provides accountability via the traditional cost recovery processes, the industry will gain experience with real world projects and the Commission will have the opportunity to re-evaluate its policy on a periodic basis.

Circumstances where it may be appropriate to utilize an energy storage system include a long rural radial line with existing reliability concerns or for load concentration on a circuit where the bulk of the load is used by a single customer. A battery storage device may also be warranted at the outer edges of the service territory where there are issues dealing with capacity or power quality which can be solved via energy storage for less capital than traditional solutions. Each of these circumstances should be addressed individually and a flexible policy will encourage EDCs to explore those opportunities. *See, e.g.,* PECO comments to December 3 Secretarial Letter at pp. 5 – 6 detailing various operational needs that an energy storage asset could address, such as: use of energy storage in a substation or on a distribution feeder to enhance reliability and defer the need to increase capacity; deployment of energy storage to improve grid stability and support larger-scale integration of DERs; utilization of energy storage

to maintain power quality; and deployment of energy storage to enhance system reliability and resiliency for critical facilities on a stand-alone basis or as part of a microgrid. *See also*, Duquesne comments to December 3 Secretarial Letter at pp. 4 – 5 for additional examples of distribution applications for energy storage assets; PPL’s discussion of various applications (facilitate safe and reliable interconnection of distributed energy resources (“DER”), such as solar; help reduce peak demand and help relieve distribution congestion)¹² ; UGI comments to December 3 Secretarial Letter at p. 3 and; FE operating companies’ comments to December 3 Secretarial Letter at pp. 3 – 4, discussing situations where energy storage systems can cost-effectively address reliability and resiliency concerns as well as provide voltage support and control to the benefit of customers.

While EAP and its member EDCs have identified numerous potential uses of the technology, this list should not be considered exhaustive for current uses, no less for future uses, as energy storage technology improves. It is important for the Commission to recognize and make room in its policy for the technology to develop and improve, which may ultimately increase the utilization of this technology on the grid.

D. Who should own an energy-storage asset? EDCs, third-party vendors, or some combination of both?

EAP believes that the reasonable, commonsense response to this inquiry is “some combination of both” with the EDC retaining oversight and control of the storage asset connected to its distribution system even where it is owned by a third party. A review of forty-four nationwide case studies assembled in an EEI compilation, *Leading the Way: U.S. Electric Company Investment and Innovation in Energy Storage*, reveals that electric utilities have successfully deployed energy storage projects utilizing a number of ownership models to the

¹² PPL comments to December 3 Secretarial Letter at pp. 4 – 5.

benefit of customers and the electric grid. *See supra.* at fn. 11. Projects owned and operated by electric utilities have integrated renewable energy resources, improved system reliability by providing grid stability services, reduced transmission constraints, managed peak demand, and addressed the unique needs of individual customers. As aptly stated in the above-referenced EEI publication, “[w]hile laws and regulations vary by state, electric companies are responsible for distribution system reliability and therefore they should be able to own, procure, and operate energy storage as a tool to help deliver clean, reliable, resilient, safe, and affordable electricity to customers.”

EAP urges the Commission to adopt a flexible position regarding storage asset ownership and reject a policy position, as espoused by some commentators, that energy storage assets are generation-only assets, prohibiting EDC ownership under the Electricity Generation Customer Choice and Competition Act. As detailed in EDC comments to the December 3 Secretarial Letter, energy storage systems, such as batteries, store electric power which is subsequently discharged. Batteries do not generate electricity by taking one fuel source and transforming it into another and should not be considered a generation-only resource. *See, e.g.*, PPL comments to December 3 Secretarial Letter at pp. 1 – 2; UGI comments to December 3 Secretarial Letter at pp. 4 – 5; and FE operating companies’ comments to December 3 Secretarial Letter at p. 5. Electric storage assets deployed by electric utilities and dedicated to utility operations involving reliability and resiliency should be identified as distribution assets and included in distribution rates for purposes of cost recovery. *See also*, EAP comments to December 3 Secretarial Letter at pp. 2 – 5.

E. What processes should the Commission use to review requests to utilize energy storage as a distribution asset and recover associated costs?

EAP supports using existing processes, i.e., via a base rate case. *See, e.g.,* PECO comments to December 3 Secretarial Letter at p. 10 which provide that “[r]ecovery of energy storage costs through distribution rates is appropriate because the primary function of the energy storage system deployed is to help ensure reliability consistent with other distribution system improvements and not to meet the ongoing energy and capacity needs of retail electric customers.” The Commission should also acknowledge that it is appropriate to identify energy storage assets as specific DSIC-eligible facilities pursuant to the “other related costs”¹³ definition of Act 11. Doing so will reduce regulatory lag and encourage deployment of energy storage systems such as batteries. In order for this technology to be included in the DSIC for cost recovery, it is reasonable for EDCs to identify their use as part of its LTIP, which would enable Commission review in both the LTIP proceeding and when EDCs file their annual asset optimization plans.

EAP believes that the particular process employed should be the choice of the utility seeking to deploy an energy storage system, not prescribed in a policy statement. Under certain circumstances, the utility may choose to petition the Commission for approval in advance of deploying the asset, while in other cases, the EDC may be comfortable in deploying the asset and subsequently seeking cost recovery in a base rate proceeding. The Commission should not make the use of energy storage technology more administratively burdensome than any other capital solution deployed by EDCs, or distinguish it procedurally in any way. Rather, it should provide EDCs the regulatory tools and pathways that are commensurate with permitting “just and

¹³ 66 Pa. C.S. § 1351. Definitions, Definition of “eligible property” (1)(vi).

reasonable” deployment of energy storage assets and support for continued technology development.

Further, EAP does not support a requirement that the utility seek a certificate of public convenience in order to deploy a distribution asset, such as an energy storage system. A certificate of public convenience is not required for other devices installed on the distribution system to resolve planning issues and likewise should not be required for energy storage assets. Energy storage systems should be treated in the same manner as any other distribution asset.

F. What cost recovery mechanisms should be implemented for the ownership and operation of energy-storage assets?

As discussed above, EAP and its EDC members contend that energy storage assets owned and operated by electric utilities and used to support distribution functions to maintain and/or improve grid reliability and resiliency are distribution assets subject to rate recovery in the course of a traditional ratemaking proceeding. EAP further believes that there may be circumstances involving third-party ownership of the storage system where it may be appropriate for the EDC to share in revenue earned by the third-party for the benefit of its ratepayers; in, for example, a partnership arrangement similar to current asset management agreements. It may also be warranted under certain circumstances for the utility to earn a return on that third-party owned asset. In either of these circumstances, EAP maintains that a policy statement should leave these issues to be addressed in the future on a case-by-case basis where specific facts can be presented and reviewed by the Commission and statutory advocates to ensure that any revenue collected or shared, or return earned, is appropriately used to the overall benefit of that EDC’s distribution grid and its customers.

The Commission raised a number of additional questions regarding cost recovery mechanisms in the text following this Directed Question, including: whether further examination

of cost-recovery is warranted because energy storage requires energy to charge and it consumes more energy than it can dispense; whether cost-recovery should be determined “through § 1308 base rate for all costs, or a combination of § 1308 applicable to the capital costs of the battery system and § 1307 automatic adjustment for the energy cost associated with running the battery system”; whether the policy statement should limit operation of the battery system by the EDC for cost-recovery purposes and; whether the PUC should allow EDCs to enter into agreements with third-party owned energy storage system for distribution-related services and, if so, how should the EDC recover those costs.

EAP maintains that these concerns can best be addressed in individual cases as EDCs seek to deploy or obtain cost recovery for energy storage devices. All distribution system costs and cost recovery are already addressed in other proceedings, and therefore EAP does not suggest treating energy storage assets any differently in separate or standalone filings.

Furthermore, such proscriptive determinations at this juncture are problematic and ultimately inappropriate for a policy statement. Actual experience gained will aid the Commission, EDCs, and other interested parties develop regulatory solutions without unintended consequences that can create barriers, hindering reliability or resiliency improvements to the grid or elongating timelines associated with the ultimate deployment of energy storage and adoption of evolving energy storage technologies.

The Commission also asks, if participation in the PJM wholesale market is allowed, should PJM revenues be used to offset the costs of the electric storage system and be credited to customers. The Commission asks whether participation under those parameters alleviates the competition concerns raised by a number of commentators in response to the December 3 Secretarial Letter. As detailed below, under the certain circumstances participation in the PJM

wholesale power market may provide additional value to the utility and its customers by utilizing multiple attributes of an energy storage system.

G. What are the appropriate models and limitations necessary to allow energy storage to participate in the wholesale power market?

This question raises a number of the same concerns detailed by the Commission under the prior Directed Question. The Commission states that while it is possible for an energy storage asset to serve various functions (a primary function of reliability/resiliency while also a secondary function of participating in the PJM markets for energy, capacity and ancillary power), if an EDC-owned energy storage asset was to be used in this manner, it would raise issues concerning competition and the impact of EDC participation in the wholesale market. The Commission opines that allowing an EDC to utilize this function may be contrary to the Pennsylvania model of competitive markets for power generation. The Commission suggests that this concern may be addressed by requiring that revenue generated from EDC participation in PJM markets be used to offset costs and reduce customers' bills.

EAP's EDC members agree with this approach and seek a policy statement that does not prohibit EDC participation in the PJM wholesale market at this juncture. In this time of rising costs due to the increased need for infrastructure replacement, it is of critical importance that EDCs have the ability to fully utilize new technology that has the possibility of ultimately reducing the costs that are borne by ratepayers. Further, it may be that participation could be limited such that EDC participation complements rather than competes with other market participants. *See, e.g.,* Duquesne's comments to December 3 Secretarial Letter at page 7, stating that "[a]llowing EDC energy storage assets to capture additional value through market participation is not in conflict with the intent of the Competition Act." Duquesne further contends 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.” *Id.* at p. 9. PECO also supports participation in the wholesale market as one of the criteria for the PUC to examine when evaluating potential energy storage pilot projects. *See*, PECO comments to December 3 Secretarial Letter at p. 9. Participation in the wholesale market under the right circumstances allows the utility to increase the value of this asset for the benefit of its ratepayers by using any such revenue to offset operation costs and reduce customer bills.

The Commission further opines that allowing third party ownership of storage assets would alleviate the competition concerns but does raise other issues. For example, how would third parties be held accountable to have their energy storage systems prioritize reliability and resiliency needs of the utility while also participating in the power market? The primary goal of any third party would be to increase revenues and there could be times where selling energy in the PJM market would result in higher revenues as compared to selling to the utility to assure reliability or resiliency. Under such circumstances, utility customers could be harmed by reduced reliability and possibly experience increased outages or longer recovery times when there is a system-wide outage, such as the cold weather crisis Texas faced earlier this year. The Commission would certainly want to avoid repeating the 2013 polar vortex consequences involving gas arbitrage where suppliers made more money going into the market (even with penalties) than meeting their contractual obligations to natural gas distribution utilities.

There are PJM rules in place that can discourage a third-party from selling into market when that proves more lucrative than meeting contractual obligations. PJM rules prohibit a market participant from draining its battery system below a certain point, leaving stored energy available for meeting contractual obligations in the case of a third-party and providing another check to ensure that the utility selling into the market would not inadvertently reduce energy

storage to a point where it could not be used to address distribution system reliability needs. EAP believes that PJM protections mitigate the anti-competitive concerns identified by the Commission. In all, there are numerous operating, dispatch, market participation, and value sharing scenarios which should be considered on a case-by-case basis for determination of PJM participation.

III. CONCLUSION

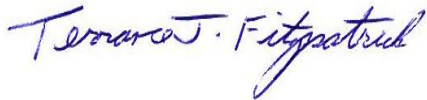
EAP supports the Commission's inquiry into the utilization of storage resources as electric distribution assets. Energy storage technology – properly deployed – can deliver enhanced levels of reliability, resiliency, and improved grid operations to the benefit of all EDC customers.

Any policy ultimately adopted by the Commission should support ownership by EDCs as well as third-party stakeholders while ensuring flexibility of EDCs to test, evaluate, and deploy these technologies at locations that meet the needs of customers and enhance grid operations. Energy storage policies should encourage utility involvement in the integration of these resources into the distribution system in order to ensure safety, visibility, and control at the time of interconnection and throughout the operable life of the device. Such EDC oversight is critical to optimize the value and benefits to the electric grid and to customers. The Commission should further support fair and timely cost recovery of utility investments in energy storage while ensuring that retail ratemaking avoids cost-shifting among customers in situations where the storage resource is owned by a third party.

EAP believes that, given the ongoing development of technology and technological capabilities in this area, the Commission's final Policy Statement on energy storage resources should be left inherently adaptable to changes. Handling these projects on a case-by-case basis is

preferable to a policy which is prescriptive or establishes limits which may end up discouraging the use of innovative energy storage systems. In this way, industry will gain experience with actual projects and the Commission will have the opportunity to re-evaluate its policy as needed.

Respectfully submitted,



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