COMMONWEALTH OF PENNSYLVANIA

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September 15, 2023

Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street
Harrisburg, PA 17120

Re: Letter Of Notification Of PPL Electric Utilities Corporation, Filed Pursuant To 52 Pa. Code Chapter 57 Subchapter G, For Approval To Rebuild The Existing Double-Circuit Stanton-Summit #3 And #4 230 kV Transmission Lines Connecting the Stanton 230 kV Substation And A Two-Pole Turn Structure That Are Respectively Located In Luzerne And Lackawanna Counties, Pennsylvania
Docket No. A-2022-3037374

Dear Secretary Chiavetta:

Attached for electronic filing please find the Office of Consumer Advocate's Main Brief in the above-referenced proceeding.

Copies have been served on the parties as indicated on the enclosed Certificate of Service.

Respectfully submitted,

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Certificate of Service
*4862-2137-4335, v. 1

CERTIFICATE OF SERVICE

Letter of Notification of PPL Electric Utilities Corporation, Filed Pursuant To 52 Pa. Code Chapter 57 Subchapter G, For Approval To Rebuild The Existing Double-Circuit Stanton-Summit #3 And #4 230 kV Transmission Lines Connecting the Stanton 230 kV Substation And A Two-Pole Turn Structure that are Respectively Located in Luzerne and Lackawanna Counties, Pennsylvania	:	Docket No. A-2022-3037374

I hereby certify that I have this day served a true copy of the following document, the Office of Consumer Advocate's Main Brief, upon parties of record in this proceeding in accordance with the requirements of 52 Pa. Code § 1.54 (relating to service by a participant), in the manner and upon the persons listed below:

Dated this 15th day of September 2023.

SERVICE BY E-MAIL ONLY

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*4853-8061-2735, v. 1

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Letter Of Notification Of PPL Electric Utilities Corporation, Filed Pursuant To 52 Pa. Code Chapter 57 Subchapter G, For Approval To Rebuild The Existing Double-Circuit Stanton-Summit #3 And #4 230 kV Transmission Lines Connecting the Stanton 230 kV Substation And A Two-Pole Turn Structure That Are Respectively Located In Luzerne And Lackawanna Counties, Pennsylvania	:	Docket No. A-2022-3037374

MAIN BRIEF OF THE OFFICE OF CONSUMER ADVOCATE

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September 15, 2023

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I. INTRODUCTION

PPL Electric Utilities Corporation (PPL or the Company) filed a Letter of Notification (LON) for the reconstruction of the Stanton-Summit #3 and #4 230 kV Transmission Line. The Office of Consumer Advocate (OCA) is participating in this matter to protect the interests of PPL's ratepayers. PPL is in the midst of rebuilding a large part of its existing 230 kV transmission infrastructure, at a cost that will run into the hundreds of millions of dollars. The current Project, a complete rebuild of the existing Stanton to Summit dual 230 kV transmission line, is just one part of this massive transmission rebuild.

Under the Commission's regulations, the primary determination that must be made in every transmission line case is whether the specific project that is being proposed is needed. As the Applicant here, PPL bears the burden of proof to show that there is a need for this Project. The OCA submits that based on the record evidence, PPL has failed to carry its burden of proof that its proposed Project is needed. Accordingly, the Commission should deny PPL's LON.

PPL alleges that the existing steel lattice structures are being adversely affected by pack rust, which is compromising the structural integrity of the line. PPL's only proposed response to this condition is to completely rebuild the line with new structures and new conductors. The OCA is not challenging PPL's determination as to the pack rust issue. The OCA is challenging PPL's proposal to rebuild the line, as the OCA submits PPL has failed to fairly evaluate all reasonable options, including a retirement option, the use of dynamic line rating (DLR) technology, and an undergrounding option.[1]

[1] In Direct Testimony, the OCA proposed several other alternatives for PPL to consider, including a potential 500 kV option, a battery storage option, and the recognition of demand response and aggregation of distributed energy resources. After review of PPL's Rebuttal Testimonies, and responses to discovery, the OCA has determined to not pursue these three options in this case.

The OCA believes that PPL should have specifically considered whether retirement of the lines was a more viable option and should have been explored before the specific option put forward in this case. Specifically, PJM has a process in place to evaluate the effect on the grid if a transmission owner wants to retire an existing transmission line. The record evidence shows that PPL did not seek that analysis from PJM. As such, what additional upgrades or reinforcements to the grid would be needed if the existing line were retired, if any, and the costs of such additions are unknown. In the OCA's view, this is a fatal flaw in the process that PPL chose to follow and deprives the Commission of a full and fair evaluation of other potential alternatives. The OCA submits that such an analysis is especially important in this matter, as the record shows the need for the *existing* line, let alone a rebuilt line, is questionable. Specifically, the record evidence shows that the existing line could suffer a complete outage on both conductors and no customers would lose service nor would that outage cause other nearby facilities to overload.

The Commission should also be fully aware of the role PJM plays in this matter. PPL's Project is classified as a "supplemental project", meaning that PJM is not requiring PPL to build this Project to resolve any reliability or congestion issues. Rather, a supplemental project, also sometime referred to as a "transmission owner identified" project, is one where the transmission owner (TO) — here PPL — proposes to build a project based on its own testing parameters, reliability measures, or in this case structural deficiencies. For PPL, this is a unilateral decision to propose a project solely designed to benefit its own needs.

Supplemental projects are submitted to PJM solely for the purpose of a "do no harm" study. Specifically, PJM models the grid with the new project connected. So long as the new project causes no harm to the functioning of the grid, PJM takes no further action. In this Main Brief the OCA will further discuss what PJM does and does not do as to supplemental projects, but to be

clear, the OCA is not challenging the PJM process nor seeking to change that process in this proceeding. The OCA is providing this information to ensure that the Commission is fully informed as to the limited role that PJM plays as to supplemental projects.

In consideration of the singular analysis that PJM does, it is even more important for the Commission to thoroughly review and evaluate supplemental projects like the one proposed by PPL. Currently, for supplemental projects, there is no entity other than the Commission that considers these types of projects with a wider or more holistic view towards the overall needs of the grid. Furthermore, because this project is solely within the control of PPL and within its service territory, it is PPL's ratepayers alone who will bear the cost without any showing that the project is necessary. The OCA has concerns as to the increasing level of PPL's transmission rates, similar to the concerns expressed by the Commission in rejecting a prior PPL supplemental project. *Letter of Notification of PPL*, Dock. No. A-2017-2635709 (Order entered Aug. 3, 2018) (*2018 PPL LON*). The OCA submits this Main Brief to lay out the facts, as they are known, to assist the Commission to make a reasoned decision in this matter. Unfortunately, not all of the available alternatives or options are available for review at this point, as PPL has chosen one path forward that may be the best option for the Company, but it is unclear whether the proposed option is the best way forward for PPL's ratepayers.

II. BACKGROUND AND HISTORY OF THE PROCEEDING

On December 27, 2022, PPL filed the instant LON for the reconstruction of the Stanton-Summit #3 and #4 230 kV Transmission Line (Stanton-Summit Line) connecting the Stanton 230 kV substation and a two-pole turn structure, which are located in Luzerne and Lackawanna Counties, Pennsylvania. LON at 4-5. Built in 1970, the existing Stanton-Summit Line is part of the PPL 230 kV transmission system. *Id*. These 230 kV lines feed the 230-69 kV substations in

PPL's northeast region. The Stanton substation is in Luzerne County, and the Summit substation is in Lackawanna County, Pennsylvania. *Id*. PPL proposes rebuilding the Stanton - Summit Line at an estimated cost of $36.8 Million. LON at 10. Forty-Six COR-TEN lattice structures currently support the Stanton-Summit Line. PPL proposes replacing all 46 COR-TEN lattice structures, including new 230 kV double circuit conductors due to a pack-out rust issue.[2] OCA St. 1 at 8.

On January 25, 2023, the OCA responded to PPL's LON by submitting a Notice of Intervention and Public Statement. Subsequently, the OCA filed a Formal Protest on February 8, 2023. By prehearing conference hearing notice dated February 24, 2023, a prehearing conference was scheduled to take place on April 13, 2023. Notice of the prehearing conference and the subject matter of the LON were published in *The Scranton Times Tribune* on February 24, 2023, and March 3, 2023, and in *The Reading Eagle* on February 26, 2023, and March 5, 2023. The publications advised that formal protests and motions to intervene must be filed on or before April 10, 2023.

A prehearing conference order, dated February 24, 2023, was served on the entities identified by PPL as potentially affected by the project or required to be notified by the Commission's regulations. In addition to providing the time and date of the prehearing conference and the deadline for filing protests, the prehearing conference order informed these entities that if they did not attend the prehearing conference or notify the administrative law judge of their intent to participate, their name would be removed from the service list and they would not receive any pleadings, filings, discovery requests, written testimony or orders and decisions in this matter.

[2] Throughout its Application and testimonies of PPL witnesses the Company describes how this pack rust issue has caused a degradation of the existing steel lattice structures, to the extent that these structures are no longer suitable for continued use. The OCA does not contest these findings.

The Prehearing Conference took place as scheduled on April 13, 2023, before Deputy Chief Administrative Law Judge Mark Hoyer and Administrative Law Judge Darlene Heep. In accordance with the litigation schedule agreed to at the Prehearing Conference, on May 24, 2023, PPL filed and served the Direct Testimonies of Joseph B. Lookup and Christopher Szmodis. Subsequently, on July 20, 2023, the OCA filed and served the revised Direct Testimony of OCA witness Rao Konidena.[3] On August 3, 2023, PPL filed and served the Rebuttal Testimonies of Mr. Lookup and Mr. Szmodis.

On August 15, 2023, the ALJs held a telephonic evidentiary hearing. During the hearing, both Parties' witnesses testified in accordance with their written testimony and were subject to cross-examination. In accord with the procedural schedule, the OCA now submits this Main Brief.

III. LEGAL STANDARDS

A. Burden of Proof

PPL must demonstrate that it has met all of the requirements under the Commonwealth's Constitution, Statutes, and the Commission's regulations to the extent they are applicable in this matter. Pa. Const., Art. 1, § 27; 66 Pa. C.S. §§ 332(a), 1501; 52 Pa. Code §§ 57.71, *et seq*. Under Section 332 of the Public Utility Code, the proponent of a rule or order in any Commission proceeding has the burden of proof. 66 Pa. C.S. § 332. Therefore, as it seeks an order approving its LON, PPL has the burden of proof to establish the need for its proposed Project.

[3] Rao Konidena is Owner and President of Rakon Energy LLC. Mr. Konidena has been an independent energy consultant for the past five years, primarily focusing on Regional Transmission Organization practices and policy. As an independent consultant, Mr. Konidena has provided testimony and comments on behalf of and before various entities, including the Pennsylvania Office of Consumer Advocate, Public Service Commission of Wisconsin, Minnesota Public Utilities Commission, Kansas Corporation Commission, California Public Utilities Commission, Colorado Public Utilities Commission and Texas Public Utilities Commission. Mr. Konidena received a Bachelor of Engineering in Electrical & Electronics Engineering from Bangalore University, a Master of Science in Electrical Engineering from the University of Texas at Arlington, and a Master of Business Administration from the University of Minnesota.

The Pennsylvania Supreme Court has stated that the party with the burden of proof has a formidable task to show that the Commission may lawfully adopt its position. Even where a party has established a prima facie case, the party with the burden must establish "the elements of that cause of action to prevail, precluding all reasonable inferences to the contrary." *Burleson v. Pa. PUC*, 461 A.2d 1234, 1236 (Pa. 1983). Thus, PPL has an affirmative burden to establish the necessity and reasonableness of its request.

The Pennsylvania Supreme Court has also held that the party with the "burden of proof" has a duty to establish material facts by a preponderance of the evidence. *Se-Ling Hosiery, Inc. v. Margulies*, 70 A.2d 854, 857 (Pa. 1950). The "preponderance of the evidence" means that one party has presented evidence that is more convincing than the evidence presented by the other party. *Id*., 70 A.2d at 856.

Additionally, any finding of fact necessary to support an adjudication of the Commission must be based upon substantial evidence, which is such relevant evidence as a reasonable mind might accept as adequate to support a conclusion. *Mill v. Comm.*, 447 A.2d 1100 (Pa. Cmwlth. Ct. 1982); *Edan Transportation Corp. v. Pa. PUC*, 623 A.2d 6 (Pa. Cmwlth. Ct. 1993), 2 Pa. C.S. § 704. More is required than a mere trace of evidence or a suspicion of the existence of a fact sought to be established. *Norfolk & Western Ry. v. Pa. PUC*, 413 A.2d 1037 (Pa. 1980); *Erie Resistor Corp. v. Unemployment Com. Bd. Of Review*, 166 A.2d 96 (Pa. Super. 1960); *Murphy v. Comm., Dept. of Public Welfare, White Haven Center*, 480 A.2d 382 (Pa. Cmwlth. Ct. 1984).

The burden of proof is composed of two distinct burdens: the burden of production and the burden of persuasion. *Hurley v. Hurley*, 754 A.2d 1283 (Pa. Super. 2000) (*Hurley v. Hurley*). The burden of production, also called the burden of producing evidence or the burden of coming forward with evidence, determines which party must come forward with evidence to support a

particular proposition. This burden may shift between the parties during the course of a trial. If the party (initially, this will usually be the complainant, applicant, or petitioner, as the case may be) with the burden of production fails to introduce sufficient evidence the opposing party is entitled to receive a favorable ruling. That is, the opposing party would be entitled to a compulsory nonsuit, a directed verdict, or a judgment notwithstanding the verdict. Once the party with the initial burden of production introduces sufficient evidence to make a prima facie case, that burden shifts to the opposing party. If the opposing party introduces evidence sufficient to balance the evidence introduced by the party having the initial burden of production, the burden then shifts back to the party who had the initial burden to introduce more evidence favorable to his position. The burden of production goes to the legal sufficiency of a party's case.

Having passed the test of legal sufficiency, the party with the burden of proof must then bear the burden of persuasion to be entitled to a verdict in his favor. "[T]he burden of persuasion never leaves the party on whom it is originally cast, but the burden of production may shift during the course of the proceedings." *Riedel v. County of Allegheny*, 633 A.2d 1325, 1328 n. 11 (Pa. Cmwlth. Ct. 1993). The burden of persuasion, usually placed on the complainant, applicant, or petitioner, determines which party must produce sufficient evidence to meet the applicable standard of proof. *Hurley v. Hurley*. It is entirely possible for a party to successfully bear the burden of production but not be entitled to a verdict in his favor because the party did not bear the burden of persuasion. Unlike the burden of production, the burden of persuasion includes determinations of credibility and acceptance or rejection of inferences. Even unrebutted evidence may be disbelieved. *Suber v. Pa. Comm'n on Crime and Delinquency*, 885 A.2d 678 (Pa. Cmwlth. Ct. 2005), appeal denied, 895 A.2d 1264 (Pa. 2006). In order to bear the burden of proof and be entitled

to a decision in his favor, a party must bear both the burden of production and the burden of persuasion.

B. Constitutional Law

In analyzing the siting and construction of high voltage transmission lines, the Commission must be guided by the Environmental Rights Amendment codified as Article 1, Section 27 of the Pennsylvania Constitution. The Environmental Rights Amendment protects the rights of Pennsylvanians to clean air, pure water, and the preservation of the environment, while also requiring the Commonwealth to conserve and maintain the public's natural resources for the benefit of all Pennsylvanians. Article 1, Section 27 provides:

> The people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment. Pennsylvania's public natural resources are the common property of all the people, including generations yet to come. As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people.

Pa. Const., Art. 1, § 27.

C. Statutory Law

Section 1501 of the Public Utility Code requires every public utility to furnish reasonable and adequate service and facilities. The provision provides in part:

§ 1501. Character of service and facilities.

> Every public utility shall furnish and maintain adequate, efficient, safe, and reasonable service and facilities, and shall make all such repairs, changes, alterations, substitutions, extensions, and improvements in or to such service and facilities as shall be necessary or proper for the accommodation, convenience, and safety of its patrons, employees, and the public. Such service also shall be reasonably continuous and without unreasonable interruptions or delay. Such service and facilities shall be in conformity with the regulations and orders of the commission…

66 Pa. C.S. § 1501. This provision grants the Commission the authority to review a utility's facilities and determine whether changes are needed to ensure safe, adequate and reliable service

to the public. Furthermore, a regulated utility cannot make the regulated upgrades unless it can show that the project is necessary or proper for the accommodation, convenience, and safety of its patrons. *Pa. Power & Light Co. v. Pa. Pub. Util. Comm'n*, 696 A.2d 248, 250 (Pa. Commw. Ct. 1997).

D. Regulatory Framework

Pursuant to its enabling statutes, the Commission promulgated regulations setting forth the regulatory requirements for approval to construct high-voltage transmission facilities. The Commission's regulations were based on the *Payne v. Kassab*, 312 A.2d 86, 94 (Pa. Commw. Ct. 1973) standard, a now overruled interpretation of the Commonwealth's constitutional obligations under the Environmental Rights Amendment. Accordingly, the Commission must ensure that its constitutional obligations are fulfilled and that its regulations are applied in a manner consistent with *Pennsylvania Environmental Defense Foundation v. Commonwealth of Pennsylvania, et al.,* 161 A.3d 911, 930 (Pa. 2017) (*PEDF*).

Pursuant to the Commission's authority under 66 Pa. C.S. Section 1501, 15 Pa. C.S. Section 1511, and the Environmental Rights Amendment, the Commission promulgated regulations for the siting and construction of high-voltage transmission lines codified at Chapter 57, Subchapter G, of Title 52 of the Pennsylvania Code. 52 Pa. Code §§ 57.71-57.77.[4] Section 57.71 of the Commission's Regulations provides:

> § 57.71. Application.
>
> Upon the application of a public utility for authorization to locate and construct a HV transmission line or any portion thereof, upon approval of the application by the Commission first had and obtained, and upon compliance with existing laws, it shall be lawful for a public utility to commence construction of the HV transmission line or portion thereof.

[4] The Commission's Regulations define a high-voltage line as "an overhead electric supply line with a design voltage greater than 100,000 volts" or 100 kilovolts (kV). 52 Pa. Code § 57.1.

52 Pa. Code § 57.71. The form and content of the application is codified at Section 57.72, which sets forth the necessary information that must be produced at the time of submission. 52 Pa. Code § 57.72. Additionally, the Commission issued a policy statement at Sections 69.3101 – 69.3107 of the Commission's regulations requesting additional information when submitting an application for approval. 52 Pa. Code §§ 69.3101 – 69.3107. This includes, among other things, information concerning route evaluation and siting criteria, as well as health and safety considerations. *Id.*

The Commission's regulations also set forth the criteria that must be met before a high-voltage transmission line is approved:

> § 57.76. Determination and order.
>
> (a) The Commission will issue its order, with its opinion, if any, either granting or denying the application, in whole or in part, as filed or upon the terms, conditions or modifications, of the location, construction, operation or maintenance of the line as the Commission may deem appropriate. The Commission will not grant the application, either as proposed or as modified, unless it finds and determines as to the proposed HV line:
>
> (1) That there is a need for it.
>
> (2) That it will not create an unreasonable risk of danger to the health and safety of the public.
>
> (3) That it is in compliance with applicable statutes and regulations providing for the protection of the natural resources of this Commonwealth.
>
> (4) That it will have minimum adverse environmental impact, considering the electric power needs of the public, the state of available technology and the available alternatives.

52 Pa. Code § 57.76. Pursuant to Section 57.76, the Commission must ensure that all criteria are met before it may approve the siting and construction of high-voltage transmission facilities.

The Commission, in a recent transmission siting proceeding, has interpreted the above regulations as being consistent with its constitutional obligations under the *PEDF* standard. *Application of Pennsylvania Electric Company Seeking Approval to Locate, Construct, Operate*

and Maintain a High-Voltage Transmission Line Referred to as the Bedford North-Central City West 115 kV HV Transmission Line Project, Docket No. A-2016-2565296, *et al*., Opinion and Order at 14 (Mar. 8, 2018) (noting that the evidentiary record in that proceeding had closed prior to the *PEDF* decision). The Commission's Order provided:

> The Commission's regulatory scheme for high-voltage line transmission siting cases, therefore, provides for a robust, evidence-based deliberative process that provides due process for all interested parties. The Commission, consistent with our role as a fiduciary responsible for the preservation of the Commonwealth's natural resources, and consistent with *PEDF*, acts with prudence, loyalty and impartiality when adhering to these regulations. In this manner, we fulfill our responsibility to protect the public's natural resources from depletion or degradation, while also allowing legitimate development that improves the lot of Pennsylvania's citizenry, as the Pennsylvania Supreme Court recognized in *Robinson Township v. Com. of Pa.*, 623 Pa. 564, 658, 83 A.3d 901, 958 (2013).
>
> We conclude that the evidentiary record in this proceeding, the process used to evaluate it, and the approval of this project are fully consistent with the Environmental Rights Amendment and the Supreme Court's opinion in *PEDF*.

Id.

Accordingly, in light of *PEDF*, the Commission's regulations require more than a mere balancing of the harms and benefits of PPL's Project. Rather, the Commission must give strong consideration to the potential environmental harms or degradation caused by PPL's Project and any available alternatives. Moreover, a more rigorous proof of need, or necessity, is required in order to approve a transmission project.

IV. SUMMARY OF ARGUMENT

Pursuant to Sections 332(a) and 1501 of the Public Utility Code, the Company has the burden of proof to demonstrate that the Project is necessary to maintain adequate, efficient, safe, and reasonable service and facilities. 66 Pa. C.S. §§ 332(a), 1501. The OCA contends that the LON should be rejected. The OCA submits that PPL has not adequately and thoroughly explored various alternatives to its proposed Project, including whether PPL's proposal to rebuild the existing

Stanton-Summit Line is the best long-term option for improved reliability, resiliency and in the best interest of ratepayers. The OCA is also concerned with the cost of this limited rebuild of only a small section of PPL's transmission infrastructure, currently estimated at almost $37 million.

Consistent with the legal framework for approval of any transmission line project, the applicant must prove that there is a need for the proposed project. In part, the applicant must consider all reasonable alternatives and present those alternatives to the Commission for its review. This is a critical step, as the Commission needs to weigh the costs and benefits of various alternatives against the applicant's proposed project. Here, PPL has failed to satisfy this threshold requirement as the only option considered by PPL was a rebuild of the existing line.

For the reasons set forth herein, the Commission should deny the Company's LON.

V. ARGUMENT

A. Introduction

PPL seeks approval of its LON for the reconstruction of the Stanton-Summit Line. PPL avers that the LON should be granted, as there is a need for the project due to the pack rust issue and the deterioration of the towers. The OCA contends that the LON should be denied, as PPL has failed to establish a need for the proposed supplemental project. The OCA also contends that PPL has failed to investigate and consider reasonable alternatives to the proposed supplemental project. Based upon the evidence provided, the OCA submits that PPL has not adequately proven the need for this Project. PPL has not provided any evidence to establish a reasonable likelihood that the "contingency" events which could lead to an outage are likely to occur, nor has it demonstrated that the proposed solution is an efficient and cost-effective choice relative to other potential alternatives. In the absence of facts supporting a current need for the proposed supplemental project, PPL has failed to carry its burden of proof. PPL cannot solely rely upon PJM's review of supplemental projects like the one proposed here as justification for the project. PPL is required to

investigate and explore reasonable alternatives before such a supplemental project can move forward, as this Commission has previously held. *2018 PPL LON* at 7 (citing PPL's "failure to fully assess alternative solutions").

B. PPL Has Failed To Establish A Need For This Project.

1. The PJM Process Is Limited To A "Do No Harm" Study.

PJM plays a part in this process, but its review of supplemental projects like the one PPL is proposing here is limited. PJM's Regional Transmission Expansion Plan (RTEP) process has three (3) transmission project categories: 1) Baseline; 2) Network; and 3) Supplemental. Rebuilding the Stanton-Summit Line falls under the third category – Supplemental Projects, because these projects are "supplemental" to the Baseline reliability projects. OCA St. 1 at 12. Since PJM is responsible for the entire region, before including a supplemental project in the RTEP, PJM conducts a "do no harm study." OCA St. 1 at 14. In this study, PJM ensures that the Stanton-Summit Line rebuild would not harm the reliability of the PJM transmission system. If a supplemental project is found harmful to the reliable operation of the grid, then the sponsoring TO is responsible for implementing upgrades to the transmission system in order to accommodate the proposed project. OCA St. 1 at 14.

However, unlike baseline RTEP projects, Supplemental projects, such as this one proposed by PPL, are not required to go through the FERC Order 1000 required Competitive Planning Process at PJM. OCA St. 1 at 15. As discussed by PPL witness Lookup, supplemental projects are not subject to competition. PPL St. 1-R at 18. For supplemental projects, a TO like PPL has the sole right to own and build a supplemental project in its own service territory.

For supplemental projects, PJM does not evaluate potential alternatives. OCA St. 1 at 17. PJM does take note of the projected costs of supplemental projects, but does not consider cost caps

as part of its review process. Tr. at 39-42. In other words, PJM does not evaluate the "need" for supplemental projects as PJM is only concerned as to whether the rebuild will harm the reliability of the transmission system.

Although PJM does not directly offer comments or suggestions as to supplemental projects that are brought before it for review, PJM does host a Transmission Expansion Advisory Committee (TEAC) that has the ability to review projects and provide comments and/or alternatives. OCA St. 1 at 12-14. As explained by OCA witness Konidena, there are several opportunities for TEAC members to review and comment. OCA St. 1 at 12-13. At trial, OCA counsel questioned PPL witness Lookup about the particular TEAC meeting where PPL's Project was presented, as follows:

> Q. So was that the meeting where comments would have been supplied by other TEAC members in response to PPL's plan?
>
> A. Yes, they would have provided comments during the PJM process in that meeting or following up to that meeting.
>
> Q. And if you recall, at that time, were there any comments that were submitted by other TEAC members in response to PPL's plan to rebuild these lines?
>
> A. I do not recall any comments during that time.

Tr. at 37.

In his Rebuttal Testimony, Mr. Lookup testified that the Commission had recently approved six separate PPL transmission line projects, as follows:

> I also note that between January 2021 and December 2022, the Commission has reviewed and approved 6 HV transmission line filings made by PPL Electric to address increased incidences of pack-out rust across its system … .

PPL St. 1-R at 9. During cross examination, OCA counsel asked Mr. Lookup what if any TEAC comments were submitted to any of these six prior projects, as follows:

> Q. Do you know that these projects were also submitted for review to PJM's TEAC Committee?

A. That's correct.

Q. And if you know, do you know if there were any comments supplied by the TEAC to any of these proposed projects?

A. I do not recall any comments.

Tr. at 39. As to the current Project, and the six preceding projects that PPL brought before the TEAC for review and comment, no alternatives/comments were provided as to these seven separate projects.

As part of the PJM review, PPL did submit cost estimates for the current Project. At trial, Mr. Lookup confirmed the original estimate that was presented to PJM was $21 million, and at the time of filing this LON the estimate is now $37 million. Tr. at 41-42. Although PJM apparently collects cost information, there are no cost limitations or cost caps imposed by PJM. Tr. At 39-40.

As discussed here, PJM's review of supplemental projects is limited to a "do no harm" study. PJM itself does not provide alternatives, as the review and comment process for potential alternatives is left to the TEAC. At least as to this Project, PJM also does not limit or impose cost caps. The OCA submits that it is important for the Commission to have a clear understanding of what PJM does and does not do as to supplemental projects in order to ensure that PPL's proposed Project is appropriately considered within the rubric of Pennsylvania laws, Commission regulations and past decisions.

2. The Commission Should Require PPL To Seek A Retirement Review For The Stanton-Summit Line From PJM And Report Those Findings.

Based on the record evidence in this matter, the OCA submits that a rebuild of the Stanton-Summit Line may not only be imprudent but also unnecessary. To be clear, the OCA agrees something must be done as the current tower structures are no longer suitable for continued use.

The question is whether the current Stanton-Summit Line is actually needed, and whether PPL has reasonably investigated retiring the line.

OCA Cross Exhibit 2 that was admitted during the hearing is a discovery response from PPL regarding the question of potential alternatives that PPL may choose to study, in relevant part as follows:

> Reference PPL Statement 2, page 1, Mr. Szmodis mentions, "If and when any issues are discovered, the Asset Management Group, under my supervision, develops alternatives." Has the Transmission Planning department ever developed an alternative other than a Transmission line?
>
> PPL Response
>
> Yes. Examples of alternatives that have been used are the following: build a new substation, install a new transformer, replace a transformer, install DLR, install a capacitor bank and install a reactor. The Company evaluates a variety of solutions to determine the most cost effective way to resolve the issue. Additionally, the Consolidated Transmission Owners Agreement ("CTOA") with PJM requires transmission owners to "operate and maintain its Transmission Facilities".
>
> PJM's planning assumptions include that transmission facilities will not be retired without PJM study and review. In order for PPL Electric to retire a transmission line it would first have to provide PJM advance notice so that PJM could study the impact of the retirement. Retiring a 230 kV transmission line, like the Stanton-Summit 230 #3 and #4 Transmission Lines may have the cumulative effect of negatively impacting the reliability, efficiency, safety, resilience and security of the transmission system. That cumulative negative impact could also drive the need for additional facilities to be constructed to compensate for those removed, including greenfield installations.

OCA Cross Exh. 2. As shown here, PJM does have a process for TOs to initiate in order to gauge the effects of retiring a transmission line.

At trial, PPL witness Mr. Lookup confirmed that he is familiar with the process where PJM could study the effects on the grid of retiring a transmission line. Tr. at 34-35. As to the possibility of retiring the Stanton-Summit Line, OCA counsel questioned Mr. Lookup as follows:

> Q. So the question that I have is at any time during the periods in question, and I'm referring to - back to almost ten years ago, when PPL first identified this pack rust

> issue, and then over the preceding years up until when this application was filed, at any time in there, to your knowledge, did PPL ask PJM to study the possibility that if PPL were to retire these lines?
>
> A. To my knowledge, we did not.

Tr. at 35-36. The record is clear that even though PPL identified this pack rust issue at least 10 years ago, and there is a process at PJM to gauge the effects on the grid of possibly retiring a transmission line, PPL never sought that review or analysis from PJM. The OCA submits that the record evidence in this case shows that it would have been prudent for PPL to explore this option.

At the hearing, OCA Cross Exhibit 7 was admitted into evidence. This Exhibit is a discovery response from PPL regarding questions about the possible use of a battery energy storage system (BESS), as follows:

> Reference PPL Statement 2, page 10, Mr. Szmodis states, "While the BESS could potentially be used to address system overload issues." Please provide an explanation on whether system overload issues were studied due to the loss of Stanton-Summit #3 and #4 – 230 kV transmission lines?
>
> PPL Response
>
> It was studied and there are no system overloads for the loss of these two transmission lines. Rather, as explained previously, it is the asset health of the transmission lines that is the primary need driver for the project. System overloads are example of a need driver for a transmission project, but are not the only need drivers. Maintaining the transmission system in a safe condition is also an obligation of all transmission owners.

OCA Cross Exh. 7. As shown here, the Stanton-Summit Line could lose both of the 230 kV lines and no system overloads would occur, and no customers would experience an outage. At the hearing, PPL witness Mr. Smodis confirmed this was correct – both lines could fail and no overloads would occur. Tr. at 77. On further questioning, Mr. Smodis confirmed that overloads would only occur on the next contingency, in other words, the Stanton-Summit Line would have

to completely fail and then another transmission line or asset would also fail or be out of service at the same time. Tr. at 77-79.

At trial, OCA counsel also questioned Mr. Lookup about the complete loss of the Stanton-Summit Line, as follows:

> Q. If we're looking at the #3 and #4 lines, the 230 kV lines that are the subject of this proceeding. And my question was, if both of those lines failed at the same time, say a structure - one of the towers collapsed, both of the lines went out of service, would an outage occur to customers immediately or would it only occur in a situation where the next contingency, as you described, in other words, another related transmission line or asset would go out of service.
>
> A. Yes, sir. So operationally, if there was - depending on what the configuration of the grid or other assets, whether they were in service or out of service, would depend if there was an immediate customer outage. That is correct.

Tr. at 33-34. As Mr. Lookup confirmed at trial, the Stanton-Summit Line could fail completely, and no customers would lose service. A customer outage would only occur if both of the 230 kV lines failed and another transmission line or other asset failed or was completely out of service at the same time. Tr. at 32-34.

In the *2018 PPL LON* case, the Commission rejected a PPL LON filing and expressed some of the same concerns that are present in this matter. Specifically, the Commission held:

> Under the Commission's siting regulations at 52 Pa. Code § 57.71 *et seq*., the Company must establish a clear need for the Project.[5] PPL Electric has not adequately proven the need for this project. Specifically, the Company has not established a reasonable likelihood that the alleged events leading to an outage event are likely to occur, nor has it demonstrated that the proposed solution is an efficient and cost-effective choice relative to other alternatives.[6]

[5] 52 Pa. Code § 57.72(5) states that an application shall contain a general statement of need for the proposed HV line in meeting identified present and future demands for service, of how the proposed HV line will meet that need and of the engineering justifications for the proposed HV line.

[6] 52 Pa. Code § 57.76(a)(4) requires that the Commission finds and determines that a proposed HV line… will have minimum adverse environmental impact, considering the electric power needs of the public, the state of available technology and the available alternatives.

2018 PPL LON at 6 (footnotes in original). As the record here shows, the Stanton-Summit Line could be completely removed from service and no overloads would occur, and no customers would lose service. It would take the next "contingency", or loss of other transmission assets for any potential loss of load. Here, as in the *2018 PPL LON* case, PPL has provided no evidence to show whether it is a reasonable probability that such a contingency event would even occur.

Further, in the *2018 PPL LON* case the Commission expressed many of the same concerns that the OCA is raising in this matter, specifically:

> This Commission has a responsibility to ensure that substantial investments are prudently made, particularly those filed as supplemental projects. Because this is a supplemental project, no other third party like PJM has performed a cost benefit analysis or assessed alternatives.[7] Moreover, PPL Electric has filed a vastly disproportionate number of such supplemental projects. As of August 30, 2017, the Company was responsible for $2.9 Billion of the $3.1 Billion to be spent on supplemental projects in Pennsylvania, or 93% of such spending. According to our annual Rate Comparison Report, PPL Electric's transmission rates have increased 175% since January 31, 2006, with almost all of that increase starting in 2013. Between 2013 and 2018, PPL Electric's transmission rates increased 19% each year. While this history and inventory of past and future transmission project costs do not have a direct relevance to the particular circumstances to this proposed project, *they do highlight the need for further scrutiny by all interested parties to ensure the requirements of 52 Pa. Code § 57.72(5) and 52 Pa. Code § 57.76(a)(4) are met, particularly for supplemental projects, and that electric distribution companies in Pennsylvania are expected to provide more information to justify these expenditures going forward.*

2018 PPL LON at 7 (footnote in original, emphasis added). As to the cost issue, the OCA has noted how the original cost of the Project as submitted to PJM was $21 million, but at the time the LON was filed the estimate is now $36.8 million. Tr. at 41-42. Similar to the Commission's past concerns about PPL's ever-increasing transmission rates, the current numbers show no slowing in that area.

According to the Commission's 2019 Rate Comparison Report, a PPL residential customer

[7] PJM simply notes supplemental projects for purposes of outage planning.

using 500 kwh per month would incur a transmission charge of $6.65.[8] The 2023 Rate Comparison Report shows the same PPL residential customer incurring a transmission charge of $11.58.[9] Since 2019, that is approximately a 74% increase.

As the evidence shows, and for the reasons discussed herein, PPL has failed to prove that there is a need for this Project at this time. A retirement review from PJM would show what reinforcements or additions to the grid, if any, would be required should the Stanton-Summit Line be retired. Without this information for comparison to PPL's proposal here, the Commission should reject this LON.

3. The Use Of Dynamic Line Rating (DLR) Technology May Be A Viable Option Here And Should Be Studied Further, Especially In Conjunction With A Retirement Scenario.

Dynamic Line Rating (DLR) is a blanket term for the many different technologies and methodologies for determining conductor thermal ratings in a more-dynamic fashion using improved, more granular, or real time data.[10] PPL Witness Szmodis explained, "DLR is a technology that allows a transmission owner to set conductor ratings based upon real time values. An example of some of these real time values are ambient temperature and wind speed. These values are incorporated into determine (sic) the rating of the transmission line conductor." PPL St. 2-R at 9. According to the U.S. Department of Energy,

> The objective of all DLR systems is to help system operators determine, accurately and reliably, the prevailing current carrying capacity limits of transmission lines to relax constraints based on thermal considerations [13]. In some cases, the consideration of seasonal or monthly ratings may help defer some infrastructure investments made for economic reasons or increase the utilization of existing lines.

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[8] Available at: https://www.puc.pa.gov/General/publications_reports/pdf/Rate_Comparison_Rpt2019.pdf

[9] Available at: https://www.puc.pa.gov/media/2364/23_rate-comparison-report_final.pdf

[10] U.S. Department of Energy, "Dynamic Line Rating", June 2019 at page 4. Available at: https://www.energy.gov/oe/articles/dynamic-line-rating-report-congress-june-2019

> DLR also has the benefit of improving reliability and resilience by providing grid operators with enhanced situational awareness of individual assets, enabling greater flexibility. DLR can be applied in a variety of circumstances and voltage classes, but is particularly well suited to manage congestion on older lines, such as those at 115, 138, and 230 kV. While new lines may be designed to avoid a thermal limit, use of DLR can still be beneficial by providing situational awareness and supporting asset management. [11]

OCA Witness Konidena testified that PPL's alternatives to its proposed rebuild are primarily transmission asset-related alternatives, transmission structure replacement and remediation. OCA St. 1 at 22. Mr. Konidena added, "Due to the "asset health" needs designation, not transmission congestion, PPL did not evaluate other possible alternatives like Dynamic Line Ratings. The Commission should require PPL to evaluate all options to reduce consumer costs irrespective of the need designation." OCA St. 1 at 23. In his Rebuttal Testimony PPL Witness Szmodis testified, in relevant part:

> DLR is used to reduce real-time power-flow congestion on the electric system. It is not a technology that affects the standard steady-state load-flow analysis because you can not rely on a possible increase in conductor rating due to DLR during an electrical system event. OCA witness Mr. Konidena suggests that the widespread employment of DLR will allow PPL Electric to retire existing HV transmission lines. This is simply not true, and to my knowledge DLR has not been utilized in the manner suggested by Mr. Konidena anywhere in the nation. While DLR may be able to slow the need for additional transmission investments to address congestion issues, *it cannot act as a substitute for facilities*.

PPL St. 2-R at 9-10 (emphasis added).

During cross examination, OCA counsel asked Mr. Szmodis about the DLR option, as follows:

> Q. Would you agree that in certain scenarios DLR could be a replacement for a line rebuild?
>
> A. DLR is used for generation congestion on the transmission system. And during times where there is congestion on a circuit, this is an alternative to be able to transport more power down a transmission line by installing DLR. Another option is rebuilding a transmission line with a larger conductor to transport more power.

[11] U.S. Department of Energy, "Dynamic Line Rating", June 2019 at Page 5. Available at: https://www.energy.gov/oe/articles/dynamic-line-rating-report-congress-june-2019

> So in that circumstance, where there is congestion, DLR can help transport more power.
>
> Q. And Mr. Szmodis, in the event that the #3 and #4 230 kV lines that are connecting the Stanton-Summit Substation were to fail due to whatever the event happened to be, structure power failure, and both of those lines go out of service, would that not more heavily load or possibly create congestion on the surrounding lines that are also connected to those substations?
>
> A. It would increase the load on neighboring network systems. I'm not able to speak on congestion. I'm not able to speak on the specific congestion at that moment when that incident would happen.

Tr. at 75. As shown here, in certain situations the use of DLR technology can replace the need to build new transmission lines. PPL has used DLR technology for this same purpose, as PPL's own documents provide, "$250,000 DLR solution instead of an estimated $50 million line rebuild."[12]

PPL has previously installed DLR technology to address congestion issues. Specifically, as the data requests show, PPL installed DLR on the Juniata and Susquehanna lines to address network congestion. *See* OCA St. 1 at 26; PPL Response to OCA I-7. According to PPL, "DLR has been installed on circuits that would benefit from the allowance of additional load increase: Juniata – Cumberland 1 230kV, Susquehanna – Harwood 1 & 2 230 kV." *Id*. PPL has experience using DLR technology.

DLR can be used for more than just to address congestion issues, as OCA witness Konidena testified "In addition to reduced transmission congestion, DLRs provide increased transfer capacity[13] and resiliency benefits[14], and PPL does not need to schedule an outage on existing

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[12] OCA Cross Exhibit 6 at 3, "DLR from the Utility Perspective".

[13] Unlocking the Queue with Grid-Enhancing Technologies, Brattle presentation, February 1, 2021, "DOE/ONCOR study indicates DLR transfer capability to be 5 to 25% higher than SLR." SLR is Static Line Rating. https://watt-transmission.org/wp-content/uploads/2021/02/Brattle__Unlocking-the-Queuewith-Grid-Enhancing-Technologies__Final-Report_Public-Version.pdf90.pdf

[14] "DLR technology can identify additional capacity on transmission lines, potentially relieving congestion and creating economic efficiencies. Such technology can also enhance system resilience by providing enhanced real-time monitoring of transmission assets." https://www.pjm.com/-/media/library/reportsnotices/

transmission lines to install sensors, unlike transmission options discuss below." OCA St. 1 at 26 (footnotes in original). As such, if PPL used DLRs on existing transmission lines, some of the lines could be loaded much lighter to the point that they might not even be needed. OCA St. 1 at 26. Mr. Konidena concludes, "Thus, before approving this project, or as a condition of approval if the Commission determined that the rebuild is needed, the PUC should require PPL to provide a complete study on how the use of DLR technology may impact the need for the planned rebuilds of PPL's 230kV system." OCA St. 1 at 26.

Utilizing DLR technology is more cost effective than building new transmission infrastructure. Based on the evidence, the complete loss of the Stanton-Summit Line, followed by the next "contingency" would lead to heavier loads being placed on the surrounding transmission assets. The use of DLR technology on these other lines could help to reduce that loading.

To be clear, the OCA agrees with PPL that the current condition of the Stanton-Summit Line is untenable. PPL should be directed to seek an analysis from PJM where the Stanton-Summit Line would be removed from the grid and then model the use of DLR technology on other transmission lines to see the effects. PPL has been studying this pack rust issue for over 10 years, surely some additional time for a PJM analysis and a more complete record for the Commission to review is reasonable in this matter.

4. Should The Commission Determine That The Stanton-Summit Line Is Needed, An Undergrounding Option Should Be Explored.

PPL has asserted that rebuilding the Stanton-Summit transmission line is needed due to asset health. As such, according to OCA Witness Konidena, undergrounding should be evaluated as an option to ascertain if overall asset health is improved for the duration of the project. OCA St.

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1 at 31. “The Spring-State Hill Tie and Hershey-S. Hershey 69 kV transmission lines were the last two transmission lines that PPL Electric installed underground.” OCA St. 1 at 31; PPL Response to OCA II-7. Even though PPL has experience with undergrounding transmission lines, PPL failed to conduct an analysis evaluating whether undergrounding is a viable alternative in this LON due to cost considerations. OCA St. 1 at 31. PPL did agree, however, that undergrounding the line would resolve the current concerns over the asset health of the Stanton-Summit Line. OCA St. at 31; PPL Response to OCA III-12.

According to OCA Witness Konidena, there are two reasons why undergrounding of the Stanton – Summit Line might be a better long-term option for consumers. First, with undergrounding, there is no possible rusting issue that PPL experienced with the overhead transmission lines. OCA St. 1 at 31. As PPL explained, “Under normal circumstances, underground transmission lines do not face rusting issues. This is due to the underground transmission lines not being exposed to weather elements.” OCA St. 1 at 31; PPL response to OCA III-2. PPL noted that the existing Stanton - Summit Line experienced the COR-TEN rust issue, reducing the asset life from 75 to 45 years. OCA St. 1 at 31. Second, undergrounding ensures that the transmission investment is not exposed to weather elements, possibly increasing the life of the asset. OCA St. 1 at 31. PPL stated that due to recent weather patterns and storms experienced over the past 20 years, the overhead transmission towers are exposed to extreme precipitation and wind events. OCA St. 1 at 31-32. More specifically, in the LON, PPL explains, “Furthermore, as the topic of severe weather patterns becomes increasingly relevant, there is a need to consider how changing weather patterns will impact the reliability of the existing COR-TEN® lattice structures. Over the last 20 years, PPL Electric has seen a trend of increasing storms per year within the PPL Electric service territory. With each storm comes more exposure to extreme precipitation and wind

events." LON at 9. In sum, Mr. Konidena believes that undergrounding could improve the overall health of PPL's 230 kV system. OCA St. 1 at 32.

PPL witness Lookup testified that undergrounding is cost prohibitive and not reasonable in this instance. PPL St. 1-R at 7. PPL witness Smodis also testified that underground facilities can take more time to address outages and also would increase land disturbance. PPL St. 2-R at 7. At trial, OCA counsel questioned PPL witness Szmodis about undergrounding, as follows:

> Q. And I'd like to direct you to your response to this question, specifically starting the second sentence of the response that starts with the word outages. Could you read that sentence in full?
>
> A. Outages on 230 kV structures due to extreme weather events are rare, and outages on underground facilities are even less likely.
>
> Q. So I would be correct that your testimony is providing that an outage of an underground facility is less likely than an above ground facility.
>
> Is that correct? Let me specify, due to extreme weather events.
>
> A. Correct.
>
> Q. Now, you also indicated that underground facilities are generally not built unless overhead construction is not really an option.
>
> Is that correct?
>
> A. Yes.

Tr. 60-61. Notwithstanding PPL's opposition to undergrounding, the record is clear that PPL agrees underground facilities are less likely to suffer outages from extreme weather events. Further, PPL raised the issue of the ever-increasing threat of extreme weather and the affect that weather could have on above-ground facilities. LON at 9.

At trial, PPL witness Smodis confirmed his testimony that the most economical way to build transmission lines is above ground. Tr. at 58. OCA counsel then asked:

> Q. And to your knowledge, has PPL ever specifically studied the total cost to consumers in the event of an outage of an above-ground facility, such as, but not

> limited to, lost business revenue, lost wages, all the cessation of economic output that occurs when there is an outage? And I'm asking that in specific reference to your statement that it is the most economical way to build a transmission line. So I'm asking is whether PPL has actually studied the total costs of an outage of an above ground facility.
>
> A. I'm not aware of PPL studying the consumer cost of loss of items from an outage.

Tr. at 59. In the OCA's view, it seems unreasonable to compare only the upfront costs of building a transmission line, when the total cost of ownership to ratepayers has not been studied, and is thus unknown.

As OCA witness Konidena testified:

> While it is true that initial estimates of undergrounding are higher compared to the overhead transmission lines, PPL should look at the overall cost of undergrounding, including but not limited to the customer interruption costs due to repeated weather related forced outages. Specifically, PPL should evaluate the total costs of ownership as it applies to the ratepayers who would be paying for this Project and are served by PPL's transmission system. According to the National Centers for Environmental Information, part of the National Oceanic and Atmospheric Administration ("NOAA"), Pennsylvania experienced 24 Severe Storms in the past 5 years (2018-2023) with a total disaster cost of $2.0 - $5.0 Billion. PPL stated it experienced "27 sustained outages" on the 230 kV system in the last 5 years. There are undoubtedly economic costs that ratepayers must absorb when there is a power outage, such as lost business productivity, work hours, and many other costs that go beyond just looking at the construction costs alone.

OCA St. 1 at 32 (footnotes omitted).

In sum, the Commission cannot fairly compare the underground option without knowing the actual economic cost and impact for customers should an outage occur. PPL has not studied this issue. The OCA submits that should the Commission find that the Stanton-Summit Line is needed, PPL should be required to provide a study as to the consumer costs of outages in order for the Commission to make a fair evaluation of the available alternatives.

5. Conclusion

The OCA contends that PPL has not proven that there is a need for the project in question. Necessity can be found when a proposed transmission line provides lower prices or improved reliability. *See Hess v. Pa. Pub. Util. Comm'n*, 107 A.3d 246, 260 (Pa. Cmwlth. Ct. 2014) (*Hess*), (citing *Southeastern Pa. Transp. Auth. v. Pa. Pub. Util. Comm'n*, 991 A.2d 1021, 1023 (Pa. Cmwlth. Ct. 2010). Unlike the applicant in *Hess*, PPL has failed to show that the proposed transmission facilities lower prices or are actually needed to improve reliability such that they are necessary or proper to provide service to the public.

In determining whether an applicant has proven a need for the proposed transmission line, the Commission must accept evidence on factors including the "present and future necessity of the proposed HV line in furnishing service to the public." 52 Pa. Code §57.75(e)(1). The Commission has broad discretion to determine what factors and evidence to weigh when analyzing the need for transmission lines. *See In re: Application of Trans-Allegheny Interstate Line Co.,* Dock. No. A-110172 (Order entered December 12, 2008).

PPL has not adequately proven the need for this Project. Specifically, the Company has not provided any evidence to show whether it is a reasonable probability that a contingency event would even occur, nor has it demonstrated that the proposed solution is an efficient and cost-effective choice relative to other alternatives as outlined in this Main Brief.

C. Whether The Project Will Create An Unreasonable Risk Of Danger To The Health And Safety Of The Public

The OCA is not addressing this issue.

D. Whether The Project Is In Compliance With Applicable Statutes And Regulations Providing For The Protection Of Natural Resources

The Commission is constitutionally obligated to evaluate whether a proposal to locate and construct high voltage transmission lines ensures the protection of the environment whenever the issue of damage to the environment is raised. Pa. Const. Art. I, § 27. This requirement is satisfied when the Commission is able to determine that all applicable statutes and regulations relevant to the protection of the environment have been complied with.

The Commission's regulations require that a transmission line project "will have minimum adverse environmental impact, considering the electric power needs of the public, the state of available technology and the available alternatives." 52 Pa. Code § 57.76(a)(4). In determining whether a proposed route will have minimum adverse environmental impacts, the Commission will consider the impact and the efforts that have been and will be made to minimize the impact, if any, of the proposed line upon the following: (i) land use; (ii) soil and sedimentation; (iii) plant and wildlife habitats; (iv) terrain; (v) hydrology; (vi) landscape; (vii) geologic areas; (ix) historic areas; (x) scenic areas; (xi) wilderness areas; and (xii) scenic rivers. 52 Pa. Code § 57.75(e)(3). Further, the Commission will consider the availability of reasonable alternative routes in reaching a conclusion as to whether the proposed route will have minimum adverse environmental impacts. 52 Pa. Code § 57.75(e)(4).

The Commission's Regulations provide the necessary findings that the Commission must make and the evidence that will be considered in deciding whether to approve this Project. Key among those areas are the potential environmental impacts, specifically that the Project complies "with applicable statutes and regulations providing for the protection of the natural resources of this Commonwealth", and that "it will have minimum adverse environmental impact, considering the electric power needs of the public, the state of available technology and the available

alternatives." *See* 52 Pa. Code § 57.76 (a)(3-4). In reaching these determinations, the Commission will consider the evidence of record that is relevant to potential environmental impacts of the Project. *See* 52 Pa. Code § 57.75(e)(1-3).

In analyzing the siting, construction, and rebuilding of transmission lines, the Commission must be guided by the Environmental Rights Amendment codified as Article 1, Section 27 of the Pennsylvania Constitution. The Environmental Rights Amendment protects the rights of Pennsylvanians to clean air, pure water, and the preservation of the environment, while also requiring the Commonwealth to conserve and maintain the public's natural resources for the benefit of all Pennsylvanians. Article 1, Section 27 states in full:

> The people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment. Pennsylvania's public natural resources are the common property of all the people, including generations yet to come. As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people.

Pa. Const. Art. 1, § 27. Indeed, these constitutional rights are the basis for the regulatory framework the Commission promulgated for the review of high-voltage transmission lines. *Re Proposed Electric Regulation*, 49 Pa. PUC 709, 712 (Mar. 2, 1976).

Until recently, the Commonwealth's obligations in preserving the environment were further expressed in a three-part test established by the Commonwealth Court in the case of *Payne v. Kassab*, in which the Court stated:

> The court's role must be to test the decision under review by a threefold standard: (1) Was there compliance with all applicable statutes and regulations relevant to the protection of the Commonwealth's public natural resources? (2) Does the record demonstrate a reasonable effort to reduce the environmental incursion to a minimum? (3) Does the environmental harm which will result from the challenged decision or action so clearly outweigh the benefits to be derived therefrom that to proceed further would be an abuse of discretion?

312 A.2d 86, 94 (Pa. Commw. Ct. 1973) (*Payne*). The Commission used identical language in its Orders promulgating the regulations for the review of high-voltage transmission lines.

However, in *PEDF*, the Supreme Court of Pennsylvania overturned this test stating "[t]he Payne I test, which is unrelated to the text of Section 27 and the trust principles animating it, strips the constitutional provision of its meaning." *PEDF* at 930. In replacing the *Payne* standard, the Court outlined three principal contours of Article I, Section 27, which must guide any analysis. *Id*. As stated by the Court:

> This constitutional provision grants two separate rights to the people of this Commonwealth. The first right is contained in the first sentence, which is a prohibitory clause declaring the right of citizens to clean air and pure water, and to the preservation of natural, scenic, historic and esthetic values of the environment. This clause places a limitation on the state's power to act contrary to this right, and while the subject of this right may be amenable to regulation, any laws that unreasonably impair the right are unconstitutional.
>
> The second right reserved by Section 27, set forth in its second sentence, is the common ownership by the people, including future generations, of Pennsylvania's public natural resources…In a statement offered to the General Assembly in connection with the proposed Environmental Rights Amendment, Professor Robert Broughton explained that the provision was initially drafted as "Pennsylvania's natural resources, including the air, waters, fish, wildlife, and the public lands and property of the Commonwealth ...." but was revised to remove the enumerated list and thereby discourage courts from limiting the scope of natural resources covered.
>
> The third clause of Section 27 establishes a public trust, pursuant to which the natural resources are the corpus of the trust, the Commonwealth is the trustee, and the people are the named beneficiaries. The terms "trust" and "trustee" carry their legal implications under Pennsylvania law at the time the amendment was adopted. Notably, Professor Broughton explained that the Commonwealth's role was plainly intended to be that of a "trustee," as opposed to "proprietor." As a trustee, the Commonwealth must deal "with its citizens as a fiduciary, measuring its successes by the benefits it bestows upon all its citizens in their utilization of natural resources under law." Under Section 27, the Commonwealth may not act as a mere proprietor, pursuant to which it "deals at arms[']] length with its citizens, measuring its gains by the balance sheet profits and appreciation it realizes from its resources operations."

PEDF at 931-32 (internal citations omitted).

The Court in *PEDF* corrects the approach taken when analyzing a governmental action that may infringe upon the environmental rights of Pennsylvanians. Composed of two separate principles, the PEDF decision first opines that that there is a prohibitory clause declaring the right of citizens to clean air and pure water, and to the preservation of the natural, scenic, historic, and esthetic values of the environment. *PEDF* at 931. The second and third clauses create a trust wherein the public natural resources are the corpus of that trust, the Commonwealth the trustee, and Pennsylvanians the named beneficiaries. *Id*. Moreover, these constitutional obligations bind all government, state and local, concurrently. *Frederick v. Allegheny Twp. Zoning Hearing Bd.*, 196 A.3d 677, 694 (Pa. Commw. Ct. 2018). As such, the Commission's review of the proposed Project must follow the approach outlined in the *PEDF* decision, as these constitutional obligations bind all government, including the Pennsylvania Public Utility Commission.

Prior to the *PEDF* decision, the environmental harms from a project would need to outweigh its purported benefits in order to support a denial of such a project. *See Payne* at 94. After *PEDF*, any governmental action that may infringe on the environmental rights of Pennsylvanians is questionable in the first instance. Here, the Commission should consider the potential natural and scenic value in removing almost 8 miles of above-ground transmission lines and 46 separate transmission lattice structures, if a PJM evaluation would support that possibility. Further, the Commission should also consider the long-term benefits of undergrounding this facility, consistent with its obligations under the *PEDF* decision, if an appropriate analysis determines that the Stanton-Summit line is needed.

E. Whether The Project Will Have Minimum Adverse Environmental Impacts

The OCA is not addressing this issue.

VI. CONCLUSION

PPL has failed to demonstrate that the proposed Project is needed. As PPL has failed to carry its burden to establish the need of the proposed Project, the OCA respectfully requests that the Commission deny the Company's LON regarding the proposal to rebuild the existing double circuit Stanton-Summit #3 And #4 230 kV Transmission Lines.

Respectfully submitted,

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Dated: September 15, 2023
*4871-9054-9118

PROPOSED FINDINGS OF FACT

1. The Office of Consumer Advocate is statutorily authorized to represent the interest of public utility consumers in the Commonwealth of Pennsylvania, in all proceedings before the Public Utility Commission and the courts affecting the interest of public utility consumers. 71 P.S. § 301-7, et seq.

2. On December 27, 2022, PPL filed the Letter of Notification (LON) pursuant to 52 Pa. Code Chapter 57 Subchapter G, for approval to rebuild the existing double circuit Stanton-Summit #3 And #4 230 kV Transmission Lines connecting the Stanton 230 kV Substation and A Two-Pole Turn Structure, which are respectively located In Luzerne and Lackawanna Counties, Pennsylvania.

3. Built in 1970, the existing Stanton – Summit 230 kV double circuit #3 and #4 transmission line is part of the PPL 230 kV transmission system. Others in the 230 kV network include 1) Lackawanna-Paupack 230 kV Transmission Line, 2) the Summit-Lackawanna 230 kV Transmission Line, 3) the Jenkins-Stanton 230 kV Transmission Line, and 4) the Susquehanna-Jenkins 230 kV Transmission Line. These 230 kV lines feed the 230-69 kV substations in PPL's northeast region.

3. PPL proposes rebuilding 7.7 miles of Stanton - Summit 230 kV #3 and #4 transmission line at an estimated cost of $36.8 Million. Forty-Six COR-TEN lattice structures currently support the Stanton double-circuit transmission line. PPL proposes replacing all 46 COR-TEN lattice structures, including the Stanton – Summit 230 kV double circuit conductors.

4. Construction of the proposed Project is expected to start after the Commission's approval an anticipated In-Service Date (“ISD”) of December 2025.

5. Pursuant to 52 Pa. Code Section 57.76, PPL has failed to establish a need for the proposed Project.

6. Supplemental projects, such as this one proposed by PPL, are not required to go through the FERC Order 1000 required Competitive Planning Process at PJM.

7. The plain language of Section 1501 of the Code and Sections 57.75 and 57.76 of the regulations expressly require the Commission to make an independent determination of need for a proposed transmission line.

8. PPL has failed to show that the proposed transmission facilities lower prices or are actually needed to improve reliability such that they are necessary or proper to provide service to the public.

9. PPL has failed to investigate and consider reasonable alternatives to the proposed supplemental project.

10. For supplemental projects, PJM’s review is limited to a “do no harm study.”

11. For supplemental projects, PJM does not look for or study alternatives.

12. When PPL's Project was first proposed to PJM the estimated cost was approximately $21 million.

13. At the time of filing the LON, the estimated Project cost was $36.8 million.

14. For this Project, PJM did not require a cost cap.

15. No comments were received from the TEAC as to this Project.

16. No comments were received from the TEAC as to the six prior projects that PPL presented to PJM that were, according to PPL, being rebuilt due to "pack rust" issues.

17. PJM has a specific process to study the affects on the grid if a Transmission Owner seeks to retire an existing transmission line.

18. PPL did not seek a "retirement analysis" from PJM.

19. The Stanton-Summit Line could experience a complete outage of both of its 230 kV lines and no overloads would occur on neighboring transmission lines.

20. The Stanton-Summit Line could experience a complete outage of both of its 230 kV lines and no customer outages would occur.

21. PPL has experience using DLR technology on transmission lines.

22. DLR technology can be a substitute for building new transmission.

23. Underground transmission facilities are less likely to experience an outage due to extreme weather events.

24. Power outages can result in significant customer impacts, including lost wages, lost business revenue, and the general cessation of economic output.

25. PPL has not studied the economic losses associated with power outages.

PROPOSED CONCLUSIONS OF LAW

1. The Public Utility Commission has jurisdiction over the parties and the subject matter of this proceeding by virtue of the Public Utility Code, 66 Pa. C.S. § 101, *et seq*.

2. A litigant's burden of proof before administrative tribunals as well as before most civil proceedings is satisfied by establishing a preponderance of evidence which is substantial and legally credible. *Samuel J. Lansberry, Inc. v. Pa. PUC*, 578 A.2d 600 (Pa. Cmwlth. 1990).

3. Any finding of fact necessary to support an adjudication of the Commission must be based on substantial evidence. *Met-Ed Indus. Users Group v. Pa. PUC*, 960 A.2d 189 (Pa. Cmwlth. 2008); 2 Pa. C.S. § 704.

4. Even where a party has established a prima facie case, the party with the burden must establish "the elements of that cause of action to prevail, precluding all reasonable inferences to the contrary." *Burleson v. Pa. PUC*, 461 A.2d 1234, 1236 (Pa. 1983).

5. The "burden of proof" is composed of two distinct burdens: the burden of production and the burden of persuasion. *Hurley v. Hurley*, 754 A.2d 1283 (Pa. Super. 2000). The burden of production goes to the legal sufficiency of a party's case. *Id*.

6. Pursuant to 52 Pa. Code Section 57.76(a), the Commission may not grant the LON to approve the proposed rebuild Project in question, unless it finds and determines:

    (1) That there is a need for it;

    (2) That it will not create an unreasonable risk of danger to the health and safety of the public;

    (3) That it is in compliance with applicable statutes and regulations providing for the protection of the natural resources of this Commonwealth, and

    (4) That it will have minimum adverse environmental impact, considering the electric power needs of the public, the state of available technology and the available alternatives.

7. Pursuant to 52 Pa. Code § 57.76(a)(1), the first element to be established for approval of such a Project is "need."

8. Specifically, need is defined as the "present and future necessity of the proposed HV line in furnishing service to the public." 52 Pa. Code § 57.75(e)(1).

9. Necessity can be found when a proposed transmission line provides lower prices or improved reliability. *See Hess v. Pa. Pub. Util. Comm'n*, 107 A.3d 246, 260 (Pa. Cmwlth.

2014) (citing *Southeastern Pa. Transp. Auth. v. Pa. Pub. Util. Comm'n*, 991 A.2d 1021, 1023 (Pa. Cmwlth. 2010).

10. The Commission is constitutionally obligated to evaluate whether a proposal to locate and construct high voltage transmission lines ensures the protection of the environment whenever the issue of damage to the environment is raised. Pa. Const. of 1968, Art. I § 27.

11. PPL has failed to meet its burden in this matter in establishing a need for the proposed Project, and, therefore, the LON must be rejected pursuant to 52 Pa. Code Section 57.76(a).

PROPOSED ORDERING PARAGRAPHS

IT IS HEREBY ORDERED:

1. That the Letter of Notification filed by the PPL Electric Utilities Corporation, for approval to rebuild the existing Stanton-Summit #3 and #4 230 kV Transmission Line in Luzerne and Lackawanna Counties, Pennsylvania, is hereby denied.

2. That PPL Electric Utilities Corporation comply with the application process set forth in 52 Pa. Code § 57.72 as required by 52 Pa. Code § 57.72(d)(5).

3. That upon completion of Ordering Paragraph 2, this proceeding at Docket No. A-2022-3037374 will be marked closed.

DATE:_____

_____
Deputy Chief Administrative Law Judge Mark A. Hoyer

_____
Administrative Law Judge Darlene D. Heep