



COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA PUBLIC UTILITY COMMISSION
400 NORTH STREET, HARRISBURG, PA 17120

IN REPLY PLEASE
REFER TO OUR FILE

February 7, 2024

Docket No.: P-2022-3034972
Utility Code: 110500

DEVIN T. RYAN
POST & SCHELL, P.C.
17 NORTH SECOND STREET
12TH FLOOR
HARRISBURG, PA 17101-1601
dryan@postschell.com

RE: Petition of PPL Electric Utilities Corporation for Modification of its Third Long-Term Infrastructure Improvement Plan

Dear Mr. Ryan:

On January 17, 2024, PPL Electric Utilities Corporation (PPL) filed a Petition for Approval of a Major Modification to its existing Long-Term Infrastructure Improvement Plan (LTIIP) at Docket No. P-2022-3034972. To assist the Commission in conducting the review of the LTIIP, please respond with the information requested in Attachment 1.

Please forward the information to the Secretary of the Commission **within ten (10) business days** from the date of this letter. All documents requiring notary stamps must have original signatures. The Commission strongly encourages submission through efilng with the Secretary of the Commission by opening an efilng account through the Commission's website and accepting eservice at <https://efiling.puc.pa.gov>. The Commission is accepting all public documents through our efilng system at this time.

If your filing contains confidential material, you are required to either file by overnight delivery or submit to the Secretary's Share Point File system to ensure the timely filing of your submission. Filers should contact the Secretary's Bureau in advance to gain access to the Share Point File system. Make sure to reference the Docket Number listed above when filing your response. The overnight address for hard-copy or confidential responses is:

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

Your answers should be verified per 52 Pa Code § 1.36. Accordingly, you must provide the following statement with your responses:

I, [print name of appropriate company representative], hereby state that the facts above set forth are true and correct to the best of my knowledge, information and belief, and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Signature _____

Title _____

Date _____

Please contact the below staff person if any problems should arise that prevent a full response within ten business days or if any clarification of these data requests is needed. Please mark the materials “CONFIDENTIAL” in bold or highlighted manner if any of the requested information is deemed to be of a confidential nature.

In addition, to expedite completion of the review, please send a copy of your response to Harry R. Bidelspach Sr. in the Bureau of Technical Utility Services via e-mail at hbidelspac@pa.gov. Thank you in advance for your cooperation.

Sincerely,



Rosemary Chiavetta
Secretary

Enclosure: Attachment 1

cc: Dan Searfoorce-TUS
John Van Zant-TUS
Harry Bidelspach, TUS
Brent Killian, BIE
Kimberly A. Klock, PPL, kklock@pplweb.com

Attachment 1
TUS Data Request 1
Petition of PPL Electric Utilities Corporation (PPL) for Modification of its Third Long-Term
Infrastructure Improvement Plan (Petition)
Docket No. P-2022-3034972

Note: Please restate the data request prior to providing a response. In addition, provide the name and title of the person(s) providing the response and/or information for each data request.

1. Reference the Petition's page five, paragraph 19.
 - a. Regarding the cost savings yielded, state if those savings factor in the installation costs, maintenance costs and operational costs of the Predictive Failure Technology (PFT).
 - b. Regarding the 36 deteriorated assets identified on the test circuits, provide specific detail on each of the 36 assets identified, including the type of asset and the issue(s) identified for each asset.
 - c. Regarding the 36 deteriorated assets, state if any or all of the 36 deteriorated assets were identified prior to a permanent fault or recloser operation.
 - d. Regarding the identification of the 36 deteriorated assets, state whether the identified issues with the assets could have been detected by use of more frequent Overhead Line Patrols (OLP) or transformer inspections.
 - e. Regarding question "c" above, provide a cost comparison between installation and use of the PFT versus the use of OLP on a routine basis of once every two years. Provide specifics on costs and the expected savings by customer minutes interrupted (CMI). Compare the results to PPL's \$2.00 per CMI threshold noted in PPL's *Biennial Inspection, Maintenance, Repair and Replacement Plan for the Period January 1, 2024 – December 31, 2025*, filed on October 3, 2022, at Docket No. M-2009-2094773.
 - f. Regarding the three circuits within the program testing, provide details on when the deployment of PFT began on each circuit, when the last OLP occurred on each circuit, and when comprehensive vegetation management was conducted on each circuit.
 - g. Regarding the testing of PFT, state if any of the three specific circuits have been identified as one of PPL's worst performing 5% of circuits in any of PPL's Quarterly Reliability Reports in 2022 or 2023.
 - h. Regarding the 36 instances of deteriorated equipment identified by the test PFT, please provide as accurately as possible and based upon experience with actual fault conditions, the number of and types of the identified issues that were likely to result in a permanent fault which would require personnel to be dispatched to make repairs and restore service.

- i. Regarding the testing, during the year 2023, did any of the PFT technology fail or require maintenance or replacement?
2. Reference the Petition's page five, paragraph 20.
 - a. Please clarify the statement: "PPL Electric plans to deploy Predictive Failure Technology across its service territory." What percentage and types of distribution circuits are expected to be included in this new technology?
 - b. Regarding deployment, what percentage and types of circuits will not be candidates for the PFT across PPL's service territory?
3. Reference the Petition's page five, paragraph 21.
 - a. PPL states that over the life of the PFT technology, operations and maintenance expense will be reduced by approximately \$9 million. State if that reduction is from the result of deployment of PFT across all of the PPL distribution system and state if the \$9 million is an annual savings or a lifetime savings. State the expected lifetime of the PFT. Provide any industry data supporting the life expectancy of the devices/system.
 - b. Provide data that compares the expected SAIFI improvement utilizing PFT versus the expected SAIFI improvement if PPL would return to performing distribution overhead line patrols every one to two years as required by 52 Pa. Code § 57.198(n)(4).
 - c. State if PFT is susceptible to lightning damage, fault current damage or vegetation damage.
4. Reference the Petition's page five, paragraph 22.
 - a. State if this technology will it only be able to be used on radial line sections, (taps).
 - b. Describe if the technology will be used on radial two-phase and three-phase taps where delta connected transformer banks are employed. Describe if performance may be affected by back feed through delta connected transformers affect performance.
 - c. Regarding the PFT, describe how monitoring of these devices and systems will be accomplished., *e.g.*, distribution management system (DMS), supervisory control and data acquisition (SCADA), etc.
 - d. Describe how the PFT will communicate its results (and status to PPL's system, *e.g.*, via. landline telephone, wireless, fiber through power line, etc.
5. Reference the Petition's page 7, paragraph 33.
 - a. Given the \$84.44 million expenditure over the course of LTIIP III, and considering expected maintenance and operational costs for the final deployed systems, state the rate of return on the investment and expected cost/benefit ratio.