**PENNSYLVANIA**

**PUBLIC UTILITY COMMISSION**

**Harrisburg, PA 17120**

Public Meeting held May 23, 2019

Commissioners Present:

Gladys Brown Dutrieuille, Chairman

David W. Sweet, Vice Chairman

Norman J. Kennard

Andrew G. Place, Statement

John F. Coleman, Jr.

Docket Numbers:

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| --- | --- |
| Petition of Metropolitan Edison Company for Approval  of Modification of its Long-Term Infrastructure Improvement Plan  Petition of Pennsylvania Electric Company for Approval of Modification of its Long-Term Infrastructure Improvement Plan  Petition of Pennsylvania Power Company for Approval of Modification of its Long-Term Infrastructure Improvement Plan  Petition of West Penn Power Company for Approval of Modification of its Long-Term Infrastructure Improvement Plan | P‑2015-2508942    P-2015-2508936    P-2015-2508931    P-2015-2508948 |

**OPINION AND ORDER**

**BY THE COMMISSION:**

On January 18, 2019, Metropolitan Edison Company (Met-Ed), Pennsylvania Electric Company (Penelec), Pennsylvania Power Company (Penn Power), and West Penn Power Company (West Penn); collectively named FirstEnergy, or FirstEnergy Companies, filed petitions for approval of modification of the FirstEnergy Companies’ Long-Term Infrastructure Improvement Plans (Modified LTIIPs). FirstEnergy noted the petitions were filed in response to the September 20, 2018 Commission Order (LTIIP Review Order).[[1]](#footnote-1) The LTIIP Review Order directed the FirstEnergy Companies to file modified or new LTIIPs, pursuant to 52 Pa. Code § 121.7(d) and § 121.5(a).

The Office of Consumer Advocate (OCA) filed comments on February 15, 2019. The OCA in its comments recommended that supplemental information may be needed by the Commission and its staff in their review of the Modified LTIIPs. The OCA recommended the Commission require:

* A report, within 120 days after the LTIIP period ends, that evaluates the cost effectiveness of the LTIIP initiatives for FirstEnergy Companies
* That the new LTIIP period for the FirstEnergy Companies covers at least 5 years

The OCA also recommended that the FirstEnergy Companies provide the following information:

* That the FirstEnergy Companies calculate the individual companies’ Distribution System Improvement Charge (DSIC) rates at the end of the Modified LTIIP period based on the revised, increased spending projections
* An explanation by the FirstEnergy Companies on how the wood pole replacement program will serve to meet the Commission’s stated objectives with regard to the FirstEnergy Companies’ wood pole replacement program.

FirstEnergy filed Reply Comments on March 18, 2019. FirstEnergy in its reply comments accepted OCA’s recommendations to provide a report on cost effectiveness and an updated DSIC calculation for each of the FirstEnergy Companies. FirstEnergy also noted in its reply comments that it will be filing new LTIIPs for each of the operating companies no later than 120 days prior to the expiration of the Modified LTIIPs and that those LTIIPs would span the 5-year period 2020 through 2024. Finally, FirstEnergy clarified that its wood pole replacement program is consistent with its currently approved LTIIPs and will enhance reliability and should be approved.

We find that FirstEnergy’s Reply Comments satisfy the concerns raised in OCA’s Comments. Further, we shall direct FirstEnergy to file the report and updated DSIC calculation.[[2]](#footnote-2) No other comments were received.

FirstEnergy is a corporation organized and existing under the laws of the Commonwealth of Pennsylvania with its principal office in Akron, Ohio. FirstEnergy furnishes electric service within its authorized service territory through-out the commonwealth.

Each of the FirstEnergy Companies are considered a “public utility” within the meaning of Section 102 of the Public Utility Code, 66 Pa. C.S. §§ 102, and, with respect to their provision of electric service, an “electric distribution company,” as defined in 66 Pa. C.S. § 2201 and are subject to the regulatory jurisdiction of the Commission.

The FirstEnergy Companies’ original LTIIPs were filed on October 19, 2015, and approved by an Order entered on February 11, 2016.[[3]](#footnote-3) The LTIIPs for Met-Ed, Penelec, and Penn Power were previously modified in 2017 in order to incorporate additional available funds through the termination of the consolidated tax adjustment, pursuant to Pennsylvania’s Act No. 40, 66 Pa. C.S. § 1301.1, which became effective August 11, 2016.[[4]](#footnote-4) The modifications to the LTIIPs for Met-Ed, Penelec, and Penn Power were approved by an Order entered June 14, 2017.[[5]](#footnote-5)

**BACKGROUND**

On February 14, 2012,Governor Corbett signed into lawAct 11 of 2012 (Act 11),[[6]](#footnote-6) which amends Chapters 3, 13 and 33 of Title 66. Act 11, *inter alia*, provides utilities with the ability to implement a DSIC to recover reasonable and prudent costs incurred to repair improve or replace certain eligible distribution property that is part of the utility’s distribution system as defined in 66 Pa. C.S. §1351. Act 11 states that as a precondition to the implementation of a DSIC, a utility must file a LTIIP with the Commission that is consistent with 66 Pa. C.S. § 1352.

The Commission promulgated regulations relating to LTIIPs at 52 Pa. Code §§ 121.1 – 121.8 that became effective December 20, 2014. In accordance with the

regulations, an NGDC must include the following elements in its LTIIP:[[7]](#footnote-7)

1. Types and age of eligible property;
2. Schedule for its planned repair and replacement;
3. Location of the eligible property;
4. Reasonable estimates of the quantity of property to be improved;
5. Projected annual expenditures and measures to ensure that the plan is cost effective;
6. Manner in which replacement of aging infrastructure will be accelerated and how repair, improvement or replacement will maintain safe and reliable service;
7. A workforce management and training program; and
8. A description of a utility’s outreach and coordination activities with other utilities, PennDOT and local governments on planned maintenance/construction projects.

**FIRSTENERGY MODIFIED LTIIPS**

**Discussion**

In our LTIIP Review Order, we directed FirstEnergy to consider the following proposed methods and actions when developing its modified or new LTIIPs:

* Review the LTIIP reliability benefit results to determine why goals were not met.
* Review the methodology used to calculate the reliability benefit projections to ensure more accurate predictions.
* Following the reviews in 1 and 2, above, increase expenditures on the projects that should result in the highest reliability benefits.
* Increase overall spending on infrastructure improvement initiatives and accelerate existing planned projects for infrastructure repair and replacement.
* Maximization of the 5% DSIC cap. Assuming no overearning or base rate cases, the FirstEnergy Companies should strive to efficiently and effectively utilize the full capacity of the DSIC mechanism, as capped at 5% by statute or otherwise capped by the Commission via waiver.
* Consider tree and storm hardening methods, such as more resilient aerial cable.
* Consider selective undergrounding for areas with continuing storm-related reliability issues.
* Consider usage of additional smart field devices and SCADA (supervisory control and data acquisition) technologies to reduce customer density per circuit section.
* Consider additional investment in enhanced technology and sacrificial components.
* Consider extending the timeline of the modified LTIIP, if necessary and if not filing a new LTIIP.

FirstEnergy noted in the Modified LTIIPs that it formed an internal reliability team to augment the ongoing internal review of the LTIIP projects. FirstEnergy also retained an independent consultant, PA Consulting Group, Inc., to review the LTIIP improvements and how those efforts would address the methods and actions for consideration outlined by the Commission.

The FirstEnergy Companies in the Modified LTIIPs proposed a two-fold approach to address the Commission’s concerns of the LTIIP Review Order. First, FirstEnergy through the Modified LTIIPs noted it will move capital expenditures currently planned for 2020 into 2019 and will also further supplement those amounts with additional capital. Second, FirstEnergy will file new LTIIPs for each of the operating companies for the 5-year period 2020 through 2024 that will include programs and expenditures designed to maximize sustained reliability over the long-term. FirstEnergy noted the new LTIIPs will be filed no later than 120 days prior to the expiration of the Modified LTIIPs, which would mean no later than September 2019. As to the new LTIIPs, it can be said that FirstEnergy is proposing to replace and supersede the final year of the current LTIIPs, 2020, with a new LTIIP that spans 5 years. The Modified LTIIPs contain no projections for expenditures in 2020.

The Modified LTIIPs greatly increase the expenditures in the already existing LTIIP project categories for the FirstEnergy Companies. However, FirstEnergy also includes some new project categories in the Modified LTIIPs that were based on the internal reliability review and the review of PA Consulting Group, Inc. FirstEnergy’s original LTIIPs and first modified LTIIPs contained the 8 minimum elements of an LTIIP required by the Code as do the Modified LTIIPs. Therefore, our review of the Modified LTIIPs will highlight the proposed increases in expenditures and discuss the proposed new LTIIP project categories.

**Modified LTIIPs Proposed Changes**

Tables 1 through 4, below, detail the prior planned 2019 projects and expenditures of the FirstEnergy Companies’ LTIIPs and the proposed updated and modified projects and expenditures in the Modified LTIIPs. We will discuss each operating company’s Modified LTIIP projects.

**Table 1: Met-Ed** **Modified LTIIP Projects and Projected Expenditures**



As can be seen in Table 1,Met-Ed proposed to increase its LTIIP expenditures by approximately $25.6 million in 2019. The significant increases are primarily in the Install SCADA Devices, Line Rehabilitation, and Create Circuit Ties and Loops categories. Met-Ed noted that the Install SCADA Devices program is focused on improving the performance of worst performing circuits, circuits with more than 1,000 customers, and circuits with significant reliability issues, among other factors. Line Rehabilitation projects are focused on circuits that have high rates of equipment and line failures and animal-caused outages. Create Circuit Ties and Loops projects are focused on creating tie points and loops between radial circuits, which will reduce impacts to faults and increase reliability.

Met-Ed has also proposed one new project category – Underground Network Infrastructure – that is focused on upgrading underground network equipment and infrastructure. Met-Ed noted the equipment targeted for replacement was installed in the 1960s or earlier.

**Table 2: Penelec Modified LTIIP Projects and Projected Expenditures**



As can be seen in Table 2, Penelec will increase its LTIIP expenditures by $10.2 million in 2019. The significant increases are in the Line Rehabilitation and Substation Breaker Replacement project categories. Penelec noted the Line Rehabilitation projects will target circuits that have high numbers of customer outages and high rates of equipment and line failures. The Substation Breaker Replacement program is focused on replacing unreliable, obsolete, and aging circuit breakers or reclosers as these have a high impact on reliability when these components fail. Penelec also proposed to reduce expenditures significantly in certain project categories, such as Wood Pole Replacement, and Penelec noted this was due to its desire to focus on LTIIP projects with higher impact to reliability. Note that the vast majority of the LTIIP projects are accelerations of already existing capital improvement programs and that Penelec will still expend capital on wood pole replacements and rehabilitation outside of the LTIIP.

**Table 3: Penn Power Modified LTIIP Projects and Projected Expenditures**

As can be seen in Table 3, Penn Power will increase its LTIIP expenditures by approximately $15.33 million in 2019. The most significant increase in expenditures is the new project category, Remote Sectionalizing. Penn Power noted that the Remote Sectionalizing projects involve the installation and/or replacement of existing breakers, reclosers, and switches on distribution circuits and associated substation equipment. Penn Power noted this work will allow for remote sectionalizing of the circuits using SCADA. Such actions should improve reliability by reducing the impacts of outages and equipment failures.

**Table 4: West Penn Modified LTIIP Projects and Projected Expenditures**



As can be seen in Table 4, West Penn will increase LTIIP expenditures by approximately $33.7 million in 2019. The most significant increases in existing project categories occurred in the Add Additional Circuit Phases / Install Single Phase Circuit Ties, Enhanced Overcurrent Protection, Recloser Install/Replacement, Subtransmission Modernization and Automation, and System Reliability Improvement Projects. These project categories are designed to modernize West Penn’s distribution system and improve reliability by increasing the flexibility of the system to react to faults and minimize impacts of outages through sectionalizing and switching.

More significantly, West Penn added 10 new project categories. Some of the new project categories involve the subtransmission system. West Penn noted that 40% of customers are served from substations with source voltage provided by the subtransmission system, which West Penn defines as circuit lines of voltages between 25 and 46 kilovolts (kV). West Penn’s subtransmission system is part of distribution rate base. The first new project category involving subtransmission is Line Rehabilitation – Subtransmission. West Penn split off subtransmission from distribution for Line Rehabilitation and noted that the projects in this category will be focused on those subtransmission lines sharing facilities with the lower distribution voltages as failures on the subtransmission lines and equipment usually lead to failures on the underbuilt lower voltage lines. The Subtransmission Breaker Replacement project category is centered on replacement of older and obsolete 25-46kV oil circuit breakers with modern breakers in order to increase the reliability of the subtransmission network that sources a larger percentage of distribution customers. The Subtransmission Protection and Controls project category is focused on replacing electro-mechanical relays with modern micro-processor controlled relays. West Penn noted this will enhance self-diagnostics and allow for continuous monitoring of the health of the devices and provide load and fault data in order to increase reliability.

West Penn also had a new project category of Purchase Emergency Replacement and Emergency Mobile Transformers. West Penn noted this included replacement of emergency transformers utilized for substations that are based on failures, advanced diagnostics, and/or maintenance conditions. West Penn noted that it utilizes emergency substation transformers to bridge the gap while the replacement unit is acquired through the procurement process, which West Penn noted may take several months. West Penn estimated that it would experience 3 transformer failures of the type requiring use of the emergency or mobile transformers. We note that inclusion in the LTIIP of property is not dispositive of whether the cost of that project will be afforded DSIC recovery.

The remaining new project categories are described in brief, below.

* Reliability Improvement (N-1 Contingency) – Line: West Penn noted this program addresses projects to improve system reliability by providing the infrastructure and system capacity to overcome a single outage event, based on distribution load studies to identify the impact of a specific failure of a single component of the distribution and subtransmission system related to line infrastructure.
* Reliability Improvement (N-1 Contingency) – Substation: similar to the program above, but based on infrastructure in the substation.
* System Reliability Improvement Projects – Automation Preparation – Line: West Penn noted this involves improvement of circuits to provide the capacity necessary to implement a distribution automation system to improve system reliability.
* System Reliability Improvement Projects – Automation Preparation – Substation: similar to the program above, but focused on infrastructure in the substation.
* Thermography/Infrared Inspection Follow Up: West Penn noted this program is related to issues found during thermography inspections and is based on safety and impact to reliability.
* URD – Replace Failed Cable: West Penn noted this is to replace bare concentric neutral primary voltage cable instead of merely splicing or repairing the cable in order to improve reliability, especially the duration of any cable failures.

**Determination on Modified LTIIPs**

FirstEnergy’s Modified LTIIPs are one part of FirstEnergy’s overall efforts to improve reliability performance of the operating companies. FirstEnergy has also committed to filing new LTIIPs in September 2019 that will build on the proposed Modified LTIIPs and document a larger commitment to infrastructure improvement. FirstEnergy has also met with staff from the Commission’s Reliability and Emergency Preparedness Section of the Bureau of Technical Utility Services (TUS). FirstEnergy outlined its continuing reliability improvement strategy in those meetings and how the LTIIP and DSIC are key parts, as well as how the modifications for the LTIIPs were based on FirstEnergy’s review by their internal reliability team and independent consultant. Based on our review of the Modified LTIIPs, we find that they are an important step in improving reliability performance. Further, FirstEnergy’s new LTIIPs in 2019 shall provide more detail on how the LTIIP projects were determined utilizing a risk-based approach or other methodology that achieves the greatest impact in a cost effective manner. The new LTIIPs shall also provide detail on the metrics that define success for each LTIIP project category and how those projects will improve reliability.

Such efforts as described above indicate FirstEnergy’s willingness to work towards compliance with our reliability performance requirements. However, we have required the FirstEnergy Companies to commit to and execute reliability improvement plans since 2015.[[8]](#footnote-8) The reliability performance of the FirstEnergy Companies has not significantly improved in that time and can be said to have actually worsened.[[9]](#footnote-9) This continued poor performance was a major driver of our requirement for a new or modified LTIIP in our LTIIP Review Order. Therefore, let us make it clear that while we are supportive of FirstEnergy’s Modified LTIIPs and the filing of new LTIIPs in late 2019, we expect the FirstEnergy Companies to meet their reliability improvement goals as outlined in their LTIIPs. As such, the Commission will not hesitate to utilize all the powers under our authority to drive FirstEnergy to compliance.

**CONCLUSION**

Commission review of an LTIIP must determine if the LTIIP:[[10]](#footnote-10)

* Contains measures to ensure that the projected annual expenditures are cost‑effective.
* Specifies the manner in which it accelerates or maintains an accelerated rate of infrastructure repair, improvement or replacement.
* Is sufficient to ensure and maintain adequate, efficient, safe, reliable and reasonable service.
* Meets the requirements of 52 Pa. Code § 121.3(a).

The utility has the burden of proof to demonstrate that its proposed LTIIP and associated expenditures are reasonable, cost effective and designed to ensure and maintain sufficient, safe, adequate, reliable and reasonable service to consumers.[[11]](#footnote-11)

The Commission has reviewed FirstEnergy’s Modified LTIIPs and any resulting comments. The Commission finds that the FirstEnergy Companies have met their burden of proof by demonstrating that its Modified LTIIPs contain measures to ensure that the projected annual expenditures are cost-effective, specify the manner in which the LTIIPs accelerate or maintain an accelerated rate of infrastructure repair, improvement, or replacement, are sufficient to ensure and maintain adequate, safe, reliable, and reasonable service, and meet the requirements of 52 Pa. Code § 121.3(a). Accordingly, FirstEnergy’s Modified LTIIPs are approved.

The Commission finds FirstEnergy’s Modified Long-Term Infrastructure Improvement Plans and manner in which they were filed conform to the requirements of Act 11 and our Regulations. The plans, as approved herein, are designed to maintain safe, adequate and reliable service and, as such, FirstEnergy shall be required to comply with the infrastructure replacement schedule and elements of the plans; **THEREFORE,**

**IT IS ORDERED:**

1. That the Petition for Approval of Modification of its Long-Term Infrastructure Improvement Plan filed by Metropolitan Edison Company is approved, consistent with this Order.

2. That the Petition for Approval of Modification of its Long-Term Infrastructure Improvement Plan filed by Pennsylvania Electric Company is approved, consistent with this Order.

3. That the Petition for Approval of Modification of its Long-Term Infrastructure Improvement Plan filed by Pennsylvania Power Company is approved, consistent with this Order.

4. That the Petition for Approval of Modification of its Long-Term Infrastructure Improvement Plan filed by West Penn Power Company is approved, consistent with this Order.

5. That FirstEnergy shall file a report with the Commission, within 120 days after the Long-Term Infrastructure Improvement Plan period ends, for each of the operating companies that evaluates the cost effectiveness of the Long-Term Infrastructure Improvement Plan initiatives and provides a projected calculation of the Distribution System Improvement Charge rate at the end of 2019, and that a copy of the report shall be filed with the Reliability and Emergency Preparedness Section of the Bureau of Technical Utility Services and the Office of Consumer Advocate.

6. That the proceedings at Docket Numbers P-2015-2508942, P‑2015‑2508936, P-2015-2508931, and P-2015-2508948 be closed.

**BY THE COMMISSION,**

Rosemary Chiavetta

Secretary

(SEAL)

ORDER ADOPTED: May 23, 2019

ORDER ENTERED: May 23, 2019

1. *See Periodic Review of Metropolitan Edison Company’s Long-Term Infrastructure Improvement Plan*, Order entered September 20, 2018, at Docket No. M-2018-3000943. [↑](#footnote-ref-1)
2. *See* Ordering Paragraph 5. [↑](#footnote-ref-2)
3. Docket Nos. P-2015-2508942, P-2015-2508936, P-2015-2508931, and P-2015-2508948. [↑](#footnote-ref-3)
4. Act of June 12, 2016. P.L. 332, No. 40. [↑](#footnote-ref-4)
5. Docket Nos. P-2015-2508942, P-2015-2508936, and P-2015-2508931. [↑](#footnote-ref-5)
6. <http://www.legis.state.pa.us/WU01/LI/LI/US/HTM/2012/0/0011..HTM> [↑](#footnote-ref-6)
7. *See* 52 Pa. Code § 121.3. [↑](#footnote-ref-7)
8. See Docket Nos. D-2013-2365991, D-2013-2365992, D-2013-2365993, and D-2013-2365994. [↑](#footnote-ref-8)
9. See our report *Electric Service Reliability in Pennsylvania 2017,* available here: <http://www.puc.pa.gov/General/publications_reports/pdf/Electric_Service_Reliability2017.pdf>, as well as FirstEnergy’s *Joint 2018 4th Quarter Reliability Report* available here: <http://www.puc.pa.gov/pcdocs/1605113.pdf>. [↑](#footnote-ref-9)
10. *See* 52 Pa. Code § 121.4(e). [↑](#footnote-ref-10)
11. *See* 52 Pa. Code § 121.4(d). [↑](#footnote-ref-11)