FirstEnergy

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April 3, 2024

Ms. Tanowa Troupe
Director, Administration Department
Commission Secretary
The Public Utilities Commission of Ohio
180 East Broad Street
Columbus, Ohio 43215-3793

Re: ***In the Matter of the FirstEnergy Companies Report Filed Pursuant to Ohio Administrative Code Section 4901:1-10-10***
Case No. 24-993-EL-ESS

Dear Ms. Troupe:

On March 29, 2024, Ohio Edison Company ("OE"), The Cleveland Electric Illuminating Company ("CEI") and The Toledo Edison Company ("TE") filed Annual Reports pursuant to O.A.C. Section 4901:1-10-10 for calendar year 2023 in the above-referenced proceeding. The Annual Reports did not include CEI and TE's action plans for their Customer Average Interruption Duration Index ("CAIDI") performance for calendar year 2023. To address this omission, the Action Plans are attached.

Please contact me if you have any questions concerning this matter.

Respectfully,

/s/ Emily V. Danford

Emily V. Danford, Esq.

An Attorney for Ohio Edison Company,
The Cleveland Electric Illuminating
Company and The Toledo Edison Company

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The Cleveland Electric Illuminating Company
Customer Average Interruption Duration Index ("CAIDI") Action Plan

The Cleveland Electric Illuminating Company ("CEI" or "Company") has a history of strong reliability performance. From the time the Company's most recent distribution reliability standards were established in 2010 through 2021, the Company performed better than the standards for system average interruption frequency index ("SAIFI") and customer average interruption duration index ("CAIDI"). Notwithstanding the Company's history of reliable service, CEI did not meet its CAIDI index standard for either 2022 or 2023. After major event exclusions[i], the Company's CAIDI performance for 2023 was 145.2 minutes compared to the standard of 135.0 minutes. As a result of this performance, in accordance with Ohio Administrative Code 4901:1-10-10 (D), CEI is filing this action plan that includes the factors which contributed to the actual performance level and how CEI will ensure its performance meets or exceeds its performance standards going forward.

In reviewing 2023 performance, the primary factors impacting CEI's CAIDI performance were outages caused by lines[ii] and trees (primarily off right-of-way trees). To address these top outage causes and improve its CAIDI performance, CEI proposes the actions shown in the following table.

Cause Type	Action	Estimated Completion Date
Line Failure	• CEI will complete thermal scans for thirty to forty worst performing circuits with the top cause of line failure. This will identify abnormal wire and equipment temperatures. Deficiencies will be prioritized by overall system impact and scheduled for remediation. • CEI is planning projects determined by reviewing line failure, equipment failure, and tree-caused outages from the 2023 calendar year. For example, two to four miles of overhead conductor will be replaced based on 2023 worst performing circuit status and sorted by highest customer minutes interrupted ("CMI") and CAIDI impact. • CEI is planning projects to target customers experiencing multiple interruptions ("CEMI"). Projects will be prioritized by line and equipment failure and will target additional animal guards, transformer fusing, upgrading lightning protection, and reviewing lateral fuse protection.	12/31/2024

Trees	• CEI will perform cycle-based tree trimming, which includes achieving four years of clearance, removal of selected incompatible trees within the clearing zone corridor, removal of certain defective limbs that are overhanging primary conductors, and removal of selected off-corridor priority trees that are dead, dying, diseased, and leaning or significantly encroaching the corridor. • To enhance the ability for Vegetation field personnel to identify and control the leading cause of vegetation related outages, extensive Priority Tree training was instituted in 2023. This mandatory training focused on enhanced methods to help identify off-Right-of-Way trees that are dead, diseased, declining, structurally compromised, severely leaning, or significantly encroaching onto the Clearing Zone. The training will continue to be updated and administered annually, to ensure the most accurate and timely information is provided to assist with this challenging field assessment. • CEI performs detailed field investigations of vegetation related outages to establish definitive failure causes and capture critical details that may help trend faults or otherwise analyze patterns. At least 20% of all vegetation caused outages in CEI are thoroughly investigated by trained arborists, which is a representative sample of the total. Key metrics from the outage investigations are retained, including pertinent details regarding the failed tree, the prevailing weather conditions, and the surrounding environment, as well as any additional work that may also be necessary. • CEI intends to begin utilizing the recently modified Tree-Outage Prediction ("TOP") model, which was enhanced and renamed the Advanced Vegetation Analytics Tool ("AVAT"). This innovative tool will be rolled out in Q2 2024 and provides users with detailed vegetation analytics, including potential vegetation risks at the span/circuit level and insights into current vegetation system conditions on the Rights-of-Way. Remote sensing analytics, like AVAT, can contribute to improved reliability by enabling CEI to better target and prioritize necessary work within the current Vegetation Management Program.	12/31/2024

[i] Ohio Administrative Code 4901:1-10-01 (T) "Major event" encompasses any calendar day when an electric utility's system average interruption duration index (SAIDI) exceeds the major event day threshold using the methodology outlined in section 3.5 of standard 1366-2012 adopted by the institute of electrical and electronics engineers (IEEE) in "IEEE Guide for Electric Power Distribution Reliability Indices." The threshold will be calculated by determining the SAIDI associated with adding 2.5 standard deviations to the average of the natural logarithms of the electric utility's daily SAIDI performance during the most recent five-year period. For purposes of this definition, the SAIDI shall be determined in accordance with paragraph (C)(3)(e)(iii) of rule 4901:1-10-11 of the Administrative Code.

[ii] Defined as an outage caused by the failure of an overhead conductor or underground cable.

The Toledo Edison Company
Customer Average Interruption Duration Index ("CAIDI") Action Plan

The Toledo Edison Company ("TE" or "Company") has a history of strong reliability performance. From the time the Company's most recent distribution reliability standards were established in 2010 through 2022, the Company performed better than the standards for system average interruption frequency index ("SAIFI") and customer average interruption duration index ("CAIDI"). Notwithstanding the Company's history of reliable service, TE did not meet its CAIDI index standard for 2023. After major event exclusions[i], the Company's CAIDI performance for 2023 was 121.9 minutes compared to the standard of 112.3 minutes. As a result of this performance, in accordance with Ohio Administrative Code 4901:1-10-10 (D), TE is filing this action plan that includes the factors which contributed to the actual performance level and how TE will ensure its performance meets or exceeds its performance standards going forward.

In reviewing 2023 performance, the primary factors impacting TE's CAIDI performance were outages caused by equipment[ii] and trees (primarily off right-of-way trees). To address these top outage causes and improve its CAIDI performance, TE proposes the actions shown in the following table.

Cause Type	Action	Estimated Completion Date
Equipment	• TE will complete thermal scans on fifteen to nineteen worst performing circuits. This will identify abnormal wire and equipment temperatures. Deficiencies will be prioritized by overall system impact and scheduled for remediation. • TE is planning projects to target customers experiencing multiple interruptions ("CEMI"). Projects will be prioritized by line and equipment failure and will target additional animal guards, transformer fusing, upgrading lightning protection, and reviewing lateral fuse protection.	12/31/2024

Trees	• TE will perform cycle-based tree trimming, which includes achieving four years of clearance, removal of selected incompatible trees within the clearing zone corridor, removal of certain defective limbs that are overhanging primary conductors, and removal of selected off-corridor priority trees that are dead, dying, diseased, and leaning or significantly encroaching the corridor. • To enhance the ability for Vegetation field personnel to identify and control the leading cause of vegetation related outages, extensive Priority Tree training was instituted in 2023. This mandatory training focused on enhanced methods to help identify off-Right-of-Way trees that are dead, diseased, declining, structurally compromised, severely leaning, or significantly encroaching onto the Clearing Zone. The training will continue to be updated and administered annually, to ensure the most accurate and timely information is provided to assist with this challenging field assessment. • TE performs detailed field investigations of vegetation related outages to establish definitive failure causes and capture critical details that may help trend faults or otherwise analyze patterns. At least 20% of all vegetation caused outages in TE are thoroughly investigated by trained arborists, which is a representative sample of the total. Key metrics from the outage investigations are retained, including pertinent details regarding the failed tree, the prevailing weather conditions, and the surrounding environment, as well as any additional work that may also be necessary. • TE intends to begin utilizing the recently modified Tree-Outage Prediction ("TOP") model, which was enhanced and renamed the Advanced Vegetation Analytics Tool ("AVAT"). This innovative tool will be rolled out in Q2 2024 and provides users with detailed vegetation analytics, including potential vegetation risks at the span/circuit level and insights into current vegetation system conditions on the Rights-of-Way. Remote sensing analytics, like AVAT, can contribute to improved reliability by enabling TE to better target and prioritize necessary work within the current Vegetation Management Program.	12/31/2024

[i] Ohio Administrative Code 4901:1-10-01 (T) "Major event" encompasses any calendar day when an electric utility's system average interruption duration index (SAIDI) exceeds the major event day threshold using the methodology outlined in section 3.5 of standard 1366-2012 adopted by the institute of electrical and electronics engineers (IEEE) in "IEEE Guide for Electric Power Distribution Reliability Indices." The threshold will be calculated by determining the SAIDI associated with adding 2.5 standard deviations to the average of the natural logarithms of the electric utility's daily SAIDI performance during the most recent five-year period. For purposes of this definition, the SAIDI shall be determined in accordance with paragraph (C)(3)(e)(iii) of rule 4901:1-10-11 of the Administrative Code.

[ii] Defined as an outage caused by the failure of overhead or underground equipment.

Summary: Correspondence electronically filed by Ms. Emily V. Danford on behalf of Ohio Edison Company and The Cleveland Electric Illuminating Company and The Toledo Edison Company .