

**BEFORE
THE PUBLIC UTILITIES COMMISSION OF OHIO**

In the Matter of the Application of Ohio)
Edison Company, The Cleveland Electric)
Illuminating Company, and The Toledo) Case No. 25-0092-EL-SSO
Edison Company for Authority to Provide)
for a Standard Service Offer Pursuant to)
R.C. 4928.143 in the Form of an Electric)
Security Plan)

DIRECT TESTIMONY OF

ANDREW J. LUBICH

ON BEHALF OF

**OHIO EDISON COMPANY,
THE CLEVELAND ELECTRIC ILLUMINATING COMPANY,
AND THE TOLEDO EDISON COMPANY**

January 31, 2025

1 **I. INTRODUCTION**

2 **Q. WHAT IS YOUR NAME AND BUSINESS ADDRESS?**

3 A. My name is Andrew Lubich. My business address is 1441 Depot Road, Salem, Ohio 44460.

4 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

5 A. I am employed by FirstEnergy Service Company (“FESC”) as a Director of Operations for
6 the FirstEnergy Corp. (“FirstEnergy”) Ohio utilities: Ohio Edison Company (“OE”); The
7 Cleveland Electric Illuminating Company (“CEI”); and The Toledo Edison Company
8 (“TE”) (collectively, the Companies”).

9 **Q. PLEASE DESCRIBE YOUR QUALIFICATIONS AND BACKGROUND.**

10 A. I have worked for FESC since December 2009. In my current role, I am responsible for
11 operations, maintenance, and restoration functions of the line, substation, meter services,
12 and fleet departments and lead a diverse workforce to provide safe and reliable electric
13 service throughout the Companies’ service territory. I hold a Bachelor of Science degree
14 in Engineering from Geneva College, with a concentration in Civil Engineering and a
15 minor in Mathematics. Prior to my current position, I served in numerous organizations
16 across FirstEnergy in increasing areas of responsibility, including Engineering, Project
17 Management, Generation, and FirstEnergy Utilities.

18 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE COMMISSION?**

19 A. Yes. I have filed testimony in Case No. 24-468-EL-AIR.

20 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

21 A. My testimony addresses the need for the Companies’ proposed Storm Cost Recovery Rider
22 (“Rider SCR”). Additionally, I discuss the Companies’ reliability performance, the
23 alignment of the Companies’ reliability performance with customer expectations, and the

1 Companies' emphasis on, and dedication to committing sufficient resources to deliver and
2 maintain safe, reliable power.

3 **Q. ARE YOU SPONSORING ANY ATTACHMENTS AS PART OF YOUR**
4 **TESTIMONY?**

5 A. Yes. As discussed in more detail below, I am sponsoring the following attachment:

- 6 • Attachment AJL-1: Customer Perception Survey Results

7
8 **II. STORM RESTORATION AND RIDER SCR**

9 **Q. WHAT IMPACT DO STORMS HAVE ON THE COMPANIES' DISTRIBUTION**
10 **SYSTEM?**

11 A. The Companies' ability to provide safe and reliable service is directly impacted by storms.
12 While the Companies can track and monitor individual systems as they move across the
13 Companies' service territories, the Companies are unable to predict the frequency of storms
14 or the impact they will have. For example, the Companies experienced more severe weather
15 events in 2023 as compared to 2022. Additionally, OE and CEI experienced an
16 unprecedented storm in August 2024 that was the most impactful storm to hit the CEI
17 service territory since July 1993, including significant tree-caused outages, as discussed by
18 General Manager, Distribution Vegetation Management, Tyler Woody.

19 **Q. PLEASE DESCRIBE THE COMPANIES' APPROACH TO STORM**
20 **RESTORATION.**

21 A. The Companies' approach is based upon a comprehensive Emergency Plan for Service
22 Restoration ("E-Plan") for storm response and management. The E-Plan establishes the
23 framework for the Companies to carry out preparedness, restoration, recovery, and

1 mitigation functions in an effective, efficient, timely, and coordinated manner.
2 Additionally, the E-Plan integrates emergency management concepts and principles to
3 establish a consistent and scalable framework to prepare for, respond to, and recover from
4 incidents¹ as well as communicate and interact with various stakeholders, as necessary and
5 appropriate.

6 As the weather moves near and through the territory, the Companies adjust staffing
7 and expand or contract the Incident Command System (“ICS”) structure to ensure an
8 appropriate level of response is prepared. During this period, the Companies will acquire,
9 as needed, mutual assistance from their affiliates and other external resources to assist with
10 the restoration efforts.

11 **Q. DO THE COMPANIES ACCOUNT FOR THE COSTS OF STORM**
12 **RESTORATION WORK?**

13 A. Yes. The Companies account for the costs associated with storm restoration activities
14 through specific cost collectors. As the storm restoration winds down, the Companies flag
15 the end of the event when the last customer affected by the weather is restored. Post “end
16 of storm,” clean-up and final repairs still need to be made. The storm accounting created
17 for each specific event will remain open until this work is completed. Storm orders are
18 closed no later than six months following an event, absent any unique circumstances, such
19 as a disputed vendor invoice.

¹ An incident is defined in the E-Plan as an event that has the potential to cause interruption, disruption, loss, emergency, crisis, disaster, or catastrophe.

1 **Q. DO THE COMPANIES MONITOR AND EVALUATE THEIR STORM**
2 **RESPONSE?**

3 A. Yes. Every major storm is unique and impacts the Companies’ service territories
4 differently, such as the number of customers impacted, duration, and the ability of crews
5 to safely access the impacted infrastructure due to vegetation overgrowth and tree-strikes.
6 Storm restoration is measured based on various factors, such as safety performance,
7 environmental performance, preparation, communication, response, and accurate
8 estimated time of restoration (“ETRs”). A successful restoration effort is achieved with
9 efficient planning, resource allocations, and clear communication. Paramount to the
10 success of restoration is the safety of the public and our employees. Further, as part of the
11 Companies’ E-Plan, following events, the Companies conduct a post event evaluation. The
12 Companies seek to identify what processes worked best and any areas of opportunity for
13 improvement.

14 **Q. HOW DOES THE COMPANIES’ STORM RESTORATION RESPONSE**
15 **COMPARE TO THEIR INDUSTRY PEERS?**

16 A. The Companies have been recognized for their extraordinary efforts to restore power, or
17 for assisting other electric companies after service disruptions caused by weather
18 conditions or other natural events. Edison Electric Institute (“EEI”) presents awards twice
19 annually to member companies. FirstEnergy has been awarded Emergency Response and
20 Recovery awards by EEI for nineteen consecutive years. These awards demonstrate the
21 ongoing effective implementation of the well-designed E-Plan. The E-Plan provides a
22 resilient and scalable response framework that promotes stakeholder involvement in a

1 comprehensive all-hazards approach to planning, preparedness, response, and restoration
2 activities.

3 **Q. DOES THE PROPOSED RIDER SCR SUPPORT THE COMPANIES' STORM**
4 **RESTORATION EFFORTS IN ESP VI?**

5 A. Yes. Proposed Rider SCR, as discussed by Rates Analyst Courtney Urbancic, supports
6 storm restoration activities through timely recovery of incremental storm damage O&M
7 expenses resulting from "major events."² These major events are highly unpredictable and
8 have the potential to cause significant financial harm to the Companies.

9
10 **III. THE COMPANIES' PAST RELIABILITY PERFORMANCE**

11 **Q. DO THE COMPANIES HAVE COMMISSION-APPROVED STANDARDS TO**
12 **MEASURE RELIABILITY PERFORMANCE?**

13 A. Yes. The Companies track and measure their performance against Commission-approved
14 reliability performance standards. The Companies' current standards were approved on
15 October 2, 2024, in Case No. 20-580-EL-ESS. On December 16, 2024, the Companies
16 filed an application for approval of new reliability standards in Case No. 24-1112-EL-ESS.

17 **Q. HOW DO THE COMPANIES CALCULATE THEIR RELIABILITY**
18 **PERFORMANCE FOR THESE STANDARDS?**

19 A. Each of the Companies calculate their reliability performance using a System Average
20 Interruption Frequency Index ("SAIFI") and Customer Average Interruption Duration
21 Index ("CAIDI") reliability standard. SAIFI represents the number of interruptions per
22 customer and equals the total number of customer interruptions divided by the total number

² For purposes of Rider SCR, major events are defined consistent with the Ohio Administrative Code 4901:1-10-01(T).

of customers served. CAIDI represents the average interruption duration, or average time to restore service per interrupted customer, and equals the total duration of customer interruptions divided by the total number of customer interruptions. These SAIFI and CAIDI calculations exclude major events and transmission outages.

Q. HOW HAVE THE COMPANIES PERFORMED AGAINST THEIR RESPECTIVE RELIABILITY STANDARDS SINCE THE START OF ESP IV IN 2016?

A. The following table demonstrates the Companies’ performance against their reliability standards since the start of ESP IV in 2016. The “New Standard 2024” values are effective as of January 1, 2024.

Table 1

CEI										
Index	2016	2017	2018	2019	2020	2021	2022	2023	Standard 2016 - 2023	New Standard 2024
SAIFI	1.02	1.02	0.95	0.90	0.97	1.07	1.06	0.81	1.30	1.13
CAIDI	110.43	116.19	131.65	125.74	117.94	126.86	144.62	145.22	135.00	135.00

Ohio Edison										
Index	2016	2017	2018	2019	2020	2021	2022	2023	Standard 2016 - 2023	New Standard 2024
SAIFI	0.79	0.86	0.94	0.90	0.89	0.97	1.03	0.81	1.11	1.00
CAIDI	104.78	104.94	105.40	116.64	105.40	102.12	99.52	111.99	114.37	114.37

Toledo Edison										
Index	2016	2017	2018	2019	2020	2021	2022	2023	Standard 2016 - 2023	New Standard 2024
SAIFI	0.55	0.51	0.49	0.62	0.64	0.68	0.83	0.59	1.00	0.76
CAIDI	96.57	95.37	103.07	106.81	97.56	94.75	97.65	121.90	112.33	108.80

1 **Q. HAVE THE COMPANIES MET THEIR RESPECTIVE RELIABILITY**
2 **STANDARDS SINCE THE START OF ESP IV?**

3 A. The Companies have met their respective SAIFI standards since the start of ESP IV.
4 However, as can be seen in Table 1, OE missed its CAIDI standard in 2019, TE missed its
5 CAIDI standard in 2023, and CEI missed its CAIDI standard in 2022 and 2023.

6
7 **IV. ALIGNMENT OF CUSTOMER EXPECTATIONS AND THE COMPANIES'**
8 **PERFORMANCE**

9 **Q. ARE CUSTOMERS' RELIABILITY EXPECTATIONS ALIGNED WITH THE**
10 **COMPANIES' PERFORMANCE?**

11 A. Yes. The Companies' reliability performance aligns with customer expectations even
12 though the Companies have missed some of their reliability standards. Customers'
13 expectations for the Companies' reliability performance are shaped by their own individual
14 experiences, which may be impacted by factors outside of the SAIFI and CAIDI metrics,
15 such as the impacts of transmission outages, major storms, or personal life experiences. In
16 addition, the Companies make investments to mitigate system degradation and support
17 expansion for customer load growth, which also affect customers' experiences with
18 reliability. Ultimately, customers expect continuity of service, regardless of reported
19 CAIDI and SAIFI results, and the Companies are meeting customers' expectations.

20
21
22

1 **Q. HOW HAVE THE COMPANIES EVALUATED CUSTOMER EXPECTATIONS**
2 **TO ENSURE THEY ALIGN WITH THE COMPANIES' PERFORMANCE?**

3 A. The Companies' most recent customer perception survey was conducted over four
4 quarterly periods, beginning in the second quarter of 2021.³ Approximately 4,800
5 customers were interviewed: approximately 2,400 residential customers and 2,400
6 commercial customers. The customers were randomly selected. Customer expectations
7 around SAIFI were determined by asking customers, "How many interruptions of more
8 than five minutes would you consider acceptable during a 12-month period?" These
9 responses were translated into SAIFI values that are higher than the Companies' current
10 reliability standards and historic SAIFI performance, demonstrating that the Companies'
11 SAIFI standards and performance thereunder (summarized in Table 1) exceed (i.e., are
12 lower than) customer expectations, as shown in Attachment AJL-1.

13 Customer expectations around CAIDI were determined similarly, by asking
14 customers, "What do you consider a reasonable length of time to restore power after an
15 outage that is not storm or weather related?" and "What do you consider to be a reasonable
16 length of time to restore power after a storm or weather-related outage?" These responses
17 were translated into storm CAIDI and non-storm CAIDI values. The results demonstrate
18 that the Companies' CAIDI standards and historic performance thereunder since 2016
19 (summarized above in Table 1) are also well within the range of customer expectations, as
20 shown in Attachment AJL-1.

³ The Companies began the 2024 customer perception survey and anticipate results in the second quarter of 2025.

1 **Q. IS ONGOING CAPITAL INVESTMENT IN AND MAINTENANCE OF THE**
2 **COMPANIES' DISTRIBUTION SYSTEM NECESSARY TO CONTINUE**
3 **MEETING CUSTOMER EXPECTATIONS AROUND RELIABILITY?**

4 A. Yes. Ongoing capital investments and maintenance programs are critical to continue
5 providing safe and reliable service to customers and meet customer expectations around
6 reliability. The opportunity for timely cost recovery through Riders AMI, DCR, SCR, and
7 VMC, as discussed in the testimonies of Mr. McMillen and Ms. Urbancic, supports these
8 activities and the Companies' ability to continue meeting customer expectations. This
9 alignment of the Companies' performance and customer expectations is in the best interest
10 of both the Companies and their customers.

11
12 **V. COMPANIES' EMPHASIS ON AND RESOURCES FOR SYSTEM**
13 **RELIABILITY**

14 **Q. HAVE THE COMPANIES PLACED SUFFICIENT EMPHASIS ON AND**
15 **DEDICATED SUFFICIENT RESOURCES TO THE RELIABILITY OF THEIR**
16 **SYSTEM?**

17 A. Yes. The Companies are dedicated to providing safe and reliable service to their customers.
18 To support this objective, the Companies have made and expect to continue making
19 significant investments in their distribution system.⁴ These expected investments are
20 designed to create a more secure grid that will meet reliability targets and accommodate
21 anticipated load growth, providing a better experience for customers.

⁴ The Companies plan to invest approximately \$2 billion in their distribution system between 2025 and 2028.

1 **Q. ARE THE COMPANIES FACING ANY CHALLENGES IN MEETING THEIR**
2 **RELIABILITY STANDARDS?**

3 A. Yes. The Companies have diverse service territories, serving urban, suburban, and rural
4 areas with varying geographic features. For example, CEI’s service area adjoins Lake Erie
5 and receives the full impact of adverse “Lake Effect Weather,” including high winds and
6 significant snow fall. Further, some of CEI’s service area is composed of underground
7 networks in urban areas, and much of its service territory includes rear-lot construction,
8 both of which increase restoration times. Portions of Ohio Edison’s service area abut Lake
9 Erie and can be adversely affected by Lake Effect Weather. These factors contribute to
10 company-by-company variances in reliability performance and illustrate the diverse
11 challenges the Companies face. The Companies are also challenged by tree-caused
12 outages, and the weather impacts that tend to drive them, as explained in the testimony of
13 Mr. Woody.

14 In addition, the Companies must invest in infrastructure to prevent and mitigate
15 impacts to reliability performance. In doing so, the Companies face further challenges
16 impacting supply chain, including inflation of equipment costs, long lead times on
17 procuring materials, limits manufacturers place on the amount of equipment a utility may
18 purchase in a given month, and labor shortages. For example, if orders for overhead
19 transformers placed with the Companies’ preferred vendors exceed the amount of
20 equipment the Companies may purchase from these manufacturers, the orders may not be
21 fulfilled for anywhere from 139 to 183 weeks. In contrast, pre-Covid 19 lead times were
22 only 10 to 11 weeks. This has required the Companies to utilize overseas vendors, resulting

1 in an increase in overall costs due to factors such as shipping. Substation transformer lead
2 times have also doubled with a 125% cost increase.

3 Looking to the future, anticipated load growth from electrification may stress the
4 existing electrical system capacities and remove operational flexibility that exists today to
5 aid in restorations. Added complexities from distributed generation can slow restoration
6 efforts because of the need to understand potential electrical sources during switching.
7 While the Companies have performed well historically, investments in and maintenance of
8 their distribution system are necessary to maintain that performance as these emerging
9 technology and growth conditions arise in the future.

10 **Q. PLEASE PROVIDE EXAMPLES OF THE TYPES OF RELIABILITY PROJECTS**
11 **THE COMPANIES HAVE UNDERTAKEN TO ADDRESS THESE**
12 **CHALLENGES.**

13 A. The Companies regularly invest in their distribution systems to prevent and mitigate
14 outages from system degradation, system growth, and demand. They also perform effective
15 maintenance activities, including vegetation management, as discussed in the testimony of
16 Mr. Woody. The Companies also work to mitigate transmission-related outages through
17 investment in distribution capacity additions. In addition, the system is designed and
18 maintained to minimize outages due to uncontrollable factors, such as storms/weather and
19 certain vegetation scenarios. All these measures require capital investment and/or
20 maintenance costs to ensure a safe and reliable system.

21 The following are examples of significant projects the Companies have
22 commenced since the start of ESP IV to address reliability:

- 1 • **Distribution Wood Poles** – Proactively replaced thousands of aged and deficient
2 wooden poles identified through the Companies’ inspection and maintenance
3 program prior to pole failure.
- 4 • **Harper Substation Project** – Constructed a substation to serve new load growth
5 and provide outage load transfer capability in CEI. This project included
6 installation of 4,700 feet of new underground cable and 1,700 feet of new overhead
7 conductor. The project directly benefits 1,605 customers, with the potential to
8 benefit many more from the added load transfer capability.
- 9 • **Toledo Edison Substation Breaker Replacement Project** – This project replaced
10 aging substation breakers with performance issues impacting reliability and
11 employee safety. This project began in 2017 and will be completed by 2025. Upon
12 completion, more than 39,000 customers will experience direct benefits from this
13 project. As of 2024, 27 breakers have been replaced.
- 14 • **Legend Substation Project** – Constructed a new substation in OE that included
15 building 1,400 feet of line and replacing 2,803 feet of conductor. This project
16 relieved capacity constraints due to load growth and directly benefits 576
17 customers, with the potential to benefit many more from the added load transfer
18 capability.
- 19 • **Lake Substation Conversion Project** – This multiyear project consists of building
20 600 feet and upgrading approximately 6.5 miles of overhead line as a prerequisite
21 to transferring customers to a more modern 13.2kV distribution system. The
22 13.2kV distribution system boasts enhanced safety and monitoring features such as
23 microprocessor-based relaying at the substation that provides real-time data to our

1 distribution control center and has state-of-the-art programming capabilities to
2 avoid nuisance outages to 722 customers in Avon Lake. Furthermore, installing a
3 new circuit tie as part of the overhead line rework will increase operational
4 flexibility.

5 **Q. DO THE COMPANIES HAVE FUTURE CAPITAL PROJECTS PLANNED TO**
6 **MAINTAIN AND/OR ENHANCE THE RELIABILITY OF THEIR SYSTEM?**

7 A. Yes. The Companies have several programs with planned spend year over year. Examples
8 of these programs include:

- 9 • **Distribution Wood Poles** - Planned replacement of distribution wood poles
10 identified during the Companies' inspection and maintenance program to reduce
11 the age of pole investments.
- 12 • **Failure-based Replacement Programs** – Continuation of failure-based
13 replacement programs targeting substation and underground facilities that will
14 maintain our reliable and redundant service.
- 15 • **Customers Experiencing Multiple Interruptions (“CEMI”) Program** –
16 Targeted improvements in reliability for small clusters of customers experiencing
17 ten or more outages per year. The improvements made may include smart device
18 and lightning protection installation, line rehabilitation, or enhanced tree trimming.
- 19 • **Worst Performing Circuits (“WPC”) Program** - Targeted improvements in
20 reliability for the top 8% of circuits identified to be the annual worst performing
21 circuits. This may include circuit sectionalization, recloser upgrades, conductor
22 replacement, circuit reconfiguration, and / or upgrades to animal and lightning
23 protection.

1 VI. CONCLUSION

2 Q. DOES THIS CONCLUDE YOUR TESTIMONY?

3 A. Yes.

Customer Perception Survey Results

Company	SAIFI - Residential	SAIFI - Commercial	SAIFI - Average			
CEI	1.75	1.72	1.75			
OE	1.91	1.87	1.91			
TE	1.33	1.67	1.37			
Company	CAIDI - Residential (non-storm)	CAIDI - Commercial (non-storm)	CAIDI - Median (non-storm)	CAIDI - Residential (storm)	CAIDI - Commercial (storm)	CAIDI - Median (storm)
CEI	120.00	120.00	120.00	360.00	180.00	340.20
OE	120.00	120.00	120.00	360.00	180.00	340.20
TE	120.00	120.00	120.00	360.00	180.00	340.20

NARRATIVE

- (1) Survey results were provided by TRIAD Research Group, a third-party vendor, that conducted the survey on the Companies' behalf.

ASSUMPTIONS

- (1) The medians were calculated by weighting the survey results by customer class using customer counts (89% Residential and 11% Commercial) from the Companies' 2021 FERC Form 1.

