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 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	)))))))	Case No. 25-0092-EL-SSO

DIRECT TESTIMONY OF

TYLER WOODY

ON BEHALF OF

OHIO EDISON COMPANY
THE CLEVELAND ELECTRIC ILLUMINATING COMPANY
THE TOLEDO EDISON COMPANY

January 31, 2025

I. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Tyler Woody. My business address is 6099 Angola Rd, Holland, Ohio 43528.

Q. PLEASE IDENTIFY YOUR EMPLOYER AND DESCRIBE YOUR CURRENT POSITION.

A. I am employed by FirstEnergy Service Company ("FESC") as the General Manager, Distribution Vegetation Management for the FirstEnergy Corp. ("FirstEnergy") Ohio distribution utilities, Ohio Edison Company ("OE"), The Cleveland Electric Illuminating Company ("CEI"), and The Toledo Edison Company ("TE") (collectively, the "Companies"). I am responsible for the design and implementation of utility distribution vegetation management standards and specifications, including maintenance of vegetation on distribution circuits, clearance for construction of new facilities, administration of forestry contracts, and compliance with applicable regulatory standards. I am also responsible for communicating with state regulatory authorities regarding vegetation management policies.

Q. PLEASE DESCRIBE YOUR QUALIFICATIONS AND BACKGROUND.

A. I have been the General Manager of Distribution Vegetation Management at FESC since October 2021. I am an International Society of Arboriculture ("ISA") certified arborist, ISA Certified Arborist Utility Specialist, and hold an Ohio pesticide license. Prior to my current position, I have served as a field specialist responsible for the implementation of the vegetation management program for FESC, and the manager of Forestry Services for TE. Prior to FESC, I spent nine years working as a crew foreman, right-of-way permission specialist, and as a general foreman for a utility vegetation management contractor.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

A. The purpose of my testimony is to describe the Companies' current vegetation management plan. I also explain operational challenges the Companies face in implementing, maintaining, and managing their vegetation management plan. In addition, I describe the Companies' proposed enhanced vegetation management program ("EVM Program") as part of their sixth electric security plan ("ESP VI").

Q. ARE YOU SPONSORING ANY ATTACHMENTS?

A. Yes, I am sponsoring Attachment TW-1, which contains my workpapers.

II. THE COMPANIES' CURRENT VEGETATION MANAGEMENT PLAN

Q. PLEASE DESCRIBE THE COMPANIES' APPROACH TO VEGETATION MANAGEMENT.

A. Vegetation management is critical to a utility's provision of safe and reliable service. The Companies' vegetation management plan prescribes a four-year maintenance cycle during which each Company performs vegetation management within its distribution clearing zone. The distribution clearing zone is a corridor measured at fifteen (15) feet on either side of the pole line or to the established large tree edge. The corridor is measured vertically to fifteen (15) feet above the highest conductor attached to the pole or structure. Generally, vegetation is not removed from ground to sky along the distribution clearing zone corridors. Vegetation is removed and/or trimmed along the distribution clearing zone resulting in an approximated 15-foot radial clearance around the outermost conductor(s) leaving in place certain brush and other vegetation outside the radius. The Companies' goal is to obtain

clearance for the entire four-year cycle. However, if four years' clearance is not attainable, there must be twelve (12) feet of clearance around the distribution conductors.

Q. HOW DO THE COMPANIES MAINTAIN CLEARANCE FOR THE FOUR-YEAR CYCLE?

A. The Companies perform vegetation maintenance by manually or mechanically controlling incompatible[1] brush and/or using herbicide, and by removing (i) incompatible trees within the clearing zone corridor, (ii) certain defective limbs that are overhanging primary conductors, and (iii) off-corridor priority trees, which are those priority trees outside of the distribution clearing zone. Incompatible vegetation is identified and selected for maintenance on a case-by-case basis based on the threat it poses to the distribution system. Additionally, the Companies identify priority trees that pose a risk to the distribution system and target identified priority trees for pruning or removal, consistent with industry standards. Priority trees are trees located adjacent to the corridor that are dead, dying, diseased, declining, structurally defective, severely leaning, or significantly encroaching on areas where electric facilities are at risk of arcing or failing should the tree or portions of the tree fall near or into the facilities or otherwise grow towards or into the facilities. The Companies identify priority trees that pose a risk to the distribution system and target identified priority trees for pruning or removal, consistent with industry standards.

[1] Incompatible vegetation is vegetation (such as brush or trees) that may grow tall enough to interfere with overhead electric facilities or otherwise impede access and/or the ability to visually inspect the distribution corridor from structure to structure to ensure continued safe and reliable electric service.

Q. ARE THERE INDUSTRY STANDARDS THE COMPANIES FOLLOW WHEN PERFORMING VEGETATION MANAGEMENT?

A. Yes. The Companies, and their contractors, follow a set of Vegetation Management Standards in accordance with the American National Standards Institute ("ANSI") industry standards and amendments, and Best Management Practices ("BMPs"). The relevant ANSI standards include, but are not limited to, ANSI A300 (Part 1) - Pruning and ANSI A300 (Part 7) - Integrated Vegetation Management ("IVM"). These standards outline accepted industry practices for arboricultural operations and utility vegetation management. Additionally, the ISA publishes the BMPs as companion guides to each of the ANSI standards.

Q. WHAT IS INTEGRATED VEGETATION MANAGEMENT AND HOW DOES IT BENEFIT CUSTOMERS?

A. IVM is a system of managing plant communities whereby managers set objectives, identify compatible vegetation[2] and incompatible vegetation, define the timeframe for control, perform an evaluation and selection of control options, and implement the most appropriate control method or methods to achieve set objectives. Control methods include manual, mechanical, chemical, biological, and cultural[3] options. All options are evaluated to determine the best management practice for each site-specific location to address

[2] Compatible vegetation is defined by the IVM Best Management Practices, the special companion publication to ANSI A300 Part 7, as "plant forms that are consistent with the intended use of the site." An example is a plant species that will never grow sufficiently close to violate minimum clearance distances with electric conductors.

[3] Cultural methods are defined by the IVM Best Management Practices, the special companion publication to ANSI A300 Part 7, as "Compatible land uses that preclude the growth of incompatible vegetation, e.g. agricultural systems such as crops and pastures, parks or other managed landscapes."

incompatible vegetation, in the safest and most cost effective and efficient way. This includes, for example, treating brush on the corridor before it has the potential to grow tall enough to interfere with the facilities or impede line of sight. Through IVM, the goal is to create and sustain a compatible, stable, and low growing plant community on the corridor, which will then compete with other plant species to limit the growth of additional incompatible tree species over time. IVM practices can generate numerous benefits such as lowering vegetation management costs, creating safer sites, facilitating greater system reliability, and creating more effective long-term vegetation control and management.

Q. WHY IS TRIMMING THE PRIMARY CONTROL METHOD USED TO OBTAIN CLEARANCE?

A. In the short-term, trimming is the most cost-effective method to obtain clearance distances. Trimming can efficiently achieve clearance distances in a cost-effective manner, but it is only a short-term remedy. Focusing on trimming neglects to control vegetation long-term and in a manner consistent with established BMPs and IVM strategies, even though it may reduce the threat for a period of time. Trimmed vegetation continues to grow while new vegetation sprouts, if not otherwise controlled. This results in increasingly denser corridors and creates more work in the long-term. As vegetation density increases, the corridors also become more unsafe to maintain as access and the visual line of sight are inhibited. Additionally, as vegetation density increases, so does the cost of vegetation maintenance year-over-year. To be cost-effective, a vegetation management plan requires a vegetation management program that incorporates both trimming and controlling of vegetation.

Q. WHAT IS THE COMPANIES' ESTIMATED COST TO COMPLETE THE REGULATORY MINIMUM WORK?

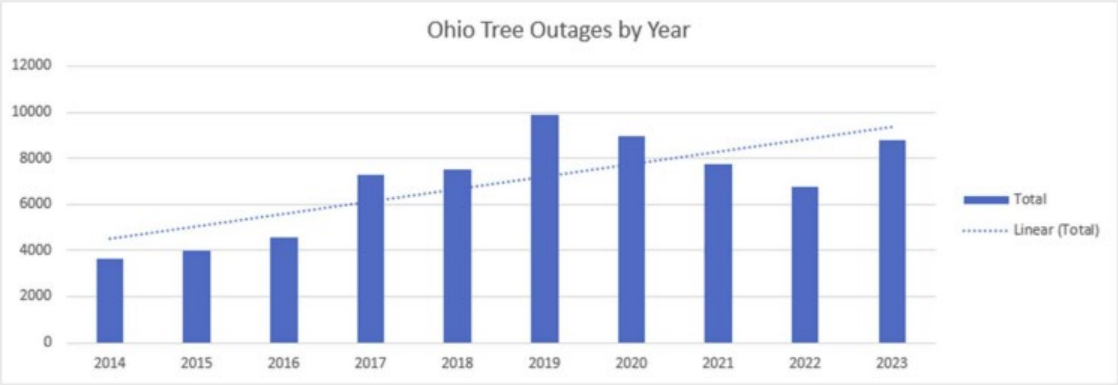
A. The Companies estimate the annual cost of completing the regulatory minimum work to be approximately $54.9 million in the first year of ESP VI, $56.5 million in the second year, and $58.2 million in the third year, which will be pro-rated to align with the term of ESP VI as necessary.

III. VEGETATION MANAGEMENT CHALLENGES

Q. PLEASE DESCRIBE THE OPERATIONAL CHALLENGES THE COMPANIES FACE IN IMPLEMENTING THEIR VEGETATION MANAGEMENT PLAN.

A. When implementing their vegetation management plan, the Companies continue to face operational challenges, including a marked increase in tree-caused outages. Specifically, since 2014, the Companies have experienced an increase in tree-caused outages of 138%, or an annual trend of 15%, as shown in Table 1.

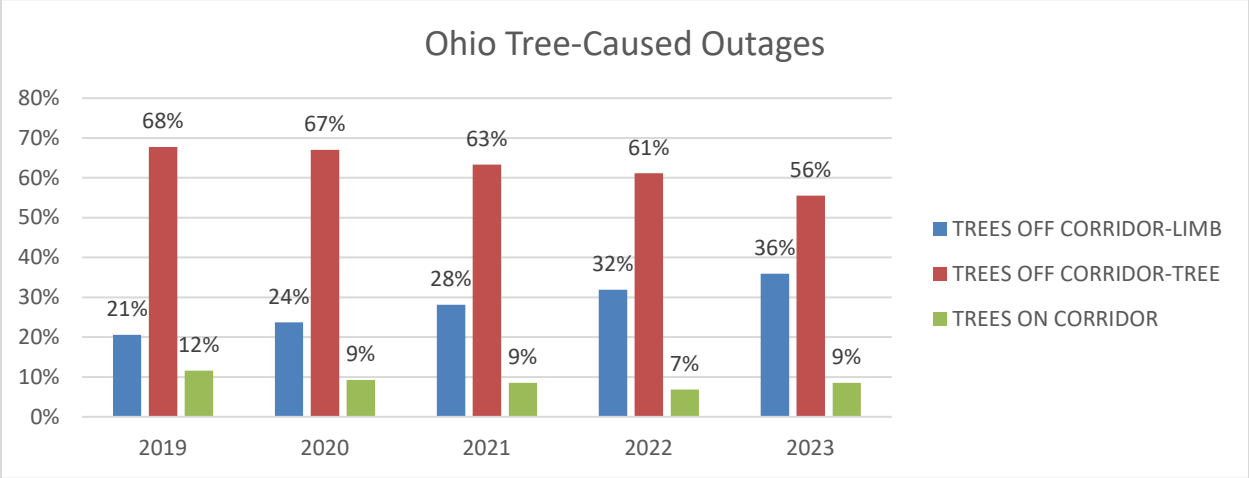
Table 1



Q. WHICH TREES IN THE COMPANIES' SERVICE TERRITORIES ARE MORE PRONE TO CAUSING OUTAGES?

A. Off-corridor trees are most prone to causing outages. In 2019, the Companies began tracking certain details during tree-caused outage investigations, such as identifying whether outages were caused by trees and/or limbs located outside of the distribution clearing zone corridor (i.e., "off-corridor") or within the distribution clearing zone corridor (i.e., "on-corridor"). Since 2019, the majority of tree-caused outages in the Companies' service territories were attributable to off-corridor trees as illustrated in Table 2.

Table 2



(Note: The percentages have been rounded to the nearest whole percentage point.)

The tree-caused outage data further revealed that approximately 90% of the outages were caused by off-corridor trees and/or limbs falling onto the Companies' facilities, which is shown in Table 2 by adding the "Trees Off Corridor-Limb" and "Trees Off Corridor-Tree" components.

Q. HOW HAVE TREE-CAUSED OUTAGES IMPACTED THE COMPANIES' RELIABILITY PERFORMANCE?

A. Since 2014, the Companies have experienced the following significant increases in System Average Interruption Frequency Index ("SAIFI") attributed to trees, excluding major events: 94% at TE, 40% at CEI, and 60% at OE, which is approximately 55% in the aggregate for the Companies. When major events are included, the increases in SAIFI attributed to trees are even greater: 173% at TE, 72% at CEI, and 203% at OE, which equates to 162% in the aggregate for the Companies, as shown in Table 3. Similarly, the Customer Average Interruption Duration Index ("CAIDI") has also increased since 2014.

In the aggregate for the Companies, CAIDI has increased approximately 12% excluding major events and 204% when major events are included.

Table 3

	2023 VS. 2014		Avg. Annual Trend
SAIFI Including Major Events	+0.21	162%	+0.023
CAIDI Including Major Events	+460.00	204%	+51.10
SAIFI Without Major Events	+0.05	55%	+0.06
CAIDI Without Major Events	+18.70	12%	+2.08

Q. ARE THERE ANY RECENT EXAMPLES OF SIGNIFICANT TREE-CAUSED OUTAGES?

A. Yes. On August 6, 2024, OE and CEI experienced a major event that impacted more than 497,500 customers. As shown in Table 4, OE and CEI responded to over 4,900 forestry events and allocated crews to assist with road opening processes.

Table 4

OpCo	Forestry Events	Total Storm CMI	Tree CMI	Tree CMI On-Corridor %	Tree CMI Off-Corridor %	Crews	Full Time Employee
CEI	3,468	1,256,465,822	327,165,135	23.9	76.1	326	711
OE	1,450	84,787,981	61,432,581	2.3	97.7	136	338
Totals	4,918	1,341,253,803	388,597,716	20.5	79.5	462	1,049

Off-corridor trees had a significant impact on the Companies' distribution system during this event, which is consistent with the Companies' tree-caused outage data. Indeed, during this event, vegetation as far as fifty feet away from the circuit caused outages. As illustrated

in the chart above, approximately 80% of tree-caused Customer Minutes Interrupted ("CMI") were the direct result of off-corridor tree failure, further underscoring that off-corridor trees and/or limbs falling within striking distance of the Companies' facilities represent the greatest risk and leading cause of vegetation related outages. This recent event provides helpful insight into the impact of vegetation on the Companies' distribution system during weather events because of the close proximity of the Companies' facilities to densely vegetated areas.

Q. WHAT ARE THE COMPANIES PROPOSING TO ADDRESS THESE CHALLENGES?

A. The Companies propose to implement an EVM Program, as discussed below. Additionally, as discussed in the testimony of Rates Analyst Courtney Urbancic, the Companies propose a Vegetation Management Cost Recovery Rider ("Rider VMC") to provide the Companies an opportunity to true up their cost recovery to reflect actual operations and maintenance ("O&M") cost. Rider VMC will support the Companies' vegetation management activities, including the EVM Program, which is estimated to provide greater distribution system reliability to customers, create safer work conditions for the Companies' employees and contractors, create safer conditions for the general public, create long-term vegetation management costs savings, and have positive environmental impacts.

IV. ESP VI PROPOSALS

Q. WHAT IS THE COMPANIES' EVM PROGRAM?

A. The EVM Program is an eight-year (two-cycle) program that will focus on removing on- and off-corridor trees, removing overhang, and controlling brush in the distribution

clearing zone in a more proactive manner. In an effort to reduce tree-caused outages, outage restoration time, and future maintenance costs, the Companies propose to implement the EVM Program to focus on the use of industry BMPs and IVM for the removal of priority trees, incompatible trees and brush in the distribution clearing zone, and overhanging limbs in Zone 2 and Zone 3, while maintaining previously removed overhang in Zone 1.[4]

Q. WHAT ARE THE COMPANIES PROPOSING FOR THE EVM PROGRAM IN ESP VI?

A. In ESP VI, the Companies propose to implement Phase 1 of the EVM Program, which will align with the term of ESP VI. Phase 1 of the EVM Program will focus on maintenance beyond minimum regulatory commitments and would include the following:

1. **Removal of priority trees:** The Companies will expand the scope of priority tree identification and removal. Priority trees are the leading cause of outages and may pose a threat to electric facilities prior to the next scheduled maintenance. Currently, the Companies remove priority trees that are identified in the field as an immediate threat to the safety of the public or facilities. The EVM Program would expand the scope of removal of priority trees across the system. The Companies propose to enhance the scope of work to include priority trees that are not classified as an immediate threat but that may still impact the distribution system prior to the next regularly scheduled maintenance, especially for major events. This

[4] Zone 1 is defined as the section of line leaving a substation to the first protective device. Zone 2 is defined as the section of line from the first protective device to the end of the 3-phase construction. Zone 3 is defined as the remaining sections of line, 2-phase and single-phase, through the end of the primary conductor.

enhancement is necessary to better align the Companies' practices with more rigorous standards and BMPs[5], as well as reduce future outages and improve reliability.

2. **Removal of on-corridor incompatible trees and brush:** These activities will allow for the removal or control of vegetation that meets cycle clearance guidelines and is expected to lead to long-term, decreasing costs. Currently, on-corridor incompatible trees and brush are being pruned to meet cycle clearance for regulatory requirements only. The EVM Program will better align the Companies with more rigorous standards and BMPs for IVM[6] by creating and sustaining a compatible, stable, and low growing plant community on the corridor, which will then compete with other plant species to limit the growth of additional incompatible tree species over time. Additionally, this approach will be consistent with and further enhance the Companies' environmental stewardship initiatives while also serving as a long-term, cost-effective strategy for maintaining on-corridor vegetation.

3. **Removal of vegetation overhanging the corridor:** This initiative allows for the removal of overhang in all Zones, which is an increasing driver of outages. Currently, the Companies remove select overhang in Zone 1 but not Zone 2 or Zone 3. Enhancing the practice to include removal in Zones 2 and 3 would target all vegetation overhanging primary conductors for removal and better align with more

[5] See *e.g.*, ANSI 300 Part 9 Tree Risk Assessment.
[6] See *e.g.*, ANSI 300 Part 1 Pruning and Part 7 IVM.

rigorous standards and BMPs.[7] Additionally, removing vegetation overhanging the corridor will promote contractor, employee, and public safety, and will improve reliability over time for all customers by decreasing limb-caused outages.

Q. WILL THE PROPOSED EVM PROGRAM HELP ADDRESS THE INCREASE IN TREE-CAUSED OUTAGES DISCUSSED ABOVE?

A. Yes. The Companies' tree-caused outages largely correlate with adverse weather conditions that impact the Companies' service territories. Weather conditions such as windstorms, tornados, ice storms or other events impact vegetation, both on-corridor and off-corridor, to damage the distribution system and lead to more vegetation related outages. As such, adverse weather conditions continue to be a leading cause for tree-caused outages, especially in the densely forested portions of the Companies' service territories. The proposed EVM Program will help to mitigate these exposures by reducing the population of trees most susceptible to these field conditions.

Q. ARE THE COMPANIES SEEKING APPROVAL OF THE FULL EIGHT-YEAR EVM PROGRAM IN ESP VI?

A. No. While the EVM Program is an eight-year program that is designed to cover two four-year vegetation management cycles, in ESP VI the Companies are only seeking approval for Phase 1, which will correspond with the term of ESP VI. Continuation or subsequent phase(s) of the EVM Program will be subject to future Commission approval.

[7] See *e.g.,* ANSI 300 Part 1 Pruning and Part 7 IVM.

Q. WHY DON'T THE COMPANIES CREATE AN ACCELERATED EVM PROGRAM THAT CONCLUDES AT THE END OF THE ESP VI TERM?

A. Since the Companies' vegetation management plan prescribes a four-year maintenance cycle, it is not possible to design and implement an effective EVM Program shorter than four years, within the proposed ESP VI term, that would affect all of the Companies' distribution circuits. Additionally, compacting the proposed eight-year EVM Program to any extent would increase costs and challenges for completion in the shorter timeframe. For the reliability, safety, and environmental benefits to be fully realized, the EVM Program must span across two four-year vegetation management cycles, which is consistent with the Companies' approved vegetation management plan.

As explained below, while some of the benefits of the EVM Program will be realized during the term of ESP VI, most of the benefits will be realized after the ESP VI term concludes.

Q. HOW DOES ADOPTING A MORE PROACTIVE APPROACH TOWARD VEGETATION MANAGEMENT ALIGN WITH MORE RIGOROUS INDUSTRY STANDARDS AND BMPS?

A. Adopting a more proactive approach through the EVM Program enables the Companies to exceed regulatory requirements. For instance, under the new EVM Program, the Companies, in addition to continuing to meet their regulatory compliance obligations for vegetation management, would also incorporate more proactive vegetation management activities such as controlling additional on-corridor brush and targeting additional overhang for removal in Zone 2 and Zone 3. This more proactive approach is beneficial because reducing the on-corridor brush prevents that brush from becoming on-corridor

trees that may need to be controlled in the next cycle, provides safer access to the facilities, and improves line of sight for inspections. Thus, if Phase 1 of the EVM Program is approved in ESP VI, the Companies would not only meet all regulatory commitments, but also perform additional vegetation management work in the most efficient manner, consistent with more rigorous ANSI standards and ISA BMPs.

Q. WHAT ARE THE ESTIMATED COSTS OF THE COMPANIES' EVM PROGRAM OVER EIGHT-YEARS?

A. If approved, the EVM Program will begin on the effective date of ESP VI. Beyond the end of ESP VI, the remainder of the total eight-year program will be subject to future Commission approval. Over the total life of the program, the Companies' estimated average incremental O&M expense of the proposed program is approximately $50.6 million per year in years 1-4 of the EVM Program, and approximately $26.6 million per year in years 5-8, including inflationary increases for contractor rates, for a total of $308.8 million over the eight-year term of the EVM Program, as shown in Table 5. The total cost of the EVM Program during ESP VI will depend on the effective date of ESP VI. If, for example, ESP VI begins on January 1, 2026, the total estimated O&M expense for the 29-month ESP VI term is approximately $120 million.

Table 5

$M	EVM Program Spend
Year 1	$48.9
Year 2	$50.0
Year 3	$51.2
Year 4	$52.3
Year 5	$26.0
Year 6	$26.4
Year 7	$26.8
Year 8	$27.3
Total	**$308.8**

Q. HOW DID THE COMPANIES ESTIMATE THE COSTS OF THE EVM PROGRAM?

A. The estimated costs are based on historical workload to be completed annually and an estimate of the average cost to be incurred for each work type. The Companies estimate the total workload over the term of the eight-year EVM Program to include, at a minimum, the removal of over 500,000 trees, 15,000 circuit miles of overhanging vegetation, and maintenance of over 40,000 acres of undergrowth (brush on-corridor). This estimate is based on the number of trees the Companies currently trim, while factoring in the number of trees that would qualify for removal and/or control based on field observations. Additionally, the estimate takes into account the size and scope of unmaintained areas based on field observations.

Q. WHAT TYPES OF BENEFITS HAVE THE COMPANIES IDENTIFIED RELATED TO THE EVM PROGRAM?

A. As previously discussed, the Companies' vegetation management program is integral to providing safe, reliable service. With respect to the EVM Program, the Companies

estimate several quantitative and qualitative benefits to customers. These benefits impact four different categories: (1) reliability, (2) safety, (3) cost, and (4) the environment.

Q. WHAT RELIABILITY BENEFITS HAVE THE COMPANIES IDENTIFIED OVER THE TERM OF THE EVM PROGRAM AND OVER THE TERM OF ESP VI?

A. The EVM Program is expected to promote the safe and reliable delivery of power to the Companies' customers. Optimizing the removal of priority trees, overhanging brush, and overall incompatible vegetation will result in a decrease in outages caused by vegetation. Over the eight-year term of the EVM Program, the Companies estimate an overall vegetation-related reliability improvement of the average SAIFI by 8% to 11%, compared to recent historical results. During Phase 1 of the EVM Program, the Companies estimate a reduction in the average SAIFI by 2%, since fewer circuits which will be impacted during that time.

Q. IS THE ESTIMATED 8% TO 11% REDUCTION IN THE AVERAGE SAIFI TIED SPECIFICALLY TO THE EVM PROGRAM'S VEGETATION MANAGEMENT ACTIVITIES?

A. Yes. The estimated 8% to 11% reduction of the average SAIFI is attributable to vegetation management activities in the EVM Program. In arriving at these estimates, the Companies specifically examined the impact of the EVM Program's vegetation management activities on the overall reliability performance of the Companies. Those estimated reliability benefits do not include any other reliability benefits attributable to other programs or mechanisms designed to improve distribution system reliability.

Historically, the Companies have generally satisfied their reliability performance requirements. More recently, as discussed by Mr. Lubich, the Companies have missed certain reliability performance standards. The Companies seek to improve reliability performance, especially given the increasing frequency and severity of adverse weather conditions that impact their service territories. As a result, the Companies must remain vigilant, diligent, responsive, and proactive in their vegetation management activities. The EVM Program will serve as an extremely valuable tool to both maintain and improve distribution system reliability, notwithstanding the increasing frequency and duration of extreme weather events like the recent August 6, 2024, event described above.

Q. WHAT SAFETY BENEFITS HAVE THE COMPANIES IDENTIFIED?

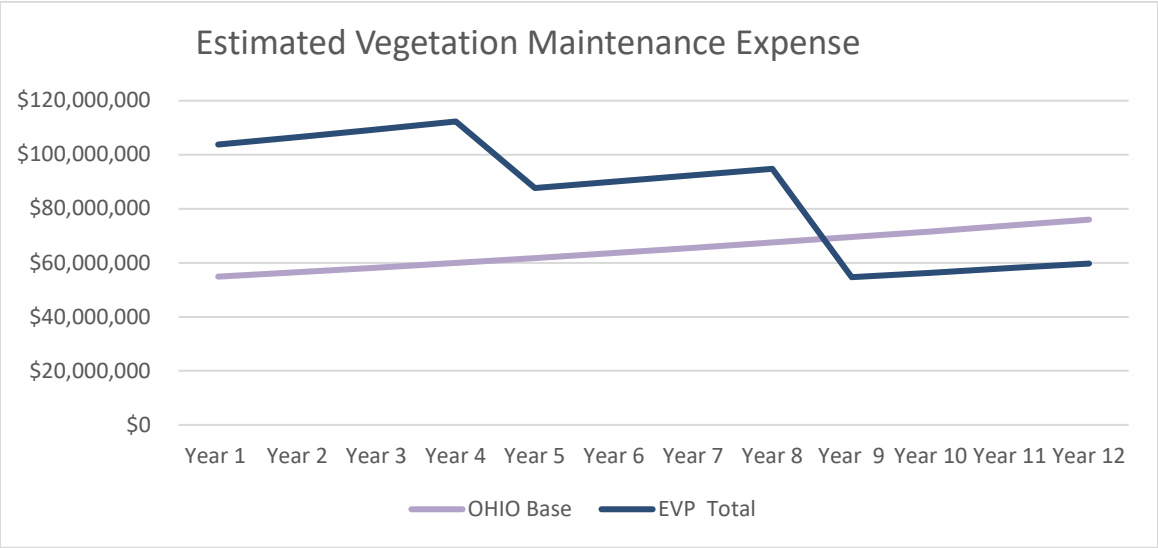
A. The EVM Program is expected to create accessible and sustainable rights-of-way, which results in safer work conditions for employees and contractors, as well as the general public. It is safer to perform vegetation maintenance in a more proactive manner when the brush is less dense, easier to access, and easier to control. Additionally, reducing the amount of brush and trees on-corridor assists with reducing hazard exposure, both electrical and non-electrical, to employees and contractors during inspections and storm restoration. Further, reducing the amount of trees and brush reduces hazard exposure to the general public as well, should a major outage occur due to storm damage or other damage. Importantly, these safety benefits will begin to accrue from the onset of the EVM Program.

Q. WHAT COST RELATED BENEFITS HAVE THE COMPANIES IDENTIFIED?

A. The Companies estimate that the proposed EVM Program will reduce future storm O&M expenses, at $2 to $3 million per year, starting in year 5, following one full cycle of maintenance. Additionally, the costs associated with the proposed EVM Program are

projected to offset future increases in vegetation management expenses, as shown below in Table 6.

Table 6



Q. EXPLAIN WHY THE COMPANIES EXPECT THEIR VEGETATION MANAGEMENT COSTS TO DECREASE UNDER THE EVM PROGRAM.

A. During the first four-year cycle, the Companies would reduce the density of vegetation by controlling additional on-corridor brush and targeting additional overhang for removal, compared to the regulatory required minimum. This additional vegetation management would, among other things, prevent brush from becoming on-corridor trees that would require additional maintenance, and costs in a future four-year cycle. Additionally, the Companies plan to remove additional off-corridor priority trees, which would lead to a reduction in vegetation-related outages and decrease the cost of restoration. By proactively addressing these vegetation management activities, the Companies anticipate offsets to increases in future vegetation management O&M expenses.

Q. WHAT ENVIRONMENTAL BENEFITS ARE ASSOCIATED WITH THE EVM PROGRAM?

A. The EVM Program will lead to diverse early successional plant communities that are beneficial to insects, animals, birds, etc. This is a significant point of emphasis because the habitat the Companies are maintaining is what the native flora and fauna depend on to survive and flourish. Research shows that the appropriate use of IVM creates the type of right-of-way that supports the needs of the utility to provide safe and reliable power to customers, while also supporting ecological benefits. Indeed, FESC participates in the Pennsylvania State Game Lands 33 Research Project, which is the oldest continuous, internationally recognized, vegetation management research project in existence. The Pennsylvania State Game Lands 33 Research Project started in 1952 and continues today, providing a wealth of research information on vegetation management techniques and their impact on wildlife and the beneficial habitat created on the rights-of-way. The EVM Program will enable the Companies to better align their practices with environmental BMPs to help support the local ecological communities, and these environmental benefits will begin to be realized at the onset of the EVM Program during ESP VI and will continue through the duration of the eight-year EVM Program.

Q. IS THE COMPANIES' PROPOSED EVM PROGRAM REASONABLE?

A. Yes. The EVM Program will ensure the rights-of-way will be in a more sustainable condition, lead to improved and more predictable reliability, reduce future spend, increase safety for the Companies' employees and contractors and the general public, and lead to diverse early successional plant communities that are beneficial to insects, animals, birds, etc. Based on the significant benefits, the Commission should approve the Companies to

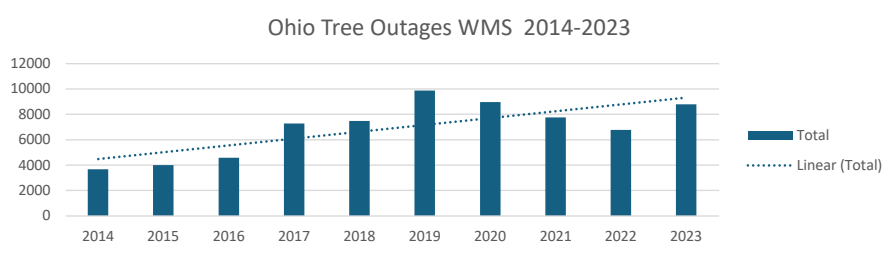
proceed with Phase 1 of the proposed EVM Program in ESP VI, with continuation of the program subject to review and approval in future proceedings.

V. CONCLUSION

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

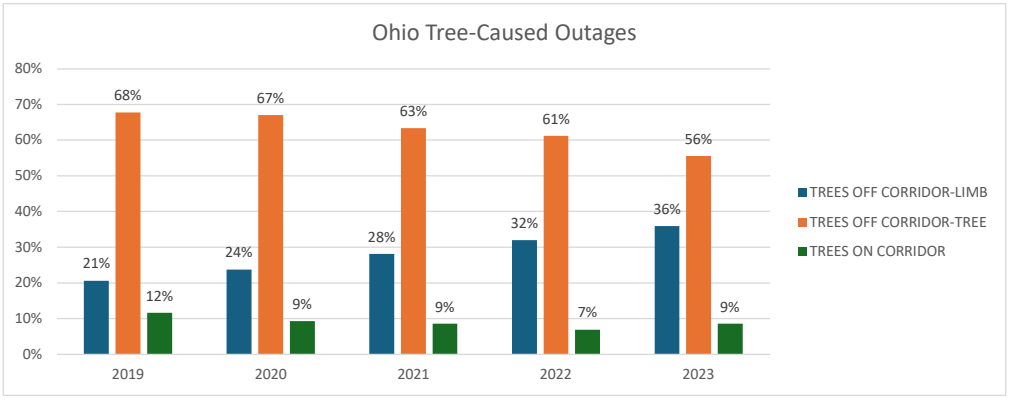
A. Yes.

Row Labels	Count of Lead Event ID
2014	3,674
2015	3,989
2016	4,577
2017	7,280
2018	7,490
2019	9,891
2020	8,968
2021	7,769
2022	6,772
2023	8,798
Grand Total	**69,208**



Count of Lead Ev	Column Labels				
Row Labels	**TREES - SEC/SERVICE**	**TREES OFF ROW-LIMB**	**TREES OFF ROW-TREE**	**TREES ON ROW**	**Grand Total**
2019	2,550	1,513	4,974	854	9,891
2020	2,080	1,634	4,616	638	8,968
2021	1,885	1,654	3,726	504	7,769
2022	1,721	1,613	3,090	348	6,772
2023	1,745	2,533	3,917	603	8,798
Grand Total	**9,981**	**8,947**	**20,323**	**2,947**	**42,198**

Row Labels	TREES - SEC/SERVICE	TREES OFF CORRIDOR-LIN	TREES OFF CORRIDOR-TR	TREES ON CORRID	Grand Total
2019	2,550	21%	68%	12%	9,891
2020	2,080	24%	67%	9%	8,968
2021	1,885	28%	63%	9%	7,769
2022	1,721	32%	61%	7%	6,772
2023	1,745	36%	56%	9%	8,798
Grand Total	9,981				42,198



(1)	**SAIFI**	**Year**										
(2)		**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024 R12**
(3)	**OH**	0.13	0.13	0.16	0.27	0.25	0.35	0.35	0.31	0.24	0.34	0.26
(4)	**Change**										0.21	
(5)	**%**										162%	
(6)	**Trend**										0.023	
(7)												
(8)	**CAIDI**		**Year**									
(9)		**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024 R12**
(10)	**OH**	225	202	218	433	281	349	501	284	370	685	848
(11)	**Change**									145	460	
(12)	**%**										204%	
(13)	**Trend**										51.10	
(14)												
(15)	**Outages**		**Year**									
(16)		**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024 R12**
(17)	**OH**	3,594	3,924	4,510	7,173	7,400	9,782	8,893	7,680	7,345	10,254	8,725
(18)												
(19)	**SAIDI**		**Year**									
(20)		**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024 R12**
(21)	**OH**	30.38	26.05	34.72	115.59	71.25	122.82	174.43	89.17	87.85	231.90	220.51
(22)												

(23) Data from outage Management Team - Reliability Tool on Power BI
(24) Subcause = D
(25) Tree causes = All four used
(26) Major events included; Reported to Commission =Y

	State	YEAR	Actual SAIFI	Tree SAIFI	Actual CAIDI	Tree CAIDI	Actual SAIDI	Tree SAIDI
(2)	Ohio	2014	0.79	0.09	106	158	83	14
(3)	Ohio	2015	0.89	0.11	110	165	98	18
(4)	Ohio	2016	0.84	0.12	106	152	89	18
(5)	Ohio	2017	0.86	0.13	109	156	94	20
(6)	Ohio	2018	0.88	0.16	115	157	101	26
(7)	Ohio	2019	0.86	0.17	119	166	102	29
(8)	Ohio	2020	0.88	0.16	109	155	96	25
(9)	Ohio	2021	0.96	0.18	111	152	107	28
(10)	Ohio	2022	1.02	0.16	116	168	118	27
(11)	Ohio	2023	0.78	0.14	125	177	97	24
(12)	**Change**			0.05		18.70		
(13)	**%**			55%		12%		
(14)	**Trend**			0.06		2.08		

(15) Only D subcause for Tree SAIFI, Tree CAIDI, and Tree SAIDI, Major Events are excluded and Commission Criteria are applied

(16) All subcauses for Actual SAIFI, Actual SAIDI and Actual CAIDI, Major Events are excluded and Commission Criteria are applied

Estimated Spend of EVM Program **Attachment TW-1**
Case No. 25-0092-EL-SSO **P. 4**

			Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9
(2)	TE	Base	$6,959,504	$7,168,289	$7,383,338	$7,604,838	$7,832,983	$8,067,973	$8,310,012	$8,559,312	$7,108,219
(3)		Brush	$1,060,900	$1,092,727	$1,125,509	$1,159,274	$690,000	$710,700	$732,021	$753,982	$0
(4)		On ROW	$2,121,800	$2,185,454	$2,251,018	$2,318,548	$575,000	$592,250	$610,018	$628,318	$0
(5)		Off ROW	$1,060,900	$1,092,727	$1,125,509	$1,159,274	$575,000	$592,250	$610,018	$628,318	$0
(6)		Overhang	$1,000,000	$1,000,000	$1,000,000	$1,000,000	$1,000,000	$1,000,000	$1,000,000	$1,000,000	$0
(7)		**Total**	**$12,203,104**	**$12,539,197**	**$12,885,373**	**$13,241,934**	**$10,672,983**	**$10,963,173**	**$11,262,068**	**$11,569,930**	**$7,108,219**
(8)	CE	Base	$19,202,290	$19,778,359	$20,371,709	$20,982,861	$21,612,347	$22,260,717	$22,928,538	$23,616,395	$19,137,513
(9)		Brush	$2,121,800	$2,185,454	$2,251,018	$2,318,548	$1,150,000	$1,184,500	$1,220,035	$1,256,636	$0
(10)		On ROW	$7,426,300	$7,649,089	$7,878,562	$8,114,919	$2,012,500	$2,072,875	$2,135,061	$2,199,113	$0
(11)		Off ROW	$2,121,800	$2,185,454	$2,251,018	$2,318,548	$1,725,000	$1,776,750	$1,830,053	$1,884,954	$0
(12)		Overhang	$3,779,051	$3,779,051	$3,779,051	$3,779,051	$3,779,051	$3,779,051	$3,779,051	$3,779,051	$0
(13)		**Total**	**$34,651,241**	**$35,577,407**	**$36,531,357**	**$37,513,927**	**$30,278,898**	**$31,073,893**	**$31,892,738**	**$32,736,149**	**$19,137,513**
(14)	OE	Base	$28,718,563	$29,580,120	$30,467,523	$31,381,549	$32,322,996	$33,292,686	$34,291,466	$35,320,210	$28,432,876
(15)		Brush	$6,365,400	$6,556,362	$6,753,053	$6,955,644	$3,450,000	$3,553,500	$3,660,105	$3,769,908	$0
(16)		On ROW	$8,487,200	$8,741,816	$9,004,070	$9,274,193	$2,300,000	$2,369,000	$2,440,070	$2,513,272	$0
(17)		Off ROW	$6,365,400	$6,556,362	$6,753,053	$6,955,644	$1,725,000	$1,776,750	$1,830,053	$1,884,954	$0
(18)		Overhang	$6,979,654	$6,979,654	$6,979,654	$6,979,654	$6,979,654	$6,979,654	$6,979,654	$6,979,654	$0
(19)		**Total**	**$56,916,217**	**$58,414,314**	**$59,957,354**	**$61,546,685**	**$46,777,650**	**$47,971,590**	**$49,201,348**	**$50,467,998**	**$28,432,876**
			Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**	**Year 9**
(20)	OHIO	Base	$54,880,357	$56,526,768	$58,222,571	$59,969,248	$61,768,325	$63,621,375	$65,530,016	$67,495,917	$54,678,608
(21)		Brush	$9,548,100	$9,834,543	$10,129,579	$10,433,467	$5,290,000	$5,448,700	$5,612,161	$5,780,526	$0
(22)		On ROW	$18,035,300	$18,576,359	$19,133,650	$19,707,659	$4,887,500	$5,034,125	$5,185,149	$5,340,703	$0
(23)		Off ROW	$9,548,100	$9,834,543	$10,129,579	$10,433,467	$4,025,000	$4,145,750	$4,270,123	$4,398,226	$0
(24)		Overhang	$11,758,705	$11,758,705	$11,758,705	$11,758,705	$11,758,705	$11,758,705	$11,758,705	$11,758,705	$0
(25)		**Total**	**$103,770,562**	**$106,530,918**	**$109,374,084**	**$112,302,545**	**$87,729,530**	**$90,008,655**	**$92,356,154**	**$94,774,077**	**$54,678,608**