

BEFORE
THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application of)
Ohio Power Company for Authority to) Case No. 16-1852-EL-SSO
Establish a Standard Service Offer)
Pursuant to §4928.143, Revised Code,)
in the Form of an Electric Security Plan)

In the Matter of the Application of)
Ohio Power Company for Approval of) Case No. 16-1853-EL-AAM
Certain Accounting Authority)

DIRECT TESTIMONY OF
SELWYN J. DIAS
IN SUPPORT OF AEP OHIO'S
AMENDED ELECTRIC SECURITY PLAN

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SELWYN J. DIAS

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BEFORE
THE PUBLIC UTILITIES COMMISSION OF OHIO
PRE-FILED DIRECT TESTIMONY OF
SELWYN J. DIAS
ON BEHALF OF OHIO POWER COMPANY

1 **PERSONAL DATA**

2 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

3 A. My name is Selwyn J. Dias and my business address is 850 Tech Center Drive, Gahanna,
4 Ohio 43230.

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

6 A. I am employed by the Ohio Power Company (“OPCo”, “the Company” or “AEP Ohio”)
7 as Vice President of Distribution Operations. Ohio Power Company is a unit of
8 American Electric Power (AEP).

9 **Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND**
10 **PROFESSIONAL EXPERIENCE.**

11 A. I graduated from the University of Central Oklahoma with a bachelor’s degree in
12 Business Administration (Accounting Major) in 1981. I have also completed the
13 Executive Management Program at the University of Virginia, Darden School of
14 Business. I hold the professional designations of certified internal auditor and certified
15 fraud examiner administered by the Institute of Internal Auditors and the National
16 Association of Certified Fraud Examiners.

17 I began my career in 1981 as an international internal auditor with Kerr-McGee
18 Corporation, an oil and gas drilling and exploration conglomerate. In 1985, I joined
19 Central and South West Corporation (CSW) as an internal auditor and progressed to a

1 management level position within the internal auditing organization. During my tenure
2 with CSW, I held several other leadership positions within the company including
3 Manager of Corporate Services, Director of Pricing Development and Director of
4 Regulatory Administration.

5 After the merger of CSW and AEP in 2000, I continued as Director of
6 Regulatory Administration with responsibilities expanded to include the remainder of
7 AEP's regulated jurisdictions. In June 2003, I was appointed Director, Regulatory
8 Affairs for AEP Ohio, and in September 2008, I was promoted to Vice President,
9 Regulatory and Finance. In January 2013, I was appointed to my current position, Vice
10 President, Distribution Operations. In this capacity, I am responsible for providing
11 organizational leadership on AEP Ohio's delivery of electric service. I oversee the
12 operations of the electric distribution system, including engineering, infrastructure design
13 and construction, forestry, underground network, and safety.

14 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE ANY REGULATORY**
15 **COMMISSIONS?**

16 A. Yes. I have presented testimony on behalf of AEP Ohio before the Public Utilities
17 Commission of Ohio (Commission or PUCO) in various cases.

18 **Q. ARE YOU SUPPORTING ANY EXHIBITS?**

19 A. Yes. I am supporting the following exhibit:

- 20 • SJD-1 – 2015 Customer Satisfaction Survey

1 **PURPOSE OF TESTIMONY**

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

3 A. The purpose of my testimony is to update the Commission on the progress of the
4 Distribution Investment Rider (DIR) and Enhanced Service Reliability Rider (ESRR)
5 since the riders' approval by this Commission in the Electric Security Plan (ESP) III
6 (Case No. 13-2385-EL-SSO and Case No. 13-2386-EL-AAM). I will also explain the
7 need for continuation of the DIR and ESRR and provide a forecast of the anticipated
8 needs of each rider in support of the Company's comprehensive approach to support a
9 suite of programs designed to maintain and improve AEP Ohio's distribution system
10 reliability.

11 **COMPREHENSIVE DISTRIBUTION RELIABILITY STRATEGIC PLAN**

12 **Q. PLEASE DESCRIBE AEP OHIO'S DISTRIBUTION RELIABILITY**
13 **STRATEGY.**

14 A. Improving reliability requires a long-term strategy with multiple, coordinated activities
15 on varied fronts. Reliability is a moving target, and without continuous improvement,
16 the general reliability of the distribution system will decline over time. AEP Ohio's
17 reliability strategy is one of continuous process improvement where ongoing analysis
18 identifies opportunities for improvement. Many factors influence reliability such as
19 weather, vegetation management, aging infrastructure, maintenance activities, system
20 operation and design, advances in new technologies, experienced and skilled labor,
21 materials, and available funding resources. All of these factors are aligned with the
22 Company's distribution reliability strategic plan including the replacement of aging

1 infrastructure through the DIR and continued cyclic vegetation maintenance through the
2 ESRR.

3 **Q. HOW WILL A COMPREHENSIVE DISTRIBUTION RELIABILITY PLAN**
4 **BENEFIT AEP OHIO CUSTOMERS?**

5 A. A well-executed comprehensive reliability plan develops specific goals for reliability
6 improvements and a process for implementation. The Company is requesting the
7 continuation, with modifications, of its existing DIR and ESRR during the term of the
8 ESP III extension. The benefits of these cost recovery mechanisms were explained in
9 previous ESP filings and were approved by the Commission.

10 **Q. DO AEP OHIO CUSTOMERS STILL HAVE HIGH EXPECTATIONS FOR**
11 **IMPROVED OR SUSTAINED RELIABILITY?**

12 A. Yes. No different than AEP Ohio customer expectations in the 2012 customer
13 satisfaction survey, both residential and commercial customers continue to have
14 expectations for improved or sustained reliable electric service based on 2015 survey
15 results. Customers were asked if they thought their expectations regarding electric
16 service reliability would change over the next five years. The percentage of residential
17 customers whose expectations concerning reliability will stay the same or increase is 87
18 percent; 20 percent of these residential customers' expectations concerning reliability
19 will increase. Similarly, the percentage of commercial customers whose expectations
20 concerning reliability will stay the same or increase is 94 percent; 19 percent of
21 commercial customers' expectations concerning reliability will increase.

1 This conclusion is confirmed by a survey conducted by Thoroughbred Research,
2 Incorporated for AEP Ohio in 2015. See Exhibit SJD-1 for the survey results.

3 **Q. WHAT ARE YOUR VIEWS ON THE RELATIONSHIP BETWEEN**
4 **RELIABILITY, DISTRIBUTION INVESTMENT AND CUSTOMER**
5 **SATISFACTION?**

6 A. The common denominator between reliability, distribution investment and customer
7 satisfaction is cost. The cost to build a distribution system that would yield nearly
8 perfect reliability would be enormous, and it would not be prudent. Utilities strive to
9 achieve the right balance between reasonable cost electric service and an acceptable level
10 of reliability. Both issues are important to customers. Over time, the accepted levels of
11 reliability or affordability may change. As customers become more dependent on the
12 technologies that require reliable electricity, their tolerance for outages may diminish,
13 and their expectations for improved reliability may increase.

14 It is also important to understand that the relationship between cost and reliability
15 is not linear, but exponential. In other words, as the Company improves reliability, the
16 cost to achieve continuous and increasing reliability improvements will increase
17 exponentially. Additionally, high utility costs can also temper customer satisfaction; so
18 again, the Company must strive to achieve the right balance between distribution
19 investment, reliability, and customer satisfaction.

20 **Q. HOW HAVE DISTRIBUTION RELIABILITY EFFORTS UNDER THE DIR**
21 **AND ESRR BENEFITED AEP OHIO CUSTOMERS?**

1 A. As shown in Table 1, the Company has continued to meet its reliability performance
2 standards as demonstrated by its System Average Interruption Frequency (SAIFI) and
3 the Customer Average Interruption Duration Index (CAIDI) during 2013 through 2015.

4 **Table 1 – 2013-2015 Reliability Metrics¹**

Year	SAIFI	SAIFI Standard	CAIDI	CAIDI Standard
2013	1.03	1.20	140.97	150.00
2014	1.13	1.20	146.61	150.00
2015	1.13	1.20	139.03	150.00

5
6 The primary drivers for such performance include the Company’s successful vegetation
7 management program as supported by the ESRR along with the completion of the
8 Company’s DIR reliability work plan that incorporates the mitigation of the worst
9 performing circuits through upgrades, asset renewals and sectionalizing initiatives on
10 targeted circuits each year.

11 **Q. ARE SAIFI AND CAIDI THE ONLY INDICATORS OF DISTRIBUTION**
12 **RELIABILITY PERFORMANCE?**

13 A. No. Reliability metrics are important; however, they do not tell the entire story. For
14 example, DIR programs have resulted in reductions in the number of outages, outage
15 minutes, and the number of outages avoided in both 2013 and 2014 due to the
16 Company’s annual work plan activities that were filed by AEP Ohio with the PUCO².

17

¹ Data reflects a combined AEP Ohio after the Columbus Southern Power and Ohio Power merger and excludes major events and transmission outages.

² Case No. 12-3129-EL-UNC and Case No. 13-2394 -EL-UNC.

1 Such activities include distribution asset improvements, the cutout and arrester program,
2 lightning and animal mitigation, and sectionalizing.

3 **Q. PLEASE DESCRIBE THE COMPANY’S EFFORTS UNDER THE ESRR SINCE**
4 **ITS APPROVAL MID-2009.**

5 A. Since successfully receiving Commission approval of our AEP Ohio cycle vegetation
6 management plan, the Company has been able to achieve the following:

- 7 • Invest more than \$450 million to keep trees away from our roughly 31,000 miles
8 of overhead lines;
- 9 • Meet our six-year goal to implement a four-year trim cycle of our lines;
- 10 • Complete the first full trim cycle of all 31,000 miles in 2014 while
11 simultaneously trimming 6,817 miles into our second cycle;
- 12 • Clear nearly half our total line miles for the second time during 2014 and 2015;
13 and
- 14 • Reduce outages caused by trees by a significant 80 percent, thereby improving
15 customers’ service:
 - 16 ○ During 2010 - 2,700 outages caused by trees inside our Rights-of-Way
17 (“ROW”).
 - 18 ○ During 2015 - 531 outages caused by trees inside our ROW.

19 **Q. PLEASE DESCRIBE THE COMPANY’S EFFORTS UNDER THE DIR SINCE**
20 **ITS APPROVAL IN 2012.**

21 A. The DIR supports the Company’s asset renewal, distribution capacity and infrastructure
22 improvements. This allows AEP Ohio the ability to meet customer demand to maintain

1 and improve the reliability of its distribution system. The Company has the ability to
2 continue its proactive asset inspection, maintenance and replacement programs, and
3 efficiently modernize AEP Ohio's system infrastructure. AEP Ohio's capital investment
4 plan has also helped proactively harden the distribution system. Under the 2013 DIR
5 work plan, the Company avoided approximately 306 outages³, had the potential to avoid
6 almost 30,983 outages, and completed work on circuits that would potentially reduce
7 total customer outage minutes by 20,400. Reliability efforts were even better in 2014
8 where under the 2014 DIR work plan, the Company avoided approximately 816 outages,
9 had the potential to avoid almost 41,888 outages, and completed work on circuits that
10 would potentially reduce total customer outage minutes by 31,200.

11 **Q. CAN AEP OHIO ALWAYS GUARANTEE IMPROVED RELIABILITY AND**
12 **CUSTOMER SATISFACTION OUTCOMES FROM IMPLEMENTING ITS**
13 **DISTRIBUTION RELIABILITY STRATEGY?**

14 A. No. Customer impacted outages can be caused by reasons beyond the Company's
15 control -- an example would be weather. Although major storms are excluded from
16 utility reliability metrics, an increase in the number of non-major storms will negatively
17 impact reliability outcomes. Additionally, both an increase in major and non-major
18 storms will negatively impact customer satisfaction. In this case, the Company's
19 reliability strategy focuses on the predictable variables such as the factors addressed by
20 the programs supported by the riders in my testimony.

³ An outage represents an event that impacts up to 2,100 customers per occurrence.

1 **CONTINUATION OF EXISTING DIR AND ESRR**

2 **Q. PLEASE PROVIDE A DESCRIPTION OF THE DIR AND ESRR ALONG WITH**
3 **THE PREVIOUS FINDINGS AND REQUIREMENTS ADOPTED BY THE**
4 **COMMISSION.**

5 A. The following is a description of each rider supported in my testimony and the findings
6 and requirements ordered by the Commission:

7 1. DIR - The purpose of the AEP Ohio DIR is to provide support for capital funding,
8 including carrying costs on distribution infrastructure to support customer expectations
9 and advanced technologies. Aging infrastructure is a major cause of customer outages
10 and reliability issues; therefore, asset renewal is a key component of the DIR in order to
11 avoid reliability issues. The DIR facilitates and encourages investments to maintain and
12 improve distribution safety and reliability, align customer expectations and the
13 expectations of the distribution utility, as well as streamline recovery of the associated
14 costs, and reduce the frequency of base distribution rate cases.

15 In ESP II, the Commission found the adoption of the DIR and the improved
16 service that comes with the replacement of aging infrastructure do facilitate
17 improved service reliability and better align the Company's and its customers'
18 expectations. The Commission noted the Company is placing sufficient proactive
19 emphasis on and will dedicate sufficient resources to the reliability of its
20 distribution system. The Commission concluded it is detrimental to the state's
21 economy to require AEP Ohio to be reactionary or allow the performance standards
22 to take a negative turn before the Commission encourages the electric utility to

1 proactively and efficiently replace and modernize infrastructure. The Commission
2 therefore found it is reasonable to permit the recovery of costs associated with
3 prudently incurred distribution infrastructure investments. The Commission added
4 that AEP Ohio is correct to aspire to move from a reactive to a more proactive
5 replacement maintenance program. Having made such findings, the Commission
6 approved the DIR as an appropriate mechanism to recover costs associated with
7 AEP Ohio's prudently incurred distribution investments.

8 The Commission found that the Company should work with Staff to develop
9 a plan to emphasize proactive distribution maintenance that focuses spending where
10 it will have the greatest impact on maintaining and improving reliability for
11 customers. Accordingly, AEP Ohio worked with Staff to develop the DIR work
12 plan, which was filed on December 3, 2012 in Case No. 12-3129-EL-UNC, and the
13 Commission approved the DIR Work Plan with modifications on May 29, 2013. In
14 the ESP III Order, the Commission further found that because AEP Ohio is
15 performing at or better than its established reliability standards and its reliability
16 expectations appear to be aligned with its customers, it is no longer necessary for
17 the Company to work with Staff to develop a DIR work plan as long as the
18 Company continues to perform at or better than its reliability standards.

19 Upon the Commission's Entry on Rehearing in ESP III (May 28, 2015), the
20 Commission affirmed their finding that it is no longer necessary to impose a
21 requirement for the Company to continue to work with Staff to develop an annual
22 DIR work plan given the Commission's finding that the Company's reliability

1 expectations appear to be aligned with its customers, as well as the fact that the
2 Company has been meeting or is performing better than its reliability standards.

3 2. ESRR – The ESRR program facilitates the transition to, and maintenance of, a
4 cycle-based vegetation management program, and was approved by the
5 Commission in ESP I. In ESP II, AEP Ohio requested the continuation of the
6 ESRR and the Company's transition to a four-year, cycle-based trimming program.
7 AEP Ohio requested incremental funding over the \$24.2 million base (combined
8 O&M and Capital funding) for both (a) the completion of the transition to a cycle-
9 based vegetation management program in the amount of \$16 million for 2014 and
10 (b) maintenance of the cycle-based program, through an additional increase of \$2
11 million annually beginning in 2014, for an annual total of \$42 million. Estimates
12 later indicated that, instead of \$18 million beginning in 2014, approximately \$25
13 million of O&M and \$1M of capital above the base would be needed to fund the
14 on-going cycle-based program as requested in ESP III.

15 In ESP III, the Commission approved the continuation of the ESRR at \$26.0
16 million for the period 2015 through 2017 and \$26.3 million for 2018. These
17 estimates reflect the history of actual expenditures experienced since beginning the
18 program in 2009.

19 **Q. HOW DOES AEP OHIO MONITOR THE DEVELOPMENT AND PROGRESS**
20 **OF A COMPREHENSIVE DISTRIBUTION RELIABILITY STRATEGY WITH**
21 **RESPECT TO SYSTEM RELIABILITY PERFORMANCE?**

1 A. The Company uses an Outage Management System (OMS) to identify, respond to and
2 assign outage causes to the events that cause sustained customer outages. Through
3 analysis of the outage events over an extended period of time, AEP Ohio can identify
4 solutions or process improvement programs to target the areas that are experiencing
5 frequent outages or outages with long durations. By implementing the reliability
6 programs supported by the riders and continuing to monitor outage events, the Company
7 can determine if the programs are achieving the expected results.

8 **Q. PLEASE EXPLAIN WHY THE PREVIOUSLY APPROVED DIR AND ESRR**
9 **DESCRIBED HEREIN SHOULD BE CONTINUED.**

10 A. As previously indicated, these riders, the DIR and the ESRR, are part of a long-term,
11 comprehensive strategy to improve distribution reliability. The AEP Ohio distribution
12 system is a large system with more than 45,500 distribution line miles and approximately
13 540 distribution substations. The reliability programs supported by these riders were
14 identified as process improvement programs that could benefit customers by improving
15 distribution reliability by specifically targeting issues that were impacting reliability.
16 The ESRR established in ESP I has been in use for multiple years and is achieving the
17 expected results as discussed earlier in my testimony. The DIR was approved in ESP II.
18 These reliability programs and the riders that provide cost recovery will also need to be
19 in use for multiple years to have a measureable impact on all distribution lines and
20 distribution substations. These programs and riders are a reasonable approach for
21 achieving improved reliability and sustaining the improvements over the long-term as
22 discussed later in my testimony.

1 **Q. DO ANY OF THE PROGRAMS IDENTIFIED IN THE STRATEGIC**
2 **RELIABILITY PLAN SUPPORT DISTRIBUTION SYSTEM RESILIENCY**
3 **AGAINST WEATHER?**

4 A. Absolutely. The DIR and ESRR each contribute to the overall improvements that
5 support storm hardening of the distribution system. These contributions are as follows:

6 1. DIR – The DIR program supports the replacement of aging infrastructure and the
7 improvement of the safety and reliability of the system. Assets that are often more than
8 fifty years old are replaced with modern equipment that takes advantage of robust design
9 and material standards that have evolved over the years. New distribution lines are
10 stronger and more resistant to loading due to wind or ice. As assets are replaced,
11 consideration may also be given to sensitive or critical facilities such as hospitals, fire
12 and police stations, and public works facilities to ensure the electric service to these
13 facilities can be restored quickly if an outage occurs.

14 2. ESRR – The ESRR program provides storm hardening by reducing the risk of tree
15 contact during storms. This program includes the widening of ROW and the removal of
16 danger trees, which reduces the risk of trees contacting lines during weather related
17 events.

18 **Q. HOW IS A FOCUS ON RELIABILITY DIFFERENT FROM A FOCUS ON**
19 **SENSITIVE FACILITIES?**

20 A. Reliability focuses on improving performance of circuits or equipment regardless of the
21 type of service and/or customer. Sensitivity focuses on the type of service and/or
22 customer. These facilities provide emergency or critical services during storms, so these

1 facilities have the highest priority for restoration in the event of widespread and multiple
2 circuit outages. Additionally, the Company evaluates the reliability of the assets that
3 serve sensitive facilities to improve reliability.

4 **Q. IS AEP OHIO PROPOSING ANY MODIFICATIONS TO THE EXISTING DIR
5 AND ESRR TO ALIGN THEM WITH CUSTOMER EXPECTATIONS?**

6 A. Yes. The Company is proposing the following adjustments to the existing DIR and
7 ESRR to align them to the expected conditions during the extended term of the ESP III
8 of 2018 through 2024. The following is a summary of the changes proposed for each
9 rider:

10 1. DIR – Modify the DIR to increase distribution capital investment for the 2018
11 through 2024 period to an estimated average annual amount of \$225 million.
12 Company witness Gill discusses the proposed modifications along with the
13 modest rate impact due to the increase.

14 2. ESRR - Modify the ESRR to increase both capital and O&M expenditures each
15 year by approximately 2.5%. Company witness Gill discusses the proposed
16 modifications.

17 **Q. DOES THE PROPOSED LEVEL OF ANNUAL DIR CAPITAL INVESTMENT
18 INCLUDE ALL CAPITAL INVESTMENTS IN DISTRIBUTION RELIABILITY
19 DURING THE TERM OF THE ESP III EXTENSION?**

20 A. No. The annual average \$225 million is subject to flexibility. AEP Ohio will evaluate
21 annually the needs of its distribution system to ensure that customer reliability
22 expectations and safety are prudently and economically achieved. At a minimum, the

1 Company must invest capital dollars that will allow it to maintain its current distribution
2 reliability levels; therefore, additional capital investments above the average annual \$225
3 million capital investments may be incurred.

4 DIR activities are key to future safety and distribution reliability
5 improvements, and are necessary simply to maintain the gains in safety and
6 reliability already achieved. Prudent investment in DIR activities will enable the
7 Company to meet customer expectations and supports the Company's ability to
8 continue its proactive asset inspections, maintenance and replacement programs,
9 and efficiently modernize AEP Ohio's system infrastructure. The DIR capital
10 investment plan has also helped the Company proactively harden the AEP Ohio
11 system. However, as previously discussed, in order to achieve the Company's
12 distribution reliability and safety goals, there may be a need to invest more capital
13 above the average annual \$225 million investment requested for the DIR in this
14 proceeding.

15 **Q. PLEASE EXPLAIN SOME OF THE PRIMARY AREAS WHERE THE**
16 **COMPANY WILL DIRECT DIR CAPITAL SPENDING.**

17 A. The majority of capital projects completed by AEP Ohio can be classified under
18 one of seven general project categories. Each year, AEP Ohio completes thousands
19 of projects of varying degrees of complexity and dollar value. The DIR capital
20 project categories, along with each categories' percentage contribution to the DIR's
21 capital investment, are described as follows:

- 1 • *Asset Improvement (39.6%)*: Asset Improvement projects include
2 replacement of obsolete equipment and other aging infrastructure.
3 These projects include both line and station equipment. This project
4 category also has a significant impact on reducing outages and
5 improving customer reliability.
- 6 • *Reliability (17.9%)*: Reliability programs are specific programs that
7 target known reliability issues impacting groups of customers or whole
8 circuits experiencing reliability issues.
- 9 • *Electric Service Support (16.4%)*: This component includes items which
10 are involved in day-to-day work components of service and upgrades to
11 existing customers. The would include such items as other capital base
12 operations, capital overheads, Distribution Dispatch support, revenue
13 credits, and contribution-in-aid-to-construction credits.
- 14 • *Customer Service (10.7%)*: This category of projects supports new
15 customer facilities, meter installations and other customer requirements.
- 16 • *Planning Capacity (10.2%)*: These projects add capacity to the
17 distribution system, which include new station and line facilities, and
18 upgrades or additions to existing assets.
- 19 • *System Restoration (3.6%)*: These projects replace assets that have
20 failed. When system restoration projects have been completed, the
21 failed assets have been replaced and those assets have been restored to

1 new condition. Capital projects completed during storm restoration are
2 typical system restoration projects.

- 3 • *Forestry (1.6%)*: Forestry projects involve ROW widening and clearing
4 ROW for new lines. ROW widening continues to be an important
5 initiative to reduce tree contacts and fall-ins, which cause customer
6 outages. In addition, danger trees may be removed within the ROW.
7 These investments are separate and apart from the expenditures made
8 pursuant to the ESRR program.

9 Capital investment is a key component in the strategy for maintaining the distribution
10 system and improving system reliability.

11 **Q. WHAT IS THE FORECAST FOR THE ESRR PROGRAM?**

12 A. Table 2 provides a summary of the O&M expenses and capital costs expected to be
13 recovered through the ESRR for the duration of ESP III. The base capital costs
14 associated with the Forestry Program are recovered through base distribution rates while
15 incremental capital is recovered through the ESRR.

16 **Table 2 – ESRR 2018-2024 Incremental Forecast⁴**

	2018	2019	2020	2021	2022	2023	2024
O&M	\$26.5	\$27.6	\$28.8	\$30.1	\$31.4	\$32.6	\$34.0
Capital	\$1.2	\$1.3	\$1.4	\$1.5	\$1.7	\$1.8	\$1.9

17
18 The above table provides an updated forecast based on historical data taken from
19 the vegetation management implementation period and reflects an incremental increase
20 of approximately 2.5% annually starting in 2019. It was determined that the previously

1 calculated incremental O&M funding of \$18 million per year approved in the ESP II was
2 not sufficient to maintain the cycle trim program. Utilizing the historical cost per mile to
3 complete the cycle trim program over the vegetation management implementation
4 period, it was determined that an incremental amount of \$25 million as approved in the
5 ESP III would be more appropriate to maintain the four year cycle trim program. ESP III
6 provided that funding amount for 2015 through 2017, with a three percent increase
7 applied in 2018 to provide relief for additional costs stemming from trimming of Tree
8 Growth Regulated (TGR) treated trees. TGR slows the tree growth when applied so that
9 the next trim cycle will be more efficient with reduced pruning required, but does not
10 stop growth altogether. Moreover, the increase in O&M is also attributed to increased
11 equipment and labor costs and the availability of actual historical data during the current
12 vegetation management maintenance cycle for developing the estimates. The use of
13 actual historical data specific to the attainment of a 4-year trim cycle provides improved
14 forecasting.

15 **Q. DO THE FORECASTED DOLLARS FOR THE DIR AND ESRR PROGRAMS**
16 **REPRESENT A FIRM SPENDING OBLIGATION?**

17 A. No. A long-term forecast spanning multiple years is based on historic spending levels,
18 expected conditions in the future, and the work plan as currently identified in the long-
19 term strategic plan. A long-term forecast can change based on a number of factors
20 including the evolution of work plans, changing priorities, the availability of resources or
21 an unexpected major storm that diverts resources.

⁴ The O&M expense in Table 2 is incremental to the current \$20.6 million base amount. The capital investment in Table 2 is incremental to the current \$3.6 million base amount.

1 The spending levels discussed in my testimony represent a minimum that the
2 Company must spend in O&M and capital dollars in order to maintain its current
3 reliability levels.

4 **Q. ARE THE FORECASTED COSTS FOR EACH OF THE RIDERS**
5 **REASONABLE FOR THE WORK AND SERVICES TO BE PERFORMED?**

6 A. Yes. The costs recovered through the riders are reasonable for the work and services to
7 be performed. The request for increased spending in the ESRR in this proceeding is
8 driven by a level O&M incremental dollar amount for years 2015 through 2017. Various
9 increases in expenditures for the ESRR program have taken place over the period with
10 no relief provided by the incremental funding provided by the ESP III decision. Items
11 such as labor rates and equipment rates have increased since the start of the cycle-based
12 vegetation management trim program, and will continue to increase year by year. For
13 this reason, AEP Ohio is requesting an annual increase to incremental funding that
14 amounts to two-and-a-half percent of the total budget amount (base rate plus incremental
15 spend) within this proceeding. The forecasted spending levels follow the labor increases
16 that AEP Ohio is contractually committed to providing annually to its contract labor
17 force.

18 In regards to the DIR, the completion of activities such as asset replacements
19 avoids outages. The Company's experience has been, as evidenced by its 2013 and 2014
20 DIR work plans, that the replacement of 7,000 cut-outs would potentially avoid 7,000
21 outages. This is presumed by the Company to apply to other distribution assets as well.
22 Not performing these activities under the DIR would result in future outages, or put
23 differently, outage avoidance improves reliability by preventing the degradation of

1 distribution assets. More importantly, the implementation phase of AEP Ohio's cycle-
2 based vegetation management program is complete and it is anticipated that additional
3 incremental reliability improvements can only be expected to be marginal from that
4 program. It is the improvements under the DIR that is keeping, and will continue to
5 keep, distribution reliability solidly above the target level.

6 The benefits to AEP Ohio customers as a result of the DIR and ESRR activities
7 are justified and the riders' costs are no different from other costs incurred through the
8 normal operation of the Company. The riders simply provide a mechanism to quickly
9 and efficiently recover the costs that will lead to sustained activities to improve
10 reliability. Actual costs are trued-up, and then audited by the Commission Staff.

11 **Q. WILL AEP OHIO CONTINUE THE CURRENT REPORTING MECHANISMS**
12 **REQUIRED BY THE EXISTING RIDERS?**

13 A. Yes. As stated in the ESP III, the Company still welcomes the opportunity to work with
14 Staff to ensure the requirements of the riders are being met and the expected results are
15 being achieved to benefit customers.

16 **SUMMARY AND CONCLUSION**

17 **Q. PLEASE SUMMARIZE YOUR TESTIMONY.**

18 A. AEP Ohio is committed to improving customer safety and reliability, and has
19 developed a long-term strategy that includes a suite of distribution reliability
20 programs and associated riders as a reasonable approach to implement and sustain
21 safety and reliability improvements. The objective of the riders is not to increase
22 the cost of performing targeted reliability activities, but to serve as a mechanism to

1 recover prudently incurred costs. However, in achieving safety and reliability
2 objectives as established in the ESRR and DIR programs, the Company focuses on
3 prudently providing cost-effective customer service. It is important to recognize
4 that great service must be cost-effective, but is not necessarily the cheapest. At
5 times, customers must pay for that great service and the Company must invest on
6 the front-end to save on the back-end. The DIR and ESRR support a streamline
7 recovery process that allows the Company to maintain a focus on improving
8 distribution safety, reliability, and meeting customer expectations.

9 **Q. DOES THIS CONCLUDE YOUR PRE-FILED DIRECT TESTIMONY?**

10 A. Yes.



AEP Ohio 2015 Service Reliability Perception Survey

Summary of Results

February 2016

Prepared by:



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Changes in Expectations for Service Reliability

Although a large majority report no change (72%), more than twice as many residential customers say their expectations for uninterrupted service have increased over the past five years (18%) than say their expectations have decreased (7%).

Changes in Expectations for Service Reliability, Past Five Years

	All Residential Customers	<i>Service Priority</i>		
		Cost	Keep Outages to a Minimum	Restore Power Quickly
Decreased (TOTAL)	7%	7%	9%	4%
• Significantly	2%	2%	4%	2%
• Somewhat	4%	5%	5%	2%
Stayed the Same	72%	71%	71%	78%
Increased (TOTAL)	18%	19%	15%	16%
• Significantly	8%	10%	8%	4%
• Somewhat	10%	10%	8%	13%
Don't Know/No Answer	3%	3%	5%	2%

When asked to speculate on any changes in expectations over the *next five years*, results for residential customers are largely the same. About two-thirds (67%) say they do not feel their expectations will change at all. But while only 7% feel expectations will decrease, one in five (20%) feel their expectations for uninterrupted service will increase over the next five years.

Changes in Expectations for Service Reliability, Next Five Years

	All Residential Customers	<i>Service Priority</i>		
		Cost	Keep Outages to a Minimum	Restore Power Quickly
Decrease (TOTAL)	7%	9%	3%	5%
• Significantly	2%	3%	-	2%
• Somewhat	5%	5%	3%	3%
Stay the Same	67%	63%	75%	71%
Increase (TOTAL)	20%	25%	15%	17%
• Significantly	5%	5%	5%	4%
• Somewhat	15%	19%	10%	13%
Don't Know/No Answer	6%	4%	8%	7%

Changes in Expectations for Service Reliability

Although a large majority report no change (78%), more than three times as many commercial customers say their expectations for uninterrupted service have increased over the past five years (16%) than say their expectations have decreased (5%).

Changes in Expectations for Service Reliability, Past Five Years

	All Commercial Customers	<i>Service Priority</i>		
		Cost	Keep Outages to a Minimum	Restore Power Quickly
Decreased (TOTAL)	5%	6%	6%	2%
• Significantly	2%	2%	3%	-
• Somewhat	2%	3%	2%	2%
Stayed the Same	78%	77%	73%	83%
Increased (TOTAL)	16%	15%	19%	16%
• Significantly	6%	8%	6%	4%
• Somewhat	10%	6%	13%	12%
Don't Know/No Answer	2%	3%	2%	-

When asked to speculate on any changes in expectations over the *next five years*, results for commercial customers are largely the same. About three-quarters say they do not feel their expectations will change at all. But while only 5% feel expectations will decrease, nearly one in five feel their expectations for uninterrupted service will increase over the next five years.

Changes in Expectations for Service Reliability, Next Five Years

	All Commercial Customers	<i>Service Priority</i>		
		Cost	Keep Outages to a Minimum	Restore Power Quickly
Decrease (TOTAL)	5%	6%	4%	2%
• Significantly	2%	2%	2%	0%
• Somewhat	3%	5%	2%	2%
Stay the Same	75%	77%	73%	78%
Increase (TOTAL)	19%	16%	21%	20%
• Significantly	3%	3%	3%	3%
• Somewhat	15%	13%	17%	17%
Don't Know/No Answer	2%	1%	2%	1%

CERTIFICATE OF SERVICE

In accordance with Rule 4901-1-05, Ohio Administrative Code, the PUCO's e-filing system will electronically serve notice of the filing of this document upon the following parties. In addition, I hereby certify that a service copy of the foregoing *Ohio Power Company's Direct Testimony of Selwyn J. Dias* was sent by, or on behalf of, the undersigned counsel to the following parties of record this 23rd day of November 2016, via electronic transmission.

/s/ Steven T. Nourse

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This foregoing document was electronically filed with the Public Utilities

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Case No(s). 16-1852-EL-SSO, 16-1853-EL-AAM

Summary: Testimony - Direct Testimony of Selwyn J. Dias in Support of AEP Ohio's Amended Electric Security Plan electronically filed by Mr. Steven T Nourse on behalf of Ohio Power Company