

FILE

BEFORE

## THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application of Columbus	)	
Southern Power Company for Approval of its	)	
Electric Service Plan; an Amendment to its	)	Case No. 08-917-EL-SSO
Corporate Separation Plan; and the Sale or	)	
Transfer of Certain Generating Assets	)	
	)	
And	)	
	)	
In the Matter of the Application of Ohio	)	
Power Company for Approval of its	)	Case No. 08-918-EL-SSO
Electric Service Plan; and an Amendment	)	
to its Corporate Separation Plan	)	

## PREPARED TESTIMONY

Of

DUANE A. ROBERTS

RELIABILITY AND SERVICE ANALYSIS DIVISION

PUBLIC UTILITIES COMMISSION OF OHIO

STAFF EXHIBIT \_\_\_\_\_

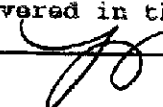
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1 1. Q. Please state your name and business address.

2 A. My name is Duane A. Roberts. My business address is 180 E. Broad Street,  
3 Columbus, Ohio 43266-0573.

4  
5 2. Q. By whom are you employed?

6 A. I am employed by the Public Utilities Commission of Ohio (PUCO).  
7

8 3. Q. What is your current position with the Public Utilities Commission of Ohio and what  
9 are your duties?

10 A. I am a Utility Special 3 in the Non-Competitive Electric Section within the Reliability  
11 and Service Analysis Division of the Service Monitoring and Enforcement  
12 Department. My duties are to develop, implement, and enforce service quality and  
13 consumer protection policies and rules for non-competitive electric service. My role  
14 in rate cases, commission-ordered investigations, and tariff reviews is to analyze their  
15 impact on customers and recommend policies and practices that ensure quality, safe,  
16 and reliable service, fair treatment of customers, and consumer protection.  
17

18 4. Q. Would you please state your background?

19 A. I am a 1984 graduate from DeVry Institute of Technology in Columbus with an  
20 Associate of Science Degree in Computer Programming and a Bachelor of Science  
21 Degree in Computer Science for Business. After graduation, I was employed by the  
22 Ohio Exposition Commission as the Commission's Fiscal Officer. I began my

1 employment with the Public Utilities Commission of Ohio in October 1984 as a  
2 Utility Examiner I in the Accounts and Valuation Division of the Utilities  
3 Department. In June 1989, I transferred to the Information Systems Division of the  
4 Administration Department as a Programmer/Analyst 3. In September 1990, I  
5 transferred to the Accounts and Audits Division of the Utilities Department in the  
6 same capacity. In December 1998, I transferred to the Electric Section in the  
7 Compliance Division of the Consumer Services Department as a Management  
8 Analyst Supervisor 2. In March 2000, I transferred to the Reliability and Service  
9 Analysis Division of the Service Monitoring and Enforcement Department at my  
10 present position. In addition and concurrent with my employment with the  
11 Commission, I served as a Computer Programming Instructor during the evening  
12 sessions at the Circleville Branch of Bliss College from January 1986 until September  
13 1986.

14  
15 5. Q. What is the purpose of your testimony in this proceeding?

16 A. The purpose of my testimony is to address the following components included within  
17 the companies' Enhanced Distribution Service Reliability Plan (Plan):

18 → Enhanced overhead inspection and mitigation initiative.

19 → Enhanced vegetation management (right-of-way clearing).

20 → Targeted underground residential distribution cable replacement and  
21 rejuvenation.

22 → Targeted distribution automation (this initiative will be addressed in staff  
23 witness Peter Baker's testimony).

1  
2 6. Q. AEP-Ohio proposes to enhance its current overhead inspection and mitigation  
3 program as part of its Plan. Does the Staff agree with the companies' proposal?  
4 Please explain.

5 A. Yes. Staff believes the companies' proposed Enhanced Overhead Line Inspection  
6 Initiative will improve service reliability by performing more thorough inspections of  
7 facilities, hardware, and equipment by walking the circuits more as opposed to  
8 driving, physically climbing structures, and using bucket trucks. The companies'  
9 continued use of infrared inspection devices, electromagnetic interference detection  
10 devices, and other technologies used to identify distribution hardware and equipment  
11 in the beginning stages of failure will also add to the program's effectiveness.  
12

13 7. Q. Why does the Staff support an Enhanced Overhead Line Inspection program?

14 A. Equipment failures have been one of the leading causes of sustained outages over the  
15 last several years (2001 through 2007).<sup>1</sup> As a result, Staff supports using inspection  
16 methods that more closely scrutinize the condition of equipment, both externally and  
17 internally, and include effective non-intrusive technology that detect the beginning  
18 stages of failure. This approach to inspection, coupled with the companies' timely  
19 follow-up repair or replacement of equipment found at an early stage of failure,  
20 should result in a reduction in the number of sustained outages.  
21

22 8. Q. Does the Staff have any concerns with the companies' proposal to enhance their line  
23 inspection program?

1 A. Yes. Staff is concerned that the companies waited until now to propose enhancing  
2 their overhead line inspection program knowing full well that they had a history of  
3 sustained outages caused by equipment and line failures. For a very long time, the  
4 companies have had been able do more walking, climbing, and bucket truck  
5 inspections, along with the use of infrared inspections, but have chosen not to do so.  
6

7 9. Q. Under the Electric Service and Safety Standards companies are required to conduct  
8 overhead line inspections. Are the categories of mitigation work associated with the  
9 proposed enhanced overhead inspection program described in company witness  
10 Boyd's testimony<sup>2</sup> above and beyond the companies' normal day-to-day mitigation  
11 work that it would typically complete as a result of performing its current inspection  
12 program?

13 A. No. The mitigation work described by company witness Boyd is the same mitigation  
14 work that the companies have been using to address deficiencies found as a result of  
15 performing its current inspection program. The mitigation work completed by all  
16 electric distribution utilities located in Ohio has always ranged from no action to full  
17 structure, hardware and equipment replacement. It's just that the companies have  
18 chosen to break the mitigation into categories.  
19

20 10. Q. Does the Staff agree with the companies' proposal to supplement its enhanced  
21 overhead line inspection program with the targeting of five overhead asset initiatives,  
22 namely cutout replacement, arrester installation and replacement, recloser

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<sup>1</sup> AEP Ohio's response to Staff Data Request No. 16

<sup>2</sup> Direct Testimony of AEP Witness Karl Boyd, Pages 19 through 20

1 replacement, 34.5 kV protection, and installation of fault indicators, as described in  
2 company witness Boyd's testimony<sup>3</sup>?

- 3 A. Based on the companies' recent (2003 through 2007) outage history<sup>4</sup>, Staff believes  
4 that the companies should make the replacement of cutouts and the installation and  
5 replacement of arresters one of its higher priorities. For the last three years,  
6 equipment failures have been the leading cause of sustained outages with cutouts  
7 causing the highest number of equipment failure caused customer interruptions in  
8 each of those years.

9  
10 Lightning and the failure of lightning arresters also caused a high number of sustained  
11 outages that affected a large number of customers. Targeting lightning and cutouts  
12 should greatly reduce the number of sustained outages experienced by customers.

- 13  
14 11. Q. Does Staff oppose the companies' proposal to target recloser replacement, 34.5kV  
15 protection, and installation of fault indicators?

- 16 A. Staff supports the companies' proposal to target the replacement of three-phase  
17 reclosers with three single-phase reclosers; enhance the protection on existing 34.5kV  
18 circuits; and the installation of fault indicators on all three-phase overhead switches,  
19 all feeder exit riser poles and underground residential distribution (URD) riser poles.  
20 The companies' proposal to target these three assets should greatly improve their  
21 customers' experience. But targeting the cutouts and lightning protection will have a  
22 greater overall impact on customer service.

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<sup>3</sup> Direct Testimony of AEP Witness Karl Boyd, Pages 21 through 26

<sup>4</sup> AEP Ohio's response to Staff Data Request No. 16

1  
2 12. Q. Do the companies quantify the improvement in reliability that customers will receive  
3 by implementing their proposed enhanced overhead inspection and mitigation work  
4 initiative?

5 A. Yes. In company witness Boyd's testimony, he states, "once a circuit has been fully  
6 mitigated, the Companies are forecasting a 40% reduction in distribution primary  
7 equipment related outages."<sup>5</sup> Additionally, in response to Staff's Data Request 4-  
8 2(a), the companies reported that implementation of this initiative would reduce  
9 CSP's SAIFI performance by .12 in year 2012 from its 2005 through 2007 average of  
10 1.68, and reduce OP's SAIFI performance by .16 from the same periods average of  
11 1.42.

12  
13 13. Q. Did the companies report any negative affects on customer service caused by  
14 implementing its proposed enhanced overhead inspection and mitigation work  
15 initiative?

16 A. Yes. In response to Staff's Data Request 4-2(a), the companies reported that if it  
17 implemented this initiative CSP's CAIDI performance would slightly increase by one  
18 and six tenths minutes in year 2012 from its 2005 through 2007 average of 121.0  
19 minutes. But OP's CAIDI would be reduced by six and one tenth minutes from the  
20 same period average of 138.6 minutes.

21  

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<sup>5</sup> Direct Testimony of AEP Witness Karl Boyd, Page 24

1 14. Q. What is the estimated incremental cost of implementing the companies' proposed  
2 enhanced overhead inspection and mitigation work initiative?

3 A. The following chart provides a breakdown of the companies' projected incremental  
4 cost of implementing the companies' proposed enhanced overhead inspection and  
5 mitigation work initiative for the first three years of the program<sup>6</sup>.

6 **Chart 1**

	Year 1		Year 2		Year 3	
	O&M	Capital	O&M	Capital	O&M	Capital
Inspect & Mitigation	\$18,943,250	\$23,031,000	\$24,022,700	\$32,171,000	\$25,983,375	\$32,289,500
CSP	6,477,300	7,301,000	8,189,080	10,378,800	8,893,350	10,249,800
OP	12,465,950	15,730,000	15,833,620	21,792,200	17,090,025	22,039,700

7  
8 15. Q. What is the estimated incremental cost of implementing the companies' proposed  
9 cutout and arrester replacement initiatives?

10 A. The following chart provides a breakdown of the companies' projected incremental  
11 cost of implementing the companies' proposed cutout and arrester replacement  
12 initiatives for the first three years of the programs<sup>7</sup>. According to the companies, the  
13 replacement of this equipment is all capital cost.

14 **Chart 2**

	Year 1		Year 2		Year 3	
	Cutout	Lightning Arresters	Cutout	Lightning Arresters	Cutout	Lightning Arresters
Total Cost	\$2,400,000	\$200,000	\$2,310,000	\$185,500	\$2,552,000	\$196,000
CSP	960,000	80,000	924,000	74,200	1,020,800	78,400
OP	1,440,000	120,000	1,386,000	111,300	1,531,200	117,600

15  
<sup>6</sup> Derived from Chart 5 on Page 26 of Company Witness Karl Boyd's Direct Testimony and AEP Ohio's response to Staff Request No. 14-A – Interrogatory Request No. 14-a



1 16. Q. What is the estimated incremental cost of implementing the companies' proposed  
2 recloser replacement, 34.5kV protection, and fault indicator installation initiatives?

3 A. The following chart provides a breakdown of the companies' projected incremental  
4 cost of implementing the companies' proposed recloser replacement, 34.5kV  
5 protection, and fault indicator installation initiatives for the first three years of the  
6 programs<sup>8</sup>.

7 **Chart 3**

	Year 1		Year 2		Year 3	
	O&M	Capital	O&M	Capital	O&M	Capital
Recloser Replacement	\$18,750	\$2,469,000	\$19,500	\$2,593,500	\$20,625	\$2,722,500
CSP	7,500	939,000	7,800	987,000	8,250	1,035,000
OP	11,250	1,530,000	11,700	1,606,500	12,375	1,687,500
34.5kV Protection	680,000	7,800,000	856,800	9,840,000	1,050,000	12,040,000
CSP	272,000	3,120,000	342,720	3,936,000	420,000	4,816,000
OP	408,000	4,680,000	514,080	5,904,000	630,000	7,224,000
Fault Indicators	858,000	N/A	901,000	N/A	946,000	N/A
CSP	343,200	N/A	360,400	N/A	378,400	N/A
OP	514,800	N/A	540,600	N/A	567,600	N/A

8  
9 17. Q. The companies have also proposed an Enhanced Vegetation Initiative. Is vegetation  
10 having an impact on the performance and reliability of the companies' distribution  
11 system?

12 A. Yes. Vegetation located inside and outside of the companies' rights-of-ways  
13 combined is second to equipment failures in causing the greatest number of sustained  
14 outages experienced by its customers. Vegetation caused outages continue to be a  
15 challenge for all of the electric distribution utilities serving customers in Ohio. To

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<sup>7</sup> Ibid.

<sup>8</sup> Ibid.

1 address this issue, the companies currently employ a performance-based approach to  
2 vegetation management. The companies plan to enhance their program by moving  
3 towards a more cycled-based approach.  
4

5 18. Q. Please describe the companies' current performance-based approach to vegetation  
6 management.

7 A. The companies' current performance-based vegetation management program  
8 prioritizes planned vegetation clearance work on circuits based on its circuits' annual  
9 tree related System Average Interruption Frequency Index (SAIFI) performance from  
10 the previous year. Circuits that fall within the group of circuits with the highest  
11 fifteen percent of tree-related SAIFI for the previous calendar year meet the  
12 companies' criteria and are scheduled for vegetation clearance during the immediate  
13 following calendar year. Staff considers this method to be a reactive approach to  
14 vegetation management because vegetation has to cause customers to experience  
15 sustained outages before a circuit can be prioritized for vegetation clearance.  
16

17 19. Q. Please describe the companies' proposed Enhanced Vegetation Management  
18 Initiative.

19 A. Under the Enhanced Vegetation Management Initiative the companies plan to  
20 augment their current program with the elements of a cycle-based approach.  
21 Company witness Boyd testified that the cycle-based vegetation program is more  
22 proactive than the performance-based program.<sup>9</sup> In response to Staff's Discovery

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<sup>9</sup> OCC deposition of AEP Witness Karl Boyd taken on Friday, October 24, 2008, Page 33, Lines 18 through 19

1 Request<sup>10</sup>, the companies reported that their vegetation program would be on a four-  
2 year cycle after the companies complete the initial five-year implementation period.  
3 The companies plan to double their current number of tree crews, complete “end-to-  
4 end” circuit rights-of-way inspections and maintenance, and use technology to collect  
5 tree inventory data to optimize planning and scheduling.

6  
7 The companies plan to continue using current specifications to clear vegetation<sup>11</sup> as  
8 follows:

- 9 • All overhang above three-phase primary lines is to be cut back;
- 10 • On single-phase lines, all overhang is to be removed to a height above the primary  
11 for a ten foot clear hinge or swing point; and
- 12 • Danger trees located outside of the companies’ rights-of-ways will continue to be  
13 removed where property owner’s permission can be secured.

14  
15 20. Q. Did the companies quantify the improvement in reliability that the customers will  
16 receive by the companies implementing their proposed enhanced vegetation  
17 management initiative?

18 A. Yes. In response to Staff’s Data Request 4-2(b), the companies reported that  
19 implementation of this initiative would reduce CSP’s SAIFI performance by .06 in  
20 year 2012 from its 2005 through 2007 average of 1.68, and reduce OP’s SAIFI  
21 performance by .08 from the same periods average of 1.42.

22  

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<sup>10</sup> AEP Ohio’s response to Commission Staff’s Discovery Request Third Request – Interrogatory Request No. 43

<sup>11</sup> AEP Ohio’s response to Commission Staff’s Discovery Request Third Request – Interrogatory Request No. 48

1 21. Q. Did the companies report any negative affects on customer service caused by  
2 implementing its proposed enhanced overhead vegetation management initiative?

3 A. Yes. In response to Staff's Data Request 4-2(b), the companies reported that  
4 implementation of this initiative would slightly increase OP's CAIDI performance  
5 by one minute in year 2012 from its 2005 through 2007 average of 138.6 minutes.  
6 But CSP's CAIDI would be reduced by eight tenths of a minute from the same  
7 period average of 121.0 minutes.  
8

9 22. Q. What is the estimated incremental cost of implementing the companies' proposed  
10 enhanced vegetation management initiative?

11 A. The following chart provides a breakdown of the companies' projected incremental  
12 cost of implementing the companies' proposed enhanced vegetation management  
13 initiative for the first three years of the program<sup>12</sup>.  
14

**Chart 4**

	Year 1		Year 2		Year 3	
	O&M	Capital	O&M	Capital	O&M	Capital
Vegetation Management	\$26,200,000	\$5,300,000	\$28,200,000	\$6,600,000	\$30,200,000	\$7,900,000
CSP	9,100,000	1,800,000	9,800,000	2,300,000	10,500,000	2,700,000
OP	17,100,000	3,400,000	18,500,000	4,300,000	19,800,000	5,200,000

15  
16 23. Q. Does the Staff support the companies' proposed enhanced vegetation management  
17 initiative?

<sup>12</sup> From Chart 7 on Page 31 of Company Witness Karl Boyd's Direct Testimony

1       A. Yes. Staff believes that since tree caused outages have such a negative impact on  
2       system performance, the companies should move to a four-year cycle-based approach  
3       to vegetation management that include the following:

- 4       • “End-to-end” circuit rights-of-way inspections and maintenance;
- 5       • Mid-point circuit inspections to review vegetation clearance from conductors,  
6       equipment and facilities;
- 7       • Greater clearance of all overhang above three-phase primary lines and single-phase  
8       lines;
- 9       • Removal of danger trees located outside of the companies’ rights-of-ways where  
10      property owner’s permission can be secured; and
- 11      • Using technology to collect tree inventory data to optimize planning and scheduling.

12  
13     24. Q. As part of its enhanced distribution service reliability plan, the companies also  
14     proposed an Enhanced Underground Cable Initiative. Has the deterioration of  
15     underground cable affected the companies’ provision of electric service to its  
16     customers served by underground facilities?

17     A. Underground cable failure caused outages affect CSP customers’ service on a much  
18     greater extent than they affect OP customers. For CSP, underground cable failures  
19     were the second leading cause of equipment failure caused customer interruptions  
20     behind cutout failures for both of the years 2006 and 2007. Underground cable  
21     failure caused customer interruptions do not even make the list of the top ten  
22     equipment caused failures for OP for 2006, and barely make the list at number eight  
23     for 2007.

1  
2 25. Q. Is the Staff aware of the magnitude of the deterioration occurring on the companies'  
3 underground system?

4 A. According to the companies' response to Commission Staff's Discovery Request<sup>13</sup>,  
5 the companies reported that all of their underground power cable still in service  
6 installed prior to 1980 has met its useful life expectancy. From that same response,  
7 the companies reported that all of their underground power cable still in service  
8 installed prior to 1990 has used up seventy-five to one hundred percent of its useful  
9 life expectancy. These statistics are relevant to all of the following types of  
10 underground cable currently installed and in service on the companies' system:

- 11 • Underground substation power cable
- 12 • Underground feeder exit cable from substations
- 13 • Underground mainline feeder cable
- 14 • Underground riser cable
- 15 • Underground residential distribution (URD) cable

16  
17 But Staff would have to know the number of miles of each type of cable that remain  
18 in service from the aforementioned list, by vintage year of installation, to know the  
19 real magnitude of the problem. In response to Commission Staff's Discovery  
20 Request<sup>14</sup>, the companies reported that this cable information is currently not  
21 available. Staff knows that underground cable failures are impacting CSP customers'  
22 service based on the annual number of customer interruptions but is unable to

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<sup>13</sup> AEP Ohio's response to Commission Staff's Discovery Request Third Request – Interrogatory Request No. 65

<sup>14</sup> AEP Ohio's response to Commission Staff's Discovery Request Third Request – Interrogatory Request No. 66

1 determine the true magnitude of the problem or the types of cable causing these  
2 interruptions because of the companies' lack of information. Without the cable  
3 mileage information, Staff is unable to estimate the cost to replace or rejuvenate the  
4 affected cable.

5  
6 26. Q. How do the companies determine what cable needs replaced or rejuvenated?

7 A. Company witness Boyd states that the companies determine the need for replacing  
8 underground cable based on the cable age, insulation type, operation history  
9 (including the number of previous failures), digs-ins, soil type, and cable condition<sup>15</sup>.

10  
11 27. Q. How do the companies determine whether to replace or rejuvenate a cable?

12 A. According to the companies' response to Commission Staff's Discovery Request  
13 Third Request – Interrogatory Request No. 68, the companies will only rejuvenate the  
14 underground residential distribution (URD) cable and only if it is in a good physical  
15 condition and is able to properly receive the injected treatment. Company witness  
16 Karl Boyd testified that more than half of the URD cable targeted for this initiative  
17 has received the injected treatment.<sup>16</sup> All other cable failing to meet the companies'  
18 criteria mentioned in the answer to Question 24 above is being replaced.

19 28. Q. What is the average additional in-service life expectancy for the cable that the  
20 companies proposes to restore (rejuvenate) via cable injection?

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<sup>15</sup> Company Witness Karl Boyd's Direct Testimony, Page 32

<sup>16</sup> OCC deposition of AEP Witness Karl Boyd taken on Friday, October 24, 2008, Page 11, Lines 8 through 10

1 A. The companies reported that the manufacturer/vendor of the fluid injected into the  
2 cable backs a warranty that provides for an additional twenty years of in-service life  
3 to the cable that receives the injection.<sup>17</sup>  
4

5 29. Q. Did the companies quantify the improvement in reliability that the customers will  
6 receive by the companies implementing its proposed Enhanced Underground Cable  
7 Initiative?

8 A. Yes. In response to Staff's Data Request 4-2(c), the companies reported that the  
9 Enhanced Underground Cable Initiative has a very nominal impact on SAIFI and  
10 CAIDI across the entire system and is therefore not reflected in the estimated system  
11 reliability improvements provided. But the companies also reported that reliability  
12 would be significantly improved for customers directly affected by this work.  
13

14 30. Q. Did the companies provide a projected cost to implement its Enhanced Underground  
15 Cable Initiative?

16 A. Yes. Company witness Boyd provides the companies' forecasted plan to  
17 replace/rejuvenate 615 line miles of underground power cable during the first three  
18 years of the on-going initiative. The following chart provides the companies'  
19 forecasted incremental cost of the initiative<sup>18</sup>.

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<sup>17</sup> AEP Ohio's response to Commission Staff's Discovery Request Third Request – Interrogatory Request No. 68

<sup>18</sup> From Chart 8 on Page 33 of Company Witness Karl Boyd's Direct Testimony



Chart 5

	Year 1		Year 2		Year 3	
	O&M	Capital	O&M	Capital	O&M	Capital
Underground Cable Initiative	\$1,100,000	\$37,200,000	\$1,700,000	\$39,400,000	\$1,800,000	\$41,700,000
CSP	800,000	27,100,000	1,200,000	28,700,000	1,300,000	30,400,000
OP	300,000	10,100,000	500,000	10,700,000	500,000	11,300,000

31. Q. Does the Staff support the companies' proposed enhanced underground cable initiative?

A. Based on the negative impact that underground cable failures are having on CSP's annual SAIFI, Staff would support an underground cable initiative that would significantly reduce the number cable failures, and that ultimately reduces the number of related customer interruptions. But Staff is unable to support the proposed initiative on a global basis because the companies admittedly reported that their proposed underground cable initiative had a very nominal impact on system SAIFI and CAIDI. Staff therefore questions the effectiveness of the proposal overall on system performance. Staff would certainly expect the companies to continue monitoring situations where customers are impacted by poor performing URD cable, and taking appropriate remedial action.

32. Q. Does the Staff have any concerns or recommendations regarding the companies' Enhanced Underground Cable Initiative?

A. Yes. In order for CSP to meet its annual SAIFI and CAIDI performance targets, CSP needs to be more proactive in addressing underground power cable failures occurring on its system. Since the companies admitted that their proposed initiative is not

capable of meeting this need, Staff recommends that the Commission require the companies to re-submit a more aggressive proposal that addresses significantly more miles of underground power cable each year. Staff emphasizes that this re-submittal needs to be of such substance that implementation would noticeably reduce the number of underground power cable failures. Once the companies re-submit a proposal, the Staff will review the proposal and make further recommendations to the Commission at that time.

33. Q. In summary, what specific companies proposed initiatives does the Staff support?

A. Staff recommends that the Commission require the companies to implement the following list of proposed initiatives.

- Enhanced overhead inspection and mitigation work initiative;
- Replacement of cutouts;
- Installation and replacement of arresters;
- Replacement of three-phase reclosers with three single-phase reclosers;
- Enhance the protection on existing 34.5kV circuits;
- Installation of fault indicators on all three-phase overhead switches, all feeder exit riser poles and underground residential distribution (URD) riser poles; and
- Enhanced vegetation management initiative (includes all of the components listed in response Question 21).

1 34. Q. For each of the proposed initiatives that Staff recommends that the Commission  
2 require the companies to implement, what is Staff's recommendation for cost  
3 recovery?

4 A. Staff Witness J. Edward Hess is providing testimony in this proceeding supporting  
5 Staff's position on cost recovery of each recommended initiative.  
6

7 35. Q. Do you have any other recommendations concerning the performance improvements  
8 of both the Enhanced Vegetation Initiative and the Enhanced Overhead Inspection  
9 and Mitigation Initiative?

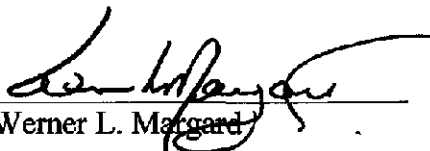
10 A. Staff recommends that the Commission hold the Companies accountable for achieving the  
11 projected reliability improvements associated with these initiatives. Staff also  
12 recommends that the projected reliability improvement should be factored into the  
13 companies system performance when they are considered for revision.  
14

15 36. Q. Does this conclude your testimony?

16 A. Yes.

## PROOF OF SERVICE

I hereby certify that true copy of the foregoing Testimony submitted on behalf of the Staff of the Public Utilities Commission of Ohio, was served by regular U.S. mail, postage prepaid, hand-delivered, and/or delivered via electronic mail, upon the following parties of record, this 7<sup>th</sup> day of November, 2008.

  
Werner L. Margard

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