#### BEFORE THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Annual Report of AEP Ohio Transmission Company Pursuant to Rule 26 of the Electric Service and Safety Standards, Ohio Administrative Code 4901:1-10-26

Case No. 13-996-EL-ESS

#### ANNUAL REPORT OF THE AEP OHIO TRANSMISSION COMPANY COMPANY

Pursuant to Rule 26 of the Electric Service and Safety Standards, Ohio, Administrative Code 4901:1-10-26, AEP Ohio Transmission Company ("CSP") submits the following Annual Report. The Report is attached.

We/I certify that the following Report accurately and completely reflects the Annual Report requirements pursuant to Rule 26 of the Electric Service and Safety Standards, Ohio, Administrative Code 4901:1-10-26

N/A, N/A Responsible For Distribution Reporting

Lisa Barton, Executive Vice President AEP Transmission Responsible For Transmission Reporting

Report Date & Time: March 28, 2013 2:14 pm

Date

Date

a.	b.	с.	d.	e.	f.	g.	h.	i.
Identification of project/program or plan by facility, equipment, or project name	Transmission or distribution ("T" or "D")	Description of project/program and goals of planned investment	Portion of service territory effected	Characteristics of territory effected	Estimated cost for implementation	Date of initiation of program or project	Planned completion date	Actual completion date
TP-2005-004	Т	Retire the 69 kV system in the area, which is approximatekly 90 years old, and transfer the load to a more reliable 138 kV system.	Athens subtrans mission area	This is a load area of about 400 MW.	80,000,000	06/01/2011	03/01/2016	

a.	b.	c.	d.	e.	f.	g.	h.	i.
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TP-2005-059	Т	Construct 138/69 kV station to reinforce Lick-Pedro 69 kV line. Upgrade GOABs to MOABs with SCADA. Upgrade 138 kV CB's at Millbrook Park.	The 69 kV areas between Lick and Millbrook Park stations and the 138 kV areas between Gavin and Millbrook Park stations.	This is a load area of about 50 MW.	25,000,000	06/01/2012	06/30/2014	

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TP-2005-151	Т	New 765/345 kV Vassell Station with 4-750 MVA single phase transformers with a position for a switchable spare. A 345 & 138 kV station with three 345 kV lines & one 138 kV line plus other Columbus Area 138 kV Improvements.	Central Ohio.	Transmissio n Grid impacting over 4,000 MW's of peak load.	186,000,000	06/01/2010	05/01/2014	

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TP-2006-107	Т	Construct 345/138/69 kV station with 2-138 kV outlets and 2-69 kV outlets. Solve loading and low voltage issues under contingency conditions. Convert 1-69/12 kV station to 138/12 kV. Install various 345 kV, 138 kV, and 69 kV breakers to improve area reliability.	This project will reinforce the 138 and 69 kV systems in the southern Ohio area.	This is a load area of about 800 MW.	100,000,000	02/01/2012	06/01/2017	

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TP-2007-020	Т	Install 138/69 kV 130 MVA transformer and Loop Lincoln & Park Substations with about 20 miles of new 69 kV line.	Delaware, Ohio.	Approximatel y 30 MVA.	34,000,000	05/01/2010	12/01/2016	

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TP-2007-122	Т	Enhance the reliabilty of the system in the Mount Vernon and Newark area by enhancing the protection system, replacing obsolete equipment and increasing the capacity of the transmission system.	Mount Vernon and Newark Area improvem ents	This is a load area of about 200 MW.	46,000,000	06/01/2009	06/01/2015	

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TP-2007-153	Т	Convert 34.5 kV subtransmission area to 69 kV at Millbrook Park, Tenth & Offenere, Scioto Trail (OP), and Central Portsmouth stations.	This project will impact the 34.5 kV area of Portsmout h Ohio.	This is a load area of about 40 MW.	22,000,000	01/01/2011	12/01/2013	
TP-2008-024	Т	This project includes rebuilding 5.96 miles of 138 kV line between Sterling and Rockhill Station which will alleviate future overloads identified by PJM.	Lima area.	Commercial, Industrial, and Rural Areas in Lima.	13,051,700	08/27/2010	06/01/2013	

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TP-2008-081	Т	Install 345 kV CB's in West Millersport Station to mitigate a tower outage contingency violation - Islands 345/138 kV transformer and overloads other. RTEP approved. Install 138 kV Line into Gahanna Substation to alleviate PJM identified 138 kV contingenc	West Millerspor t and Eastern Columbus , and Hebron Area	Could impact more than 400 MW's of customer load, Industrial, Commercial and Residential	32,000,000	03/25/2010	12/01/2013	

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TP-2009-120	Т	Un-six-wire the Hyatt - Sawmill 138 kV circuit and install 138 kV station terminal equipment to establish two Hyatt - Sawmill 138 kV circuits including circuit breakers.	Northwest Columbus area.	Approximatel y 400 MW	8,000,000	04/01/2012	06/01/2014	
TP-2009-134	Т	Install a new 69 kV line (6 miles) into West Jefferson to alleviate forecasted 40 kV system overloads w/ Battelle & J.I. Load Increases.	West Jefferson, Ohio.	Approximatel y 25 MVA	13,000,000	01/01/2011	06/01/2013	

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TP-2009-135	Т	Construct new 69kV Switch station to reduce line exposure of Dennison-Miller Switch 69kV line. Add capacitor bank to provide voltage support. Part of the Carrolton Improvements Project.	The project will reinforce the 69kV system in the Dennison Area	This is a load area of about 40 MW.	6,500,000	04/01/2011	10/01/2013	
TP-2009-172	Т	Reconductor the Bixby - Three C - Groves, and the Bixby - Groves 138 kV double circuit lines. Reconductor the Bexley - Groves 138 kV circuit.	Southeast Columbus area.	Approximatel y 400 MVA	9,000,000	02/25/2010	06/01/2014	

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TP-2009-174	Т	Rebuild 19 miles of 138 kV line forecasted to overload by 2014.	Southwes t Columbus & Lancaster	Approximatel y 140 MVA	12,500,000	05/01/2010	05/01/2014	

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TP-2010-110	Т	Create a 138 kV route from Hillsboro station through Highland station to Seaman station via construction / reconfiguration / voltage conversion in order to close the 138 kV loop. Alleviate the voltage drop issues experienced in this area due.	This project will reinforce the 138 systems in the southern Ohio area.	This is a load area of about 800 MW.	30,000,000	03/01/2013	12/31/2015	

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TP-2010-143	Т	Construct Cole 345/138/69 kV station along the Beatty - Hayden 345 kV line. Establish 138 kV loop from Cole to Amlin utilizing the vacant tower position on the Beatty - Hayden 345 kV line. Create 69 kV loop between Trabue - Battelle - Blair - Cole, and	Columbus area.	Approximatel y 4500 MW	90,000,000	01/01/2013	12/01/2016	

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TP-2010-150	Т	Construct 138 kV switch station on Waverly-Adams- Seaman 138 kV line to serve new Buckeye Power delivery point.	This project will impact the Waverly- Adams-S eaman 138 kV line between Waverly station and Seaman station.	This is a load area of about 80 MW.	3,000,000	02/01/2012	12/01/2012	

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TP-2011-027	Т	Install 2-345kV 63kA breaker on the Tangy (O.E.) line, upgrade the line relay and bus differential #1 upgrades. This will eliminate the existing (O.E.) line connection directly to 345kV Bus #1 and it will improve the reliability of the system in case of a line fault or a bus fault.	Western, OH Marysville	Enhancing the reliability of tie lines with First Energy.	2,615,000	12/04/2012	12/31/2014	

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TP-2011-039	Т	Replace existing 138 kV kV breakers and upgrade existing 138 kV station structures/config uration at Millbrook Park in order to improve reliability and prepare for future needs.	This project will impact the 138 kV areas of southern Ohio, especially in the Portsmout h, Ohio area.	This is a load area of about 800 MW.	10,000,000	12/01/2013	06/01/2017	

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TP-2011-046	Т	Establish 69 kV service to Jefferson Industries by converting the the existing West - Jefferson Industries circuit from 40 kV to 69 kV and building a portion of new 69 kV line.	West Jefferson, Ohio	Approximatel y 25 MVA	2,000,000	03/01/2012	06/01/2013	
TP-2011-084	Т	Construct new 69kV Switchstation to serve Aleris Rolled Products located in Newport,Ohio	This project will impact the existing Newcome rstown-De nnison 69kV line.	This is a load area of approximatel y 31 MW.	4,000,000	05/01/2011	11/01/2012	

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TP-2011-086	Т	Rebuild the Jug - Kirk 345 kV line with a 345 & 138 kV double circuit mono pole line.	New Albany to Pataskala , Ohio.	Approximatel y 100 MVA	57,000,000	06/01/2011	12/01/2014	
TP-2012-019	Т	Establish Amlin Station in the Dublin Ohio industrial park area. Build a 138 kV line from Hyatt station utilizing the vacant tower position on the Hayden - Hyatt 345 kV line.	Dublin, Ohio area.	Approximatel y 75 MVA	19,000,000	01/01/2012	06/01/2014	

a.	b.	С.	d.	e.	f.	g.	h.	i.
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TP-2012-038	Т	Construct 69kV station to serve Markwest Energy's gas processing plant located in Cadiz, Ohio.	This project will affect the South Cadiz-Co nsolidatio n Coal 69kV line.	This is a load area of about 45 MW.	10,000,000	01/01/2012	01/31/2013	
TP-2012-041	Т	Construct new 69kV station to serve M3 Midstream Energy's gas processing facility located in Scioto, Ohio.	This project will affect the Dennison- Miller Switch 69kV line.	This is a load area of approximatel y 40 MW.	8,000,000	02/01/2012	06/01/2013	

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TP-2012-094	Т	Construct A 138 kV station to serve Markwest's Processing Plant.	This project will impact the exisitng Summerfi eld - Muskingu m River 138 kV line.	The load in area is close to 50 MW.	9,300,000	11/01/2012	08/01/2013	

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TP-2012-104	Т	Install SCADA control on targeted equipment for improved relability. Upgrade strategic protective 138 and 69 kV devices.	This project will have a positive reliability impact on the 138, 69, and 12 kV systems in the south central Ohio area.	This area of the system is remote from any staffed locations and could greatly benefit from switching devices being operated remotely.	10,000,000	06/01/2013	12/31/2016	

a.	b.	c.	d.	e.	f.	g.	h.	i.
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TP-2012-111	Т	AEP and ATSI 2015 Generation retirements flagged overloads in the Coshocton area and vicinity for which system improvements need to be implemented to alleviate such conditions.	Coshocto n Area and vicinity	Coal-fired generating unit retirements in Ohio by 2015 will cause transmission system overloads in the Coshocton area.	15,000,000	11/01/2012	12/31/2016	

a.	b.	C.	d.	e.	f.	g.	h.	i.
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TP-2012-118	Т	AEP and ATSI 2015 Generation retirements flagged overloads in the Southeastern Ohio area for which system improvements need to be implemented to alleviate such conditions.	Southeast ern Ohio area	Coal-fired generating unit retirements in Ohio by 2015 will cause transmission system overloads in the Coshocton area.	200,000,000	11/01/2012	12/31/2016	

a.	b.	с.	d.	e.	f.	g.	h.	i.
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TP-2012-125	Т	Multiple sag studies that will increase the rating on multiple circuits. Reconductor Kammer-West Bellaire 345kV Circuit with higher capacity conductor.	This project will impact multiple lines in the Eastern Ohio area.	The affected lines do not have enough capacity due to sag limitations or are undersized.	30,000,000	06/01/2012	06/01/2015	

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TP-2012-132	Т	138kV CB '8' at Saint Clair Avenue Station was identified by PJM as an overdutied breaker, B-1746, and needs to be replaced no later than 06/01/2015. Additional breaker replacements were targeted in the Rehab list and it was determine to upgrade all the identified breakers and relays with this project to improve	Columbus , OH North Central Columbus Area: Franklin County	Approximate load in the area is 500 MVA	6,000,000	12/07/2012	12/19/2016	

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		equipment conditions and system reliability with the newer units.						
TP-2012-137	Т	Construct new 69kV station to serve Markwest Energy's fractionation plant.	This project will impact the existing Dillonvale -Amsterd am 69kV line.	This is a load area of about 35 MW.	16,000,000	06/01/2012	06/01/2013	

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TP-2012-161	Т	Construct new 345/138kV Station in Belmont County by tapping the Tidd-Muskingum River 345kV line. Integrate with FE lines in the south.	The project will provide support to Eastern and Western Ohio areas as well as facilitate providing electrical service to future customer s.	This is a load area of about 1,000 MW.	80,000,000	06/01/2012	06/01/2015	

#### 1.a. 4901:1-10-26 (B)(1)(a) Relevant Characteristics Of The Service Territory

Facility Type	Total Overhead Miles	Total Underground Miles	Other Notable Characteristics
Т	61	0	0
D	0	0	

<u>Notes</u>

There are no Distribution Facilities to report.

#### 1.b 4901:1-10-26 (B)(1b) Future investment plan for facilities and equipment (covering period 2012 to 2016)

All Cost	2012		2013	2014	2015	2016
All Cost	Planned	Actual	Planned	Projected	Projected	Projected
D	\$0	\$0	\$0	\$0	\$0	\$0
Т	\$122,381,000	\$146,616,000	\$108,012,000	\$91,277,000	\$63,358,000	\$112,730,000

#### <u>Notes</u>

There are no future investment plan for Distribution facilities and equipment associated with the AEP Ohio Transmission Company.

#### 2. 4901:1-10-26 (B)(1)(d)&(f) Complaints From Other Entities

a.	b.	c.	d.	e.	f.	g.
Complaint(s) from other electric utility companies, regional transmission entity, or competitive retail electric supplier(s) (list individually)	Date complaint received	Nature of complaint	Action taken to address complaint	Complaint resolved (Yes or No)	Date resolved	If unresolved give explanation why

#### <u>Notes</u>

There were no Complaints From Other Entities to report in 2012.

3.a. 4901:1-10-26 (B)(1)(e) Electric Reliability Organization Reliability Standards Violation

Standard number violated	Standard name violated	Date of violation	Violation risk factor	Violation severity factor	Total amount of penalty dollars	Description

<u>Notes</u>

There were no Electric Reliability Organization Reliability Standards Violations to report for 2012.

#### 3.b. 4901:1-10-26 (B)(1)(e) Regional Transmission Organization (RTO) Violations

Name of RTO violation	Description

#### <u>Notes</u>

There were no Regional Transmission Organization (RTO) Violations to report for 2012.

3.c. 4901:1-10-26 (B)(1)(e) Transmission Load Relief (TRL)

TLR Event Start	TLR Event End	Highest TLR level during event	Firm load interrupted	Amount of load (MW) interrupted	Description

#### <u>Notes</u>

There were no Transmission Load Relief (TLRs) to report for 2012.

#### 3.d. 4901:1-10-26 (B)(1)(e) Top Ten Congestion Facilities By Hours Of Congestion

Rank	Description of facility causing congestion

<u>Notes</u>

There were no congested facilities to report for 2012.

3.e. 4901:1-10-26 (B)(1)(e) Annual System Improvement Plan And Regional Transmission Operator (RTO) Expansion Plan

Relationship between annual system improvement plan and RTO transmission expansion plan

The transmission planning process for the AEP Ohio Transmission Company is performed by the AEP Service Corporation and PJM, the Regional Transmission Organization (RTO) that has functional control of the AEP Ohio Transmission Company transmission facilities. The transmission planning process is an open, transparent, and collaborative process that is conducted in accordance with the requirements in FERC Order 890. Through this stakeholder planning process, transmission projects are identified and approved for inclusion in the annual PJM Regional Transmission Expansion Plan (RTEP).
### 4. 4901:1-10-26 (B)(2) Report Of Implementation Plan From Previous Reporting Period

a.	b.	c.	d.	e.	f.
Identification of previously planned action	Transmission or Distribution ("T" or "D")	Planned completion date	Actual completion date of action	Identification of deviation(s) from goals of previous plan	Reason(s) for each identified deviation
TP-2005-004	т	03/01/2016		Deferred project pending further development.	As a new 138 kV line is being built the best route was being selected as there are many natural resources in the area. Project being further scoped as the 138 kV sytem has obsolete equipment. Also enhancing protection sytem.
TP-2005-059	т	06/30/2014		Cost changed.	Better estimates
TP-2005-151	Т	05/01/2014		Project has been in-service date has been accelerated, Project cost has decreased.	The project will now be completed by 2014 summer peak conditions. The project cost has decreased because some of the smaller 138 kV projects were split out from this project.
TP-2006-107	т	06/01/2016		Changed completion date.	Further scoping details and scheduling indicate delays.

4. 4901:1-10-26 (B)(2) Report Of Implementation Plan From Previous Reporting Period ... Continued ...

a.	b.	c.	d.	e.	f.
Identification of previously planned action	Transmission or Distribution ("T" or "D")	Planned Actual Identification of deviation(s) from go of previous plan action		Identification of deviation(s) from goals of previous plan	Reason(s) for each identified deviation
TP-2007-020	Т	12/01/2016		Project in-service date has been delayed. Project cost has increased.	The project is delayed because of funding constraints. The project cost increases were identified when the detailed estimates were completed.
TP-2007-122	Т	06/01/2015		Deferred project pending further development.	Project is being further developed. Also the outages needed will impact the outages for the Southeastern Ohio generation retirement Area upgrades, as these outages can't be done simultaneously. Therefore this project may be deferred an additional outage season.
TP-2007-153	т	12/01/2013		Cost changed.	Better estimates

4. 4901:1-10-26 (B)(2) Report Of Implementation Plan From Previous Reporting Period ... Continued ...

a.	b.	с.	d.	e.	f.
Identification of previously planned action	Transmission or Distribution ("T" or "D")	Planned completion date	Actual completion date of action	Identification of deviation(s) from goals of previous plan	Reason(s) for each identified deviation
TP-2008-024	т	06/01/2013		Project in-service date has been delayed.	The project in-service date is delayed because of outage constraints and trouble with railroad permits.
TP-2008-081	т	12/01/2013		Further development and cost changed.	Station in area being further studied to enhance reliability as well as enhance the protection system.
TP-2009-134	т	06/01/2013		Project in-service date has been delayed.	The project in-service date is delayed because of delays in finalizing enviromental permits and right of way.
TP-2009-174	т	05/01/2014		Project in-service date has been delayed.	The project in-service date is delayed because of outage constraints.
TP-2010-110	Т	12/31/2014		1) Changed initiate date. 2) 1) Approval delays. 2   Cost changed estimates	

4. 4901:1-10-26 (B)(2) Report Of Implementation Plan From Previous Reporting Period ... Continued ...

a.	b.	C.	d.	e.	f.
Identification of previously planned action	Transmission or Distribution ("T" or "D")	Planned completion date	Actual completion date of action	Identification of deviation(s) from goals of previous plan	Reason(s) for each identified deviation
TP-2010-150	Т	06/01/2013		Changed completion date.	138 kV work is done. Delay in obtaining necessary ROW and outages to complete 69 kV work.
TP-2011-039	Т	06/01/2017		Deferred project pending further development.	Available space limits improvement options so additional planning and development is required.
TP-2011-086	т	12/01/2014		Project in-service date has been delayed.	The project in-service date is delayed because of outage constraints.
TP-2012-019	т	06/01/2014		Project in-service date has been delayed. Project cost has increased.	The transmission customer no longer needed service by 12/31/2013. The project cost increases were identified when the detailed estimates were completed.

### 5. 4901:1-10-26 (B)(3)(a) Characterization Of Condition Of Company's System

	a.	b.
Type of System	Qualitative characterization of condition or system	Explanation of criteria used in making assessment for each characterization
T	The initial construction of overhead and underground facilities follows AEPs material and construction standards that incorporate National Electric Safety Code requirements. These standards were adopted to safely and reliably operate AEPs extensive transmission and distribution system in its 11-state service area. Once built and energized, the facilities are subject to mechanical and electrical stresses from various causes, including conductor and equipment loadings, severe weather, accidents and vandalism. These conditions will eventually lead to the need for maintenance, repair or replacement of the assets. Industry research and AEPs experience and expertise in the construction, operation and maintenance of transmission and distribution systems in varied geographic and demographic areas are applied to manage and maintain AEPs assets. AEP develops objectives and plans to achieve optimal performance in a safe and reliable manner over the expected life of asset, while at the same time balancing costs and benefits. An example of this type of planning can be demonstrated in AEPs annual operation and maintenance plans.	AEP Transmission Operations continually monitors the operational performance of its transmission system. As necessary, corrective actions are taken by Operations to ensure the safe and reliable operation of the system during normal, as well as, contingency conditions. During contingency conditions, Transmission Operations directs the necessary switching to isolate faulted equipment and restore service to customers impacted by the outage. Transmission Operations is also responsible for approving facility maintenance outages to ensure the outage does not adversely impact safe and reliable operation of the transmission system. AEP Transmission Planning periodically evaluates the anticipated performance of the transmission system over a planning horizon. As system performance deficiencies are identified and evaluated, appropriate area reinforcement plans are developed and implemented to ensure safe and reliable operation of the transmission system. The performance of existing facilities is also monitored by the Transmission Region Operation Groups. As needed, facilities are scheduled for maintenance or replaced as part of AEP's on-going rehabilitation. The proposed system reinforcements and system rehabilitation plan for the next several years are discussed in Section B(1).
D	N/A	N/A

**Notes** 

There is no Characterization Of Condition Of Company's System for Distribution. AEP Ohio Transmission Company is a Transmission-only company.

### 6. 4901:1-10-26 (B)(3)(b) Safety and Reliability Complaints

	a.
Type of system	Total number of safety & reliability complaints received directly from customers

#### <u>Notes</u>

There were no Safety and Reliability Complaints to report in 2012.

### 6.a. 4901:1-10-26 (B)(3)(b) Safety and Reliability Complaints Detailed Report

	1.	2.	3.	4.	5.	6.	7.
Type of system	Availability of service	Damage	Momentary interruption	Out of service	Quality of utility product	Repair service	Public safety

#### <u>Notes</u>

There were no Safety and Reliability Complaints to report in 2012.

### 7.a. 4901:1-10-26 (B)(3)(c) Transmission Capital Expenditures - Reliability Specific

Total transmission Investment = \$269,870,524

Account \ SubAccount	2012 budget	Budget as percent of investment	2012 actual	Actual as percent of investment	2013 budget	Current as percent of investment	Explanation of variance if over 10%
Construction Transmission FERC ACCOUNTS 107	122,381,000	45.35%	146,616,000	54.33%	108,012,000	40.02%	Increase due to station equipment purchases/replacements and the June 29, 2012 Derecho wind storm.

### 7.b. 4901:1-10-26 (B)(3)(c) Transmission Maintenance Expenditures - Reliability Specific

Total transmission investment = \$269,870,524

Account \ SubAccount	2012 Budget	Budget as percent of investment	2012 Actual	Actual as percent of investment	2013 Budget	Current as percent of investment	Explanation of variance if over 10%
Electric Transmission Operations FERC ACCOUNTS 560 through 567	1,276,000	0.47%	295,000	0.11%	4,043,000	1.50%	Lower than antcipated cost of outside services.
Electric Transmission Maintenance FERC ACCOUNTS 568 through 573	48,000	0.02%	25,000	0.01%	149,000	0.06%	Not material.

#### <u>Notes</u>

Transmission dollars have been rounded to the nearest 000's.

### 8.a. 4901:1-10-26 (B)(3)(d) Distribution Capital Expenditures - Reliability Specific

Total distribution investment =

Account \ SubAccount	Budget	Budget as percent of investment	Actual	Actual as percent of investment	Budget	Current as percent of investment	Explanation of variance if over 10%
		0.00%		0.00%		0.00%	

#### <u>Notes</u>

There were no Distribution Capital Expenditures.

### 8.b. 4901:1-10-26 (B)(3)(d) Distribution Maintenance Expenditures - Reliability Specific

#### Total distribution investment =

Account \ SubAccount	Budget	Budget as percent of investment	Actual	Actual as percent of investment	Budget	Current as percent of investment	Explanation of variance if over 10%
		0.00%		0.00%		0.00%	

#### Notes

There were no Distribution Maintenance Expenditures.

9. 4901:1-10-26 (B)(3)(e) Average Remaining Depreciation Life Of Distribution And Transmission Facilities

a.	b.	C.	d.	e.	f.	g.	h.
Transmission or distribution ("T" or "D")	Asset Type	Asset's assigned FERC subaccount (account/sub account)	Total depreciable life of asset	Total depreciated life of asset	Total remaining life of asset	Percent of average remaining depreciation life of asset	Depreciation of how age was determined
D			0	0.00	0	0.00%	
Т	OH Cond. & Devices	356	80	5.00	75	93.75%	Asset Remaining Life (Yrs) determined based on Depreciable Plant Base minus Accumulated Provision for Depreciation divided by the Depreciable Plant Base times the applied depreciation rate. FERC Form 1 – Pages 207, 219 and 337.

9. 4901:1-10-26 (B)(3)(e) Average Remaining Depreciation Life Of Distribution And Transmission Facilities ... Continued ...

a.	b.	с.	d.	e.	f.	g.	h.
Transmission or distribution ("T" or "D")	Asset Type	Asset's assigned FERC subaccount (account/sub account)	Total depreciable life of asset	Total depreciated life of asset	Total remaining life of asset	Percent of average remaining depreciation life of asset	Depreciation of how age was determined
т	Poles & Fixtures	355	57	12.00	45	78.95%	Asset Remaining Life (Yrs) determined based on Depreciable Plant Base minus Accumulated Provision for Depreciation divided by the Depreciable Plant Base times the applied depreciation rate. FERC Form 1 – Pages 207, 219 and 337.
Т	Station Equipment	353	50	0.00	50	100.00%	Asset Remaining Life (Yrs) determined based on Depreciable Plant Base minus Accumulated Provision for Depreciation divided by the Depreciable Plant Base times the applied depreciation rate. FERC Form 1 – Pages 207, 219 and 337.

9. 4901:1-10-26 (B)(3)(e) Average Remaining Depreciation Life Of Distribution And Transmission Facilities ... Continued ...

a.	b.	с.	d.	e.	f.	g.	h.
Transmission or distribution ("T" or "D")	Asset Type	Asset's assigned FERC subaccount (account/sub account)	Total depreciable life of asset	Total depreciated life of asset	Total remaining life of asset	Percent of average remaining depreciation life of asset	Depreciation of how age was determined
Т	Structures & Improvements	352	75	8.00	67	89.33%	Asset Remaining Life (Yrs) determined based on Depreciable Plant Base minus Accumulated Provision for Depreciation divided by the Depreciable Plant Base times the applied depreciation rate. FERC Form 1 – Pages 207, 219 and 337.
Т	Underground Conductor	358	60	13.00	47	78.33%	Asset Remaining Life (Yrs) determined based on Depreciable Plant Base minus Accumulated Provision for Depreciation divided by the Depreciable Plant Base times the applied depreciation rate. FERC Form 1 – Pages 207, 219 and 337.

9. 4901:1-10-26 (B)(3)(e) Average Remaining Depreciation Life Of Distribution And Transmission Facilities ... Continued ...

a.	b.	с.	d.	е.	f.	g.	h.
Transmission or distribution ("T" or "D")	Asset Type	Asset's assigned FERC subaccount (account/sub account)	Total depreciable life of asset	Total depreciated life of asset	Total remaining life of asset	Percent of average remaining depreciation life of asset	Depreciation of how age was determined
Т	Underground Conduit	357	55	0.00	55	100.00%	Asset Remaining Life (Yrs) determined based on Depreciable Plant Base minus Accumulated Provision for Depreciation divided by the Depreciable Plant Base times the applied depreciation rate. FERC Form 1 – Pages 207, 219 and 337.

#### Notes

Note (1): Transmission assets noted above do not include Accounts 350, 359, and 359.1. Accounts 350 - Land and Land Rights, 359 - Roads and Trails, and 359.1 - Asset Retirement Costs for Transmission Plant represent non-depreciable assets. Note (2): There

a.	b.	с.	d.	e.
Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program name	Program goals	Achieve ("Y" or "N")	Summary of findings
DS	D - Capacitor Banks	The goals are to (1) prevent unplanned outages or failures by identifying and correcting problems during scheduled inspections; and (2) reduce safety hazards, customer outages and associated call-outs for capacitor bank problems by replacing limited lifetime components in a timely manner.	Y	The maintenance performed on capacitor banks during 2012 was the result of monthly station inspections and periodic infrared inspections. Because capacitor banks have few moving parts most of the problems found were blown fuses and deformed or ruptured cans. As the problems were identified the items were replaced as soon as the equipment was available and the work could be performed.
D	D - Circuit and Line Inspections	Conduct overhead circuit inspections based on a five year cycle that results in an annual inspection of 20% of the overhead distribution facilities.	Y	N/A

a.	b.	с.	d.	е.
Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program name	Program goals	Achieve ("Y" or "N")	Summary of findings
DS	D - Circuit Breakers and Reclosers	The goals of this program are to (1) prevent misoperations or failures by identifying and correcting problems during scheduled inspections and (2) reduce safety hazards, customer outages and associated call-outs for circuit breaker problems by replacing limited lifetime components in a timely manner.	Y	External inspections & maintenance: 2012 Goal = 0; 2012 Results = 0 (100% of goal achieved); Internal inspections & maintenance: 2012 Goal = 0; 2012 Results = 0 (100% of goal achieved);
D	D - Conductors (Overhead Conductor Replacement)	Replacement of overhead conductors installation based on age, condition and reliability history.	Y	N/A
D	D - Conductors (Underground Cable Rejuvenation)	Replacement of primary underground cable based on age, condition and reliability history.	Y	N/A
D	D - Conductors (Underground Cable Replacement)	Rejuvenation of primary underground cable based on age, condition and reliability history.	Y	N/A

a.	b.	с.	d.	е.
Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program name	Program goals	Achieve ("Y" or "N")	Summary of findings
D	D - Line Capacitors	Inspect all line capacitors annually.	Y	N/A
D	D - Line Electronic Reclosers (Inspections)	Full inspection annually plus a second inspection each year for battery check.	Y	N/A
D	D - Line NonElectronic Reclosers (Inspections)	Inspect all nonelectronic line reclosers annually.	Y	N/A
D	D - Line Reclosers (Maintenance)	Maintain reclosers on a 6 (+/-) year cycle.	Y	N/A
D	D - Line Reclosers (New Vacuum Replacements)	Replace hydraulic reclosers with new vacuum interrupting reclosers	Y	N/A
D	D - Network System (Vaults)	Inspect all vaults annually.	Y	N/A
D	D - Network System (Manholes)	Inspect network manholes on a four year cycle.	Y	N/A

a.	b.	с.	d.	е.
Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program name	Program goals	Achieve ("Y" or "N")	Summary of findings
D	D - Network System (Protectors)	Inspect all network protectors annually.	Y	N/A
D	D - Network System (Transformers)	Inspect all network transformers annually.	Y	N/A
D	D - Padmounted Transformers	Five year inspection cycle of underground primary and secondary enclosures.	Y	N/A
D	D - Poles (Inspection)	The program consists of a detailed inspection of company owned wood poles once every 10 years for all non-CCA poles in service 15 years or longer and CCA poles in service pre-1986.	Y	N/A
D	D - Poles (Reinforcement)	Reinforcement of poles with internal or external decay and inadequate strength.	Y	N/A

a.	b.	с.	d.	е.
Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program name	Program goals	Achieve ("Y" or "N")	Summary of findings
D	D - Poles (Replacement)	Replacement of poles with internal or external decay and inadequate strength that are not reinforceable.	Y	N/A
D	D - Poles (Treatment)	Treatment of poles with internal or external decay but adequate strength.	Y	N/A

a.	b.	с.	d.	е.
Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program name	Program goals	Achieve ("Y" or "N")	Summary of findings
DS	D - Protection and Control	Protective relaying schemes continually monitor the power system and protect lines and station equipment from damage by isolating those facilities from system disturbances. These sophisticated protective systems are designed to minimize the number of customer outages, safety issues and pieces of equipment affected. The objectives of the maintenance program are to prevent misoperation or failures of station equipment; minimize customer outages; minimize maintenance call-outs and maximize the life of station equipment.	Y	D-Calibrations on discrete relays: 2012 Goal = 0 2012 Results = 0 (100% of goal achieved); D-Functional trip tests on relay trip paths: 2012 Goal = 0; 2012 Results = 0 (100% of goal achieved);

a.	b.	с.	d.	е.
Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program name	Program goals	Achieve ("Y" or "N")	Summary of findings
D	D - Right-of-Way Vegetation Control	Vegetation management is a long term program (more than a year or two) and contains work prescriptions which include: type of treatment (mechanical, manual, herbicide) based on tree and environmental conditions; priority and schedule of treatment by line/circuit; and cost of treatment. As the plan progresses over time, these work prescriptions will change based on the size and type of vegetation. The initial prescription for clearing an easement may include several types of activity such as: trimming, removing, mowing and spraying. AEP's Forestry staff and contractors continuously work to insure the appropriate prescription is utilized to increase effectiveness and efficiency.	Y	N/A

a.	b.	с.	d.	e.
Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program name	Program goals	Achieve ("Y" or "N")	Summary of findings
DS	D - Station Inspections	The goals are to (1) prevent unplanned outages or failures and/or safety hazards by identifying and correcting problems during scheduled inspections; and (2) reduce customer outages and associated call-outs for station problems by detecting problems and correcting them in a timely manner.	Y	2012 Goal = inspect 0 D-stations on a monthly basis; 2012 Results = inspected 0 D-stations on a monthly basis. (100% of goal achieved since one station was retired.).

a.	b.	с.	d.	е.
Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program name	Program goals	Achieve ("Y" or "N")	Summary of findings
DS	D - Transformers	The goals of this program are to (1) prevent unplanned outages or failures by identifying and correcting problems during scheduled inspections; (2) reduce safety hazards, customer outages and associated call-outs for transformer problems by replacing limited lifetime components in a timely manner; and (3) utilize best practices and technology to achieve optimum loading of all transformers.	Y	Minor external inspections & maintenance: 2012 Goal = 0; 2012 Results = 0 (100% of goal achieved); Major internal inspections & maintenance: 2012 Goal = 0; 2012 Results = 0 (100% of goal achieved); Data gathered as part of the monthly station inspections programs will be continually monitored and evaluated. Major transformer maintenance will be scheduled should equipment conditions warrant this action.

a.	b.	с.	d.	е.
Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program name	Program goals	Achieve ("Y" or "N")	Summary of findings
DS	D - Voltage Regulators	The goals are to (1) prevent unplanned outages or failures by identifying and correcting problems during scheduled inspections; and (2) reduce safety hazards, customer outages and associated call-outs for voltage regulator problems by replacing limited lifetime components in a timely manner.	Y	The maintenance performed on voltage regulators during 2012 was the result of monthly station inspections and periodic infrared inspections. Typical problems discovered are loose connections, control cabinet problems, or control problems associated with an excessive number of tap changer operations. These problems when found are either resolved at that time or subsequently scheduled for repair or replacement of the voltage regulator.

a.	b.	с.	d.	e.
Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program name	Program goals	Achieve ("Y" or "N")	Summary of findings
TS	T - Capacitor Banks	The goals are to (1) prevent unplanned outages or failures by identifying and correcting problems during scheduled inspections; and (2) reduce safety hazards, customer outages and associated call-outs for capacitor bank problems by replacing limited lifetime components in a timely manner.	Y	The maintenance performed on capacitor banks during 2012 was the result of monthly station inspections and periodic infrared inspections. Because capacitor banks have few moving parts most of the problems found were blown fuses and deformed or ruptured cans. As the problems were identified the items were replaced as soon as the equipment was available and the work could be performed.

a.	b.	с.	d.	е.
Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program name	Program goals	Achieve ("Y" or "N")	Summary of findings
TS	T - Circuit Breakers and Reclosers	The goals of this program are to (1) prevent misoperations or failures by identifying and correcting problems during scheduled inspections; and (2) reduce safety hazards, customer outages and associated call-outs for circuit breaker problems by replacing limited lifetime components in a timely manner.	Y	External inspections & maintenance: 2012 Goal = 0; 2012 Results = 0 (100% of goal achieved); Internal inspections & maintenance: 2012 Goal = 0 2012 Results = 0 (100% of goal achieved);
т	T - Line Inspections	The intent of line inspections is to check the present condition of a line and determine if any of its components exhibit a near term potential to fail and cause an outage or a safety problem.	Y	2012 Goal = inspect 58 T-line miles; 2012 Results = 100% of transmission lines inspected.
Т	T - Line Maintenance	The intent of line maintenance is to avoid line outages and/or safety concerns whenever practical and to minimize the duration of outages when they occur.	Y	OHTCO remedied 11 identified T-line problems in 2012.

a.	b.	с.	d.	e.
Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program name	Program goals	Achieve ("Y" or "N")	Summary of findings
TS	T - Protection and Control	Protective relaying schemes continually monitor the power system and protect lines and station equipment from damage by isolating those facilities from system disturbances. These sophisticated protective systems are designed to minimize the number of customer outages, safety issues and pieces of equipment affected. The objectives of the maintenance program are to prevent misoperation or failures of station equipment; minimize customer outages; minimize maintenance call-outs and maximize the life of station equipment.	Y	T-Calibrations on discrete relays: 2012 Goal = 0; 2012 Results = 0 (100% of goal achieved); T-Functional trip tests on relay trip paths: 2012 Goal = 0; 2012 Results = 0 (100% of goal achieved)

a.	b.	с.	d.	е.
Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program name	Program goals	Achieve ("Y" or "N")	Summary of findings
Т	T - Right-of-Way Vegetation Control	The intent of right of way maintenance is to minimize line outages and/or safety hazards caused by vegetation growing too near energized conductors. Trees, shrubs and vines that have the potential to grow or fall into transmission lines must be removed or their growth contained.	Y	2012 Goal = maintain 17.9 miles of T-line right-of-way; 2012 Results = maintained 18 miles. (101% of goal achieved)
TS	T - Station Inspections	The goals are to (1) prevent unplanned outages or failures and/or safety hazards by identifying and correcting problems during scheduled inspections; and (2) reduce customer outages and associated call-outs for station problems by detecting problems and correcting them in a timely manner.	Y	2012 Goal = inspect 0 T-stations on a monthly basis; 2012 Results = inspected 0 T-stations on a monthly basis. (100% of goal achieved).

a.	b.	с.	d.	е.
Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program name	Program goals	Achieve ("Y" or "N")	Summary of findings
TS	T - Transformers	The goals of this program are to (1) prevent unplanned outages or failures by identifying and correcting problems during scheduled inspections; (2) reduce safety hazards, customer outages and associated call-outs for transformer problems by replacing limited lifetime components in a timely manner; and (3) utilize best practices and technology to achieve optimum loading of all transformers.	Y	Minor external inspections & maintenance: 2012 Goal = 0; 2012 Results = 0 (100% of goal achieved); Major internal inspections & maintenance: 2012 Goal = 0; 2012 Results = 0 (100% of goal achieved); Data gathered as part of the monthly station inspections programs will be continually monitored and evaluated. Major transformer maintenance will be scheduled should equipment conditions warrant this action.

10. 4901:1-10-26 (B)(3)(f)(i) & (ii) Inspection, Maintenance, Repair And Replacement Distribution, Transmission And Substation Programs Summary Report ... Continued ...

a.	b.	с.	d.	е.
Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program name	Program goals	Achieve ("Y" or "N")	Summary of findings
TS	T - Voltage Regulators	The goals are to (1) prevent unplanned outages or failures by identifying and correcting problems during scheduled inspections; and (2) reduce safety hazards, customer outages and associated call-outs for voltage regulator problems by replacing limited lifetime components in a timely manner.	Y	The maintenance performed on voltage regulators during 2012 was the result of monthly station inspections and periodic infrared inspections. Typical problems discovered are loose connections, control cabinet problems, or control problems associated with an excessive number of tap changer operations. These problems when found are either resolved at that time or subsequently scheduled for repair or replacement of the voltage regulator.

#### <u>Notes</u>

There are no Distribution assets associated with AEP Ohio Transmission Company.

10.a. 4901:1-10-26 (B)(3)(f)(i) If Response In Column "d" Of Report 10 Is "Yes"

1.	2.	3.	4.	5.
Program name	Explanation of how goal were achieved	Description of extent of achievement	Quantitative description of goal in either numerical values or percentages	Quantitative description of actual performance in either numerical values or percentages

### 10.a. 4901:1-10-26 (B)(3)(f)(i) If Response In Column "d" Of Report 10 Is "Yes"

1.	2.	3.	4.	5.
Program name	Explanation of how goal were achieved	Description of extent of achievement	Quantitative description of goal in either numerical values or percentages	Quantitative description of actual performance in either numerical values or percentages
D - Capacitor Banks GOAL - The goals are to (1) prevent unplanned outages or failures by identifying and correcting problems during scheduled inspections; and (2) reduce safety hazards, customer outages and associated call-outs for capacitor bank problems by replacing limited lifetime components in a timely manner.	Reliable operation of capacitor banks requires that all components of these devices and their associated switchgear is in serviceable condition. These devices have relatively few mechanical parts that require special attention. The maintenance program for capacitor banks includes procedures that provide for testing and planned maintenance to assure the integrity of these components and the overall performance of the capacitor bank.	Maintenance was performed, as necessary, on distribution station capacitor banks as identified during monthly station inspections and periodic infrared inspections.	Since capacitor banks are comprised of sealed units, with essentially no moving parts, minimal maintenance is required. Any maintenance that is required is normally scheduled to coincide with station breaker maintenance.	The maintenance performed on capacitor banks was the result of monthly station inspections and periodic infrared inspections. Because capacitor banks have few moving parts most of the problems found were blown fuses and deformed or ruptured cans. As the problems were identified the items were replaced as soon as the equipment was available and the work could be

### 10.a. 4901:1-10-26 (B)(3)(f)(i) If Response In Column "d" Of Report 10 Is "Yes"

1.	2.	3.	4.	5.
Program name	Explanation of how goal were achieved	Description of extent of achievement	Quantitative description of goal in either numerical values or percentages	Quantitative description of actual performance in either numerical values or percentages
				performed.
D - Circuit and Line Inspections	N/A	N/A	N/A	N/A
GOAL - Conduct overhead circuit inspections based on a five year cycle that results in an annual inspection of 20% of the overhead distribution facilities.				

### 10.a. 4901:1-10-26 (B)(3)(f)(i) If Response In Column "d" Of Report 10 Is "Yes" ... Continued ...

1.	2.	3.	4.	5.
Program name	Explanation of how goal were achieved	Description of extent of achievement	Quantitative description of goal in either numerical values or percentages	Quantitative description of actual performance in either numerical values or percentages
D - Circuit Breakers and Reclosers GOAL - The goals of this program are to (1) prevent misoperations or failures by identifying and correcting problems during scheduled inspections and (2) reduce safety hazards, customer outages and associated call-outs for circuit breaker problems by replacing limited lifetime components in a timely manner.	Preventive maintenance on circuit breakers and reclosers is evolving from traditional time-based maintenance to Condition Based Maintenance (CBM), which includes time and operation intervals. Some of the principles of Reliability Centered Maintenance (RCM) are also being applied. RCM focuses on the reliability of components and is triggered by conditions that exist such as the total number of operations that have occurred since the last maintenance, which indicates the amount of duty (or use) the operating mechanism has incurred.	The 2012 goals for distribution circuit breaker and reclosure inspection and maintenance were achieved.	2012 Goal = 0 external inspections & maintenance 2012 Goal = 0 internal inspections & maintenance.	2012 Results = 0 external inspections & maintenance. (100% of goal achieved) 2012 Results = 0 internal inspections & maintenance. (100% of goal achieved)
1.	2.	3.	4.	5.
---	--	--------------------------------------	---	--
Program name	Explanation of how goal were achieved	Description of extent of achievement	Quantitative description of goal in either numerical values or percentages	Quantitative description of actual performance in either numerical values or percentages
D - Conductors (Overhead Conductor Replacement) GOAL - Replacement of overhead conductors installation based on age, condition and reliability history.	N/A	N/A	N/A	N/A
D - Conductors (Underground Cable Rejuvenation) GOAL - Replacement of primary underground cable based on age, condition and reliability history.	N/A	N/A	N/A	N/A

1.	2.	3.	4.	5.
Program name	Explanation of how goal were achieved	Description of extent of achievement	Quantitative description of goal in either numerical values or percentages	Quantitative description of actual performance in either numerical values or percentages
D - Conductors (Underground Cable Replacement) GOAL - Rejuvenation of primary underground cable based on age, condition and reliability history.	N/A	N/A	N/A	N/A
D - Line Capacitors GOAL - Inspect all line capacitors annually.	N/A	N/A	N/A	N/A
D - Line Electronic Reclosers (Inspections) GOAL - Full inspection annually plus a second inspection each year for battery check.	N/A	N/A	N/A	N/A

1.	2.	3.	4.	5.
Program name	Explanation of how goal were achieved	Description of extent of achievement	Quantitative description of goal in either numerical values or percentages	Quantitative description of actual performance in either numerical values or percentages
D - Line NonElectronic Reclosers (Inspections)	N/A	N/A	N/A	N/A
GOAL - Inspect all nonelectronic line reclosers annually.				
D - Line Reclosers (Maintenance)	N/A	N/A	N/A	N/A
GOAL - Maintain reclosers on a 6 (+/-) year cycle.				
D - Line Reclosers (New Vacuum Replacements)	N/A	N/A	N/A	N/A
GOAL - Replace hydraulic reclosers with new vacuum interrupting reclosers				

1.	2.	3.	4.	5.
Program name	Explanation of how goal were achieved	Description of extent of achievement	Quantitative description of goal in either numerical values or percentages	Quantitative description of actual performance in either numerical values or percentages
D - Network System (Vaults) GOAL - Inspect all vaults	N/A	N/A	N/A	N/A
annually.				
D - Network System (Manholes)	N/A	N/A	N/A	N/A
GOAL - Inspect network manholes on a four year cycle.				
D - Network System (Protectors)	N/A	N/A	N/A	N/A
GOAL - Inspect all network protectors annually.				

1.	2.	3.	4.	5.
Program name	Explanation of how goal were achieved	Description of extent of achievement	Quantitative description of goal in either numerical values or percentages	Quantitative description of actual performance in either numerical values or percentages
D - Network System (Transformers) GOAL - Inspect all network transformers annually.	N/A	N/A	N/A	N/A
D - Padmounted Transformers GOAL - Five year inspection cycle of underground primary and secondary enclosures.	N/A	N/A	N/A	N/A

1.	2.	3.	4.	5.
Program name	Explanation of how goal were achieved	Description of extent of achievement	Quantitative description of goal in either numerical values or percentages	Quantitative description of actual performance in either numerical values or percentages
D - Poles (Inspection) GOAL - The program consists of a detailed inspection of company owned wood poles once every 10 years for all non-CCA poles in service 15 years or longer and CCA poles in service pre-1986.	N/A	N/A	N/A	N/A
D - Poles (Reinforcement) GOAL - Reinforcement of poles with internal or external decay and inadequate strength.	N/A	N/A	N/A	N/A

1.	2.	3.	4.	5.
Program name	Explanation of how goal were achieved	Description of extent of achievement	Quantitative description of goal in either numerical values or percentages	Quantitative description of actual performance in either numerical values or percentages
D - Poles (Replacement) GOAL - Replacement of poles with internal or external decay and inadequate strength that are not reinforceable.	N/A	N/A	N/A	N/A
D - Poles (Treatment) GOAL - Treatment of poles with internal or external decay but adequate strength.	N/A	N/A	N/A	N/A

1.	2.	3.	4.	5.
Program name	Explanation of how goal were achieved	Description of extent of achievement	Quantitative description of goal in either numerical values or percentages	Quantitative description of actual performance in either numerical values or percentages
D - Protection and Control GOAL - Protective relaying schemes continually monitor the power system and protect lines and station equipment from damage by isolating those facilities from system disturbances. These sophisticated protective systems are designed to minimize the number of customer outages, safety issues and pieces of equipment affected. The objectives of the maintenance program are to prevent misoperation or failures of station equipment; minimize customer outages; minimize maintenance	Protective relaying schemes continually monitor the power system and protect lines and station equipment from damage by isolating those facilities from system disturbances. These sophisticated protective systems are designed to minimize the number of customer outages, safety issues and pieces of equipment affected. The objectives of the maintenance program are to prevent misoperation or failures of station equipment; minimize customer outages; minimize maintenance call-outs and maximize the life of station equipment.	The 2012 goals for distribution station discrete relay calibrations and trip path functional tests were achieved and exceeded.	2012 Goal = 0 D - discrete relay calibrations; 2012 Goal = 0 D - funcional trip tests on relay trip paths.	2012 Results = 0 calibrations on discrete relays. (100% of goal achieved); 2012 Results = 0 functional trip tests on relay trip paths. (100% of goal achieved)

1.	2.	3.	4.	5.
Program name	Explanation of how goal were achieved	Description of extent of achievement	Quantitative description of goal in either numerical values or percentages	Quantitative description of actual performance in either numerical values or percentages
call-outs and maximize the life of station equipment.				

1.	2.	3.	4.	5.
Program name	Explanation of how goal were achieved	Description of extent of achievement	Quantitative description of goal in either numerical values or percentages	Quantitative description of actual performance in either numerical values or percentages
D - Right-of-Way Vegetation Control GOAL - Vegetation management is a long term program (more than a year or two) and contains work prescriptions which include: type of treatment (mechanical, manual, herbicide) based on tree and environmental conditions; priority and schedule of treatment by line/circuit; and cost of treatment. As the plan progresses over time, these work prescriptions will change based on the size and type of vegetation. The initial prescription for clearing an	N/A	N/A	N/A	N/A

1.	2.	3.	4.	5.
Program name	Explanation of how goal were achieved	Description of extent of achievement	Quantitative description of goal in either numerical values or percentages	Quantitative description of actual performance in either numerical values or percentages
easement may include several types of activity such as: trimming, removing, mowing and spraying. AEP's Forestry staff and contractors continuously work to insure the appropriate prescription is utilized to increase effectiveness and efficiency.				

1.	2.	3.	4.	5.
Program name	Explanation of how goal were achieved	Description of extent of achievement	Quantitative description of goal in either numerical values or percentages	Quantitative description of actual performance in either numerical values or percentages
D - Station Inspections GOAL - The goals are to (1) prevent unplanned outages or failures and/or safety hazards by identifying and correcting problems during scheduled inspections; and (2) reduce customer outages and associated call-outs for station problems by detecting problems and correcting them in a timely manner.	Each distribution station is inspected monthly. Identified problems are noted on the inspection report and any serious condition is immediately reported to maintenance personnel.	The 2012 goal for distribution station inspections on a monthly basis was achieved.	2012 Goal = inspect 0 D-stations on a monthly basis.	2012 Results = inspected 0 D-stations on a monthly basis. (100% of goal achieved since one station was retired.).

1.	2.	3.	4.	5.
Program name	Explanation of how goal were achieved	Description of extent of achievement	Quantitative description of goal in either numerical values or percentages	Quantitative description of actual performance in either numerical values or percentages
D - Transformers GOAL - The goals of this program are to (1) prevent unplanned outages or failures by identifying and correcting problems during scheduled inspections; (2) reduce safety hazards, customer outages and associated call-outs for transformer problems by replacing limited lifetime components in a timely manner; and (3) utilize best practices and technology to achieve optimum loading of all transformers.	Reliable operation of transformers requires that all components of these devices be in serviceable condition. These devices have a number of mechanical and electrical parts that require special attention. The maintenance program for transformers includes procedures that provide for monitoring, testing and planned maintenance to assure the integrity of these components and the overall performance of the transformers.	The 2012 goals for distribution station transformer inspections and maintenance were achieved.	2012 Goal = 0 minor external inspections & maintenance and 0 major internal inspections & maintenance.	2012 Results = 0 minor external inspections & maintenance. (100% of goal achieved); Data gathered as part of the monthly station inspections programs will be continually monitored and evaluated. Major transformer maintenance will be scheduled should equipment conditions warrant this action. 0 major internal inspection was completed in 2012. (100% of goal achieved).

1.	2.	3.	4.	5.
Program name	Explanation of how goal were achieved	Description of extent of achievement	Quantitative description of goal in either numerical values or percentages	Quantitative description of actual performance in either numerical values or percentages
D - Voltage Regulators GOAL - The goals are to (1) prevent unplanned outages or failures by identifying and correcting problems during scheduled inspections; and (2) reduce safety hazards, customer outages and associated call-outs for voltage regulator problems by replacing limited lifetime components in a timely manner.	Reliable operation of voltage regulators requires that all components of these devices be in serviceable condition. These devices have a number of mechanical and electrical parts that require special attention. The maintenance program for voltage regulators includes procedures that provide for testing and planned maintenance to assure the integrity of these components and the overall performance of the voltage regulators.	Maintenance was performed, as necessary, on distribution station feeder regulators and/or bus regulators as identified during monthly station inspections.	Based on experience and results of previous monthly station inspections, no distribution station feeder or bus regulator maintenance was planned in 2012 for OHTCO voltage regulators. Data from monthly station inspection programs is continually monitored	The maintenance performed on voltage regulators was the result of monthly station inspections and periodic infrared inspections. Typical problems discovered are loose connections, control cabinet problems, or control problems associated with an excessive number of tap changer operations. These problems when found are either resolved at that time or subsequently

1.	2.	3.	4.	5.
Program name	Explanation of how goal were achieved	Description of extent of achievement	Quantitative description of goal in either numerical values or percentages	Quantitative description of actual performance in either numerical values or percentages
				scheduled for repair or replacement of the voltage regulator.

1.	2.	3.	4.	5.
Program name	Explanation of how goal were achieved	Description of extent of achievement	Quantitative description of goal in either numerical values or percentages	Quantitative description of actual performance in either numerical values or percentages
T - Capacitor Banks GOAL - The goals are to (1) prevent unplanned outages or failures by identifying and correcting problems during scheduled inspections; and (2) reduce safety hazards, customer outages and associated call-outs for capacitor bank problems by replacing limited lifetime components in a timely manner.	Reliable operation of capacitor banks requires that all components of these devices and their associated switchgear is in serviceable condition. These devices have relatively few mechanical parts that require special attention. The maintenance program for capacitor banks includes procedures that provide for testing and planned maintenance to assure the integrity of these components and the overall performance of the capacitor bank.	Maintenance was performed, as necessary, on transmission station capacitor banks as identified during monthly station inspections and periodic infrared inspections.	Since capacitor banks are comprised of sealed units, with essentially no moving parts, minimal maintenance is required. Any maintenance that is required is normally scheduled to coincide with station breaker maintenance.	The maintenance performed on capacitor banks was the result of monthly station inspections and periodic infrared inspections. Because capacitor banks have few moving parts most of the problems found were blown fuses and deformed or ruptured cans. As the problems were identified the items were replaced as soon as the equipment was available and the work could be

1.	2.	3.	4.	5.
Program name	Explanation of how goal were achieved	Description of extent of achievement	Quantitative description of goal in either numerical values or percentages	Quantitative description of actual performance in either numerical values or percentages
				performed.
T - Circuit Breakers and Reclosers GOAL - The goals of this program are to (1) prevent misoperations or failures by identifying and correcting problems during scheduled inspections; and (2) reduce safety hazards, customer outages and associated call-outs for circuit breaker problems by replacing limited lifetime components in a timely manner.	Preventive maintenance on circuit breakers and reclosers is evolving from traditional time-based maintenance to Condition Based Maintenance (CBM), which includes time and operation intervals. Some of the principles of Reliability Centered Maintenance (RCM) are also being applied. RCM focuses on the reliability of components and is triggered by conditions that exist such as the total number of operations that have occurred since the last maintenance, which indicates the amount of duty (or use) the operating mechanism has incurred.	The 2012 goals for transmission circuit breaker and reclosure inspection and maintenance were achieved and exceeded.	2012 Goal = 0 external inspections & maintenance; 2012 Goal = 0 internal inspections & maintenance.	2012 Results = 0 external inspections & maintenance (100% of goal achieved); 2012 Results = 0 internal inspections & maintenance (100% of goal achieved).

1.	2.	3.	4.	5.
Program name	Explanation of how goal were achieved	Description of extent of achievement	Quantitative description of goal in either numerical values or percentages	Quantitative description of actual performance in either numerical values or percentages
T - Line Inspections GOAL - The intent of line inspections is to check the present condition of a line and determine if any of its components exhibit a near term potential to fail and cause an outage or a safety problem.	OHTCO has a total of 58 miles of transmission lines ranging from 69 kV to 138 kV in voltage. Various types of construction have been used over the years ranging from typical wood pole structures to large lattice towers. Inspection methods vary and can be performed from the air, ground, or by climbing a structure. All structures or a few targeted structures in a line may be inspected at a given time utilizing one or more inspection methods.	2012 goal for transmission line inspections was achieved.	2012 Goal = Inspect 58 T-line miles.	2012 Results = 100% of OHTCO transmission lines inspected.

1.	2.	3.	4.	5.
Program name	Explanation of how goal were achieved	Description of extent of achievement	Quantitative description of goal in either numerical values or percentages	Quantitative description of actual performance in either numerical values or percentages
T - Line Maintenance GOAL - The intent of line maintenance is to avoid line outages and/or safety concerns whenever practical and to minimize the duration of outages when they occur.	Data collected as part of the line inspection program is analyzed and categorized to establish a work plan. The most serious items detected that can lead to line outages and/or safety hazards, such as broken poles or cross-arms, are scheduled for prompt corrective action. Less serious problems, such as loose bolts or broken ground wires, which have little or no chance of causing outages or safety issues are catalogued as non-critical and scheduled for replacement or repair in a timely, but less critical manner. Typically, these problems are corrected as general line maintenance is performed but, in some cases, may become part of a capital line rebuild or rehabilitation program.	2012 maintenance was scheduled and performed, as necessary, on transmission lines issues that were identified during inspections.	The 2012 goal was to schedule and perform transmission line maintenance, as necessary, based on issues identified during inspections.	The number of identified problems remedied in OHTCO during 2012 is 11. Additionally, many corrective actions were made to facilities during restoration efforts following major storm activities.

1.	2.	3.	4.	5.
Program name	Explanation of how goal were achieved	Description of extent of achievement	Quantitative description of goal in either numerical values or percentages	Quantitative description of actual performance in either numerical values or percentages
T - Protection and Control GOAL - Protective relaying schemes continually monitor the power system and protect lines and station equipment from damage by isolating those facilities from system disturbances. These sophisticated protective systems are designed to minimize the number of customer outages, safety issues and pieces of equipment affected. The objectives of the maintenance program are to prevent misoperation or failures of station equipment; minimize customer outages; minimize maintenance	Protective relaying schemes continually monitor the power system and protect lines and station equipment from damage by isolating those facilities from system disturbances. These sophisticated protective systems are designed to minimize the number of customer outages, safety issues and pieces of equipment affected. The objectives of the maintenance program are to prevent misoperation or failures of station equipment; minimize customer outages; minimize maintenance call-outs and maximize the life of station equipment.	The 2012 goals for transmission station discrete relay calibrations and trip path functional tests were achieved.	2012 Goal = 0 T - discrete relay calibrations; 2012 Goal = 0 T - functional trip tests on relay trip paths.	2012 Results = 0 calibrations on discrete relays. (100% of goal achieved); 2012 Results = 0 functional trip tests on relay trip paths. (100% of goal achieved).

1.	2.	3.	4.	5.
Program name	Explanation of how goal were achieved	Description of extent of achievement	Quantitative description of goal in either numerical values or percentages	Quantitative description of actual performance in either numerical values or percentages
call-outs and maximize the life of station equipment.				
T - Right-of-Way Vegetation Control GOAL - The intent of right of way maintenance is to minimize line outages and/or safety hazards caused by vegetation growing too near energized conductors. Trees, shrubs and vines that have the potential to grow or fall into transmission lines must be removed or their growth contained.	Data from bi-annual aerial inspections and ongoing ground inspections are used to prioritize schedules and plan the most efficient maintenance techniques. These plans are then implemented by our foresters.	The 2012 goal for transmission line right-of-way vegetation control was achieved and exceeded.	2012 Goal = maintain 17.9 miles of T-line right-of-way	2012 Results = maintained 18 miles. (101% of goal achieved)

1.	2.	3.	4.	5.
Program name	Explanation of how goal were achieved	Description of extent of achievement	Quantitative description of goal in either numerical values or percentages	Quantitative description of actual performance in either numerical values or percentages
T - Station Inspections GOAL - The goals are to (1) prevent unplanned outages or failures and/or safety hazards by identifying and correcting problems during scheduled inspections; and (2) reduce customer outages and associated call-outs for station problems by detecting problems and correcting them in a timely manner.	Each transmission station is inspected monthly. Identified problems are noted on the inspection report and any serious condition is immediately reported to maintenance personnel.	The 2012 goal for transmission station inspections on a monthly basis was achieved.	2012 Goal = inspect 0 T-stations on a monthly basis.	2012 Results = inspected 0 T-stations on a monthly basis. (100% of goal achieved).

1.	2.	3.	4.	5.
Program name	Explanation of how goal were achieved	Description of extent of achievement	Quantitative description of goal in either numerical values or percentages	Quantitative description of actual performance in either numerical values or percentages
T - Transformers GOAL - The goals of this program are to (1) prevent unplanned outages or failures by identifying and correcting problems during scheduled inspections; (2) reduce safety hazards, customer outages and associated call-outs for transformer problems by replacing limited lifetime components in a timely manner; and (3) utilize best practices and technology to achieve optimum loading of all transformers.	Reliable operation of transformers requires that all components of these devices be in serviceable condition. These devices have a number of mechanical and electrical parts that require special attention. The maintenance program for transformers includes procedures that provide for monitoring, testing and planned maintenance to assure the integrity of these components and the overall performance of the transformers.	The 2012 goal for transmission transformer inspection and maintenance were achieved.	2012 Goal = 0 minor external inspections & maintenance and 0 major internal inspection & maintenance .	2012 Results = 0 minor external inspections & maintenance. (100% of goal achieved); Data gathered as part of the monthly station inspections programs will be continually monitored and evaluated. Major transformer maintenance will be scheduled should equipment conditions warrant this action. 0 major internal inspection was completed in 2012. (100% of goal achieved).

1.	2.	3.	4.	5.
Program name	Explanation of how goal were achieved	Description of extent of achievement	Quantitative description of goal in either numerical values or percentages	Quantitative description of actual performance in either numerical values or percentages
T - Voltage Regulators GOAL - The goals are to (1) prevent unplanned outages or failures by identifying and correcting problems during scheduled inspections; and (2) reduce safety hazards, customer outages and associated call-outs for voltage regulator problems by replacing limited lifetime components in a timely manner.	Reliable operation of voltage regulators requires that all components of these devices be in serviceable condition. These devices have a number of mechanical and electrical parts that require special attention. The maintenance program for voltage regulators includes procedures that provide for testing and planned maintenance to assure the integrity of these components and the overall performance of the voltage regulators.	Maintenance was performed, as necessary, on transmission station feeder regulators and/or bus regulators as identified during monthly station inspections.	Based on experience and results of previous monthly station inspections, no transmission station feeder or bus regulator maintenance was planned in 2012 for OHTCO voltage regulators. Data from monthly station inspection programs is continually monitored	The maintenance performed on voltage regulators was the result of monthly station inspections and periodic infrared inspections. Typical problems discovered are loose connections, control cabinet problems, or control problems associated with an excessive number of tap changer operations. These problems when found are either resolved at that time or subsequently

#### 10.a. 4901:1-10-26 (B)(3)(f)(i) If Response In Column "d" Of Report 10 Is "Yes" ... Continued ...

1.	2.	3.	4.	5.
Program name	Explanation of how goal were achieved	Description of extent of achievement	Quantitative description of goal in either numerical values or percentages	Quantitative description of actual performance in either numerical values or percentages
				scheduled for repair or replacement of the voltage regulator.

#### <u>Notes</u>

There are no Distribution assets associated with AEP Ohio Transmission Company.

#### 10b. 4901:1-10-26 (B)(3)(f)(i) If Response In Column "D" Of Report 10 Is "No"

1.	2.	3.	4.	5.
Program name	Cause(s) for not achieving goal(s)	Description of level of completion of goal	Quantitative description of goal in either numerical values or percentages	Quantitative description of level of completion of goal in either numerical values or percentages

#### <u>Notes</u>

There are no Distribution assets associated with AEP Ohio Transmission Company.

10.c. 4901:1-10-26 (B)(3)(f)(iii) Remedial Activity

1.	2.	3.	4.	5.	6.	7.
Program name	Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program finding(s) causing remedial activity	Remedial activity performed	Actual completion date	Remedial activity yet to be performed	Estimated completion date

#### 10.c. 4901:1-10-26 (B)(3)(f)(iii) Remedial Activity

1.	2.	3.	4.	5.	6.	7.
Program name	Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program finding(s) causing remedial activity	Remedial activity performed	Actual completion date	Remedial activity yet to be performed	Estimated completion date
D - Capacitor Banks GOAL - The goals are to (1) prevent unplanned outages or failures by identifying and correcting problems during scheduled inspections; and (2) reduce safety hazards, customer outages and associated call-outs for capacitor bank problems by replacing limited lifetime components in a timely manner.	DS	Prior to each peak load season (winter and/or summer) station capacitor banks are checked, typically during a monthly station inspection, to make sure that the unit is operating properly and will be available when called upon to support system voltages. Should a component failure, such as a capacitor can, fuse or vacuum bottle, be identified as part of the monthly station inspections, the failed unit is simply replaced with a new unit. Typically these repairs are made shortly after	Prior to each peak load season (winter and/or summer) station capacitor banks are checked, typically during a monthly station inspection, to make sure that the unit is operating properly and will be available when called upon to support system voltages. Should a component failure, such as a capacitor can, fuse or vacuum bottle, be identified as part of the monthly station inspections, the failed unit is simply replaced with a new unit. Typically these repairs are made shortly after	12/31/2012	Prior to each peak load season (winter and/or summer) station capacitor banks are checked, typically during a monthly station inspection, to make sure that the unit is operating properly and will be available when called upon to support system voltages. Should a component failure, such as a capacitor can, fuse or vacuum bottle, be identified as part of the monthly station inspections, the failed unit is simply replaced with a new unit. Typically these repairs are made shortly after the condition is identified.	12/31/2012

10.c. 4901:1-10-26 (B)(3)(f)(iii) Remedial Activity

1.	2.	3.	4.	5.	6.	7.
Program name	Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program finding(s) causing remedial activity	Remedial activity performed	Actual completion date	Remedial activity yet to be performed	Estimated completion date
		the condition is identified.	the condition is identified.			
D - Circuit and Line Inspections GOAL - Conduct overhead circuit inspections based on a five year cycle that results in an annual inspection of 20% of the overhead distribution facilities.	D	N/A	N/A	12/31/2012	N/A	12/31/2012

1.	2.	3.	4.	5.	6.	7.
Program name	Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program finding(s) causing remedial activity	Remedial activity performed	Actual completion date	Remedial activity yet to be performed	Estimated completion date
D - Circuit Breakers and Reclosers GOAL - The goals of this program are to (1) prevent misoperations or failures by identifying and correcting problems during scheduled inspections and (2) reduce safety hazards, customer outages and associated call-outs for circuit breaker problems by replacing limited lifetime components in a timely manner.	DS	Of the maintenance performed on substation circuit breakers and reclosers during 2012, typical problems discovered are summarized as follows - bushings that exhibited elevated power factor test results, gas leaks, deteriorated oil based on test results, deteriorated or worn internal tank components (interrupters, elevated contact resistance, moisture intrusion), compressor system problems, and mechanism problems.	Typical remediation for bushings that exhibited elevated power factor readings would be an accelerated testing schedule or a scheduled replacement. Gas leaks are addressed based on the severity and the location of the gas leak. If the gas leak is severe, a complete overhaul of the circuit breaker may be required which would be scheduled as soon as practical. Deteriorated oil is typically cleaned and reclaimed by filtering at the time of the circuit breaker/recloser internal inspection, or replaced with new oil if the level	12/31/2012	Typical remediation for bushings that exhibited elevated power factor readings would be an accelerated testing schedule or a scheduled replacement. Gas leaks are addressed based on the severity and the location of the gas leak. If the gas leak is severe, a complete overhaul of the circuit breaker may be required which would be scheduled as soon as practical. Deteriorated oil is typically cleaned and reclaimed by filtering at the time of the circuit breaker/recloser internal inspection, or replaced with new oil if the level of deterioration warrants.	12/31/2012

1.	2.	3.	4.	5.	6.	7.
Program name	Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program finding(s) causing remedial activity	Remedial activity performed	Actual completion date	Remedial activity yet to be performed	Estimated completion date
			of deterioration warrants. Deteriorated or worn internal components are typically replaced or repaired during the circuit breaker/recloser internal inspection, however, judgment is used on continued serviceability and the circuit breaker may be placed on an accelerated inspection schedule. Compressor system problems and mechanism problems are addressed when found as these conditions can affect the timing and operation of the circuit breaker or recloser. Any moisture		Deteriorated or worn internal components are typically replaced or repaired during the circuit breaker/recloser internal inspection, however, judgment is used on continued serviceability and the circuit breaker may be placed on an accelerated inspection schedule. Compressor system problems and mechanism problems are addressed when found as these conditions can affect the timing and operation of the circuit breaker or recloser. Any moisture intrusion is typically corrected at the time of the internal inspection.	

1.	2.	3.	4.	5.	6.	7.
Program name	Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program finding(s) causing remedial activity	Remedial activity performed	Actual completion date	Remedial activity yet to be performed	Estimated completion date
			intrusion is typically corrected at the time of the internal inspection.			
D - Conductors (Overhead Conductor Replacement)	D					
GOAL - Replacement of overhead conductors installation based on age, condition and reliability history.						

1.	2.	3.	4.	5.	6.	7.
Program name	Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program finding(s) causing remedial activity	Remedial activity performed	Actual completion date	Remedial activity yet to be performed	Estimated completion date
D - Conductors (Underground Cable Rejuvenation) GOAL - Replacement of primary underground cable based on age, condition and reliability history.	D					
D - Conductors (Underground Cable Replacement) GOAL - Rejuvenation of primary underground cable based on age, condition and reliability history.	D					

1.	2.	3.	4.	5.	6.	7.
Program name	Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program finding(s) causing remedial activity	Remedial activity performed	Actual completion date	Remedial activity yet to be performed	Estimated completion date
D - Line Capacitors GOAL - Inspect all line capacitors annually.	D	N/A	N/A	12/31/2012	N/A	12/31/2012
D - Line Electronic Reclosers (Inspections) GOAL - Full inspection annually plus a second inspection each year for battery check.	D	N/A	N/A	12/31/2012	N/A	12/31/2012

1.	2.	3.	4.	5.	6.	7.
Program name	Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program finding(s) causing remedial activity	Remedial activity performed	Actual completion date	Remedial activity yet to be performed	Estimated completion date
D - Line NonElectronic Reclosers (Inspections) GOAL - Inspect all nonelectronic line reclosers annually.	D	N/A	N/A	12/31/2012	N/A	12/31/2012
D - Line Reclosers (Maintenance) GOAL - Maintain reclosers on a 6 (+/-) year cycle.	D	N/A	N/A	12/31/2012	N/A	12/31/2012

1.	2.	3.	4.	5.	6.	7.
Program name	Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program finding(s) causing remedial activity	Remedial activity performed	Actual completion date	Remedial activity yet to be performed	Estimated completion date
D - Line Reclosers (New Vacuum Replacements) GOAL - Replace hydraulic reclosers with new vacuum interrupting reclosers	D	N/A	N/A	12/31/2012	N/A	12/31/2012
D - Network System (Vaults) GOAL - Inspect all vaults annually.	D	N/A	N/A	12/31/2012	N/A	12/31/2012
D - Network System (Manholes) GOAL - Inspect network manholes on a four year cycle.	D	N/A	N/A	12/31/2012	N/A	12/31/2012
1.	2.	3.	4.	5.	6.	7.
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Program name	Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program finding(s) causing remedial activity	Remedial activity performed	Actual completion date	Remedial activity yet to be performed	Estimated completion date
D - Network System (Protectors) GOAL - Inspect all network protectors annually.	D	N/A	N/A	12/31/2012	N/A	12/31/2012
D - Network System (Transformers) GOAL - Inspect all network transformers annually.	D	N/A	N/A	12/31/2012	N/A	12/31/2012
D - Padmounted Transformers GOAL - Five year inspection cycle of underground primary and secondary enclosures.	D					

1.	2.	3.	4.	5.	6.	7.
Program name	Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program finding(s) causing remedial activity	Remedial activity performed	Actual completion date	Remedial activity yet to be performed	Estimated completion date
D - Poles (Inspection) GOAL - The program consists of a detailed inspection of company owned wood poles once every 10 years for all non-CCA poles in service 15 years or longer and CCA poles in service pre-1986.	D	N/A	N/A	12/31/2012	N/A	12/31/2012
D - Poles (Reinforcement) GOAL - Reinforcement of poles with internal or external decay and inadequate strength.	D	N/A	N/A	12/31/2012	N/A	12/31/2012

1.	2.	3.	4.	5.	6.	7.
Program name	Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program finding(s) causing remedial activity	Remedial activity performed	Actual completion date	Remedial activity yet to be performed	Estimated completion date
D - Poles (Replacement) GOAL - Replacement of poles with internal or external decay and inadequate strength that are not reinforceable.	D	N/A	N/A	12/31/2012	N/A	12/31/2012
D - Poles (Treatment) GOAL - Treatment of poles with internal or external decay but adequate strength.	D	N/A	N/A	12/31/2012	N/A	12/31/2012

1.	2.	3.	4.	5.	6.	7.
Program name	Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program finding(s) causing remedial activity	Remedial activity performed	Actual completion date	Remedial activity yet to be performed	Estimated completion date
D - Protection and Control GOAL - Protective relaying schemes continually monitor the power system and protect lines and station equipment from damage by isolating those facilities from system disturbances. These sophisticated protective systems are designed to minimize the number of customer outages, safety issues and pieces of equipment affected. The objectives of the maintenance program	DS	Most of the relay systems were found to be in good operating condition and did not require any corrective maintenance. In some instances, the Protection and Control maintenance program identified relays and relay schemes that were inoperative or partially inoperative due to dirty contacts, coils, associated wiring, or other components. Relays that were found to be inaccurate or inoperative were recalibrated or in some cases replaced if the physical condition warranted. Relay	Any deficiencies identified were either rectified at the time of discovery or as soon as replacement parts were available. The problems that were identified and corrected helped to ensure the safety of our system, reduce outages to customers, and prevent possible damage to other power system equipment.	12/31/2012	Any deficiencies identified were either rectified at the time of discovery or as soon as replacement parts were available. The problems that were identified and corrected helped to ensure the safety of our system, reduce outages to customers, and prevent possible damage to other power system equipment.	12/31/2012

1.	2.	3.	4.	5.	6.	7.
Program name	Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program finding(s) causing remedial activity	Remedial activity performed	Actual completion date	Remedial activity yet to be performed	Estimated completion date
are to prevent misoperation or failures of station equipment; minimize customer outages; minimize maintenance call-outs and maximize the life of station equipment.		schemes that failed to operate as designed due to component failure were restored to full functionality through a number of means including the cleaning of contacts, the adjustment of components, and the replacement of failed parts.				

1.	2.	3.	4.	5.	6.	7.
Program name	Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program finding(s) causing remedial activity	Remedial activity performed	Actual completion date	Remedial activity yet to be performed	Estimated completion date
D - Right-of-Way Vegetation Control GOAL - Vegetation management is a long term program (more than a year or two) and contains work prescriptions which include: type of treatment (mechanical, manual, herbicide) based on tree and environmental conditions; priority and schedule of treatment by line/circuit; and cost	D					
of treatment. As the plan progresses over time, these work prescriptions will						

1.	2.	3.	4.	5.	6.	7.
Program name	Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program finding(s) causing remedial activity	Remedial activity performed	Actual completion date	Remedial activity yet to be performed	Estimated completion date
change based on the size and type of vegetation. The initial prescription for clearing an easement may include several types of activity such as: trimming, removing, mowing and spraying. AEP's Forestry staff and contractors continuously work to insure the appropriate prescription is utilized to increase effectiveness and efficiency.						

1.	2.	3.	4.	5.	6.	7.
Program name	Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program finding(s) causing remedial activity	Remedial activity performed	Actual completion date	Remedial activity yet to be performed	Estimated completion date
D - Station Inspections GOAL - The goals are to (1) prevent unplanned outages or failures and/or safety hazards by identifying and correcting problems during scheduled inspections; and (2) reduce customer outages and associated call-outs for station problems by detecting problems and correcting them in a timely manner.	DS	The replacement of burned out control panel and equipment lights are accomplished during the inspection. Also, station batteries are inspected for corroded terminals and any abnormal cells. Terminals are cleaned and any abnormalities are reported into the tablet computers. Battery ground lights are checked which could indicate a possible ground in the DC system, and the overall battery voltage and battery charger voltage and current are taken and recorded, with the battery charger output	Typically many of the minor items discovered as part of the Station Inspection Program can be and are remedied during the inspection. The level of resources required and the severity of the findings determine the scheduling and response if the situation cannot be dealt with during the time of the inspection.	12/31/2012	Typically many of the minor items discovered as part of the Station Inspection Program can be and are remedied during the inspection. The level of resources required and the severity of the findings determine the scheduling and response if the situation cannot be dealt with during the time of the inspection.	12/31/2012

1.	2.	3.	4.	5.	6.	7.
Program name	Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program finding(s) causing remedial activity	Remedial activity performed	Actual completion date	Remedial activity yet to be performed	Estimated completion date
		voltage adjusted as necessary during the inspection. Control house heaters, air conditioning units or heat pumps are checked to ensure these devices are operating properly. Station grounds are inspected with special attention to the fence and gates to ensure the station is secure. Any problems with the fence or gate are repaired. If permanent repairs cannot be completed at this time it is noted in the tablet computers are made. During the inspection personnel				

1.	2.	3.	4.	5.	6.	7.
Program name	Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program finding(s) causing remedial activity	Remedial activity performed	Actual completion date	Remedial activity yet to be performed	Estimated completion date
		inspect the yards, structures and equipment for broken insulators, bird nests and other yard debris.				

1.	2.	3.	4.	5.	6.	7.
Program name	Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program finding(s) causing remedial activity	Remedial activity performed	Actual completion date	Remedial activity yet to be performed	Estimated completion date
D - Transformers GOAL - The goals of this program are to (1) prevent unplanned outages or failures by identifying and correcting problems during scheduled inspections; (2) reduce safety hazards, customer outages and associated call-outs for transformer problems by replacing limited lifetime components in a timely manner; and (3) utilize best practices and technology to achieve optimum loading of all	DS	Of the maintenance performed on substation transformers during 2012, typical problems discovered are summarized as follows - bushings that exhibited elevated power factor test results, surge arresters that were found deteriorated by test, minor oil leaks, cooling system debris, temperature gauge problems, Load Tap Changer (LTC) contact wear, minor gas system leaks, and Load Tap Changer (LTC) filtration unit problems.	Typical remediation for bushings that exhibited elevated power factor readings would be an accelerated testing schedule or a scheduled replacement. Surge arresters found deteriorated based on test results are addressed by an accelerated testing schedule or a scheduled replacement. Typically, most minor oil leaks and minor gas system leaks are addressed in as much as practical on site during preventive maintenance however, leaks that cannot be easily repaired would be scheduled for repair	12/31/2012	Typical remediation for bushings that exhibited elevated power factor readings would be an accelerated testing schedule or a scheduled replacement. Surge arresters found deteriorated based on test results are addressed by an accelerated testing schedule or a scheduled replacement. Typically, most minor oil leaks and minor gas system leaks are addressed in as much as practical on site during preventive maintenance however, leaks that cannot be easily repaired would be scheduled for repair	12/31/2012

1.	2.	3.	4.	5.	6.	7.
Program name	Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program finding(s) causing remedial activity	Remedial activity performed	Actual completion date	Remedial activity yet to be performed	Estimated completion date
transformers.			based on the severity of the condition and the level of resources required. Load Tap Changer contacts exhibiting excessive wear are generally replaced during the LTC inspection process and LTC filtration units are maintained as conditions warrant. Debris in transformer cooling systems (radiators) are typically removed when found, however, transformers with coolers instead of radiators require high-pressure washing which must be scheduled. Defective gauges found are either		based on the severity of the condition and the level of resources required. Load Tap Changer contacts exhibiting excessive wear are generally replaced during the LTC inspection process and LTC filtration units are maintained as conditions warrant. Debris in transformer cooling systems (radiators) are typically removed when found, however, transformers with coolers instead of radiators require high-pressure washing which must be scheduled. Defective gauges found are either recalibrated or scheduled	

1.	2.	3.	4.	5.	6.	7.
Program name	Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program finding(s) causing remedial activity	Remedial activity performed	Actual completion date	Remedial activity yet to be performed	Estimated completion date
			recalibrated or scheduled for replacement in the normal course of business.		for replacement in the normal course of business.	

1.	2.	3.	4.	5.	6.	7.
Program name	Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program finding(s) causing remedial activity	Remedial activity performed	Actual completion date	Remedial activity yet to be performed	Estimated completion date
D - Voltage Regulators GOAL - The goals are to (1) prevent unplanned outages or failures by identifying and correcting problems during scheduled inspections; and (2) reduce safety hazards, customer outages and associated call-outs for voltage regulator problems by replacing limited lifetime components in a timely manner.	DS	Typical problems discovered are loose connections, control cabinet problems, or control problems associated with an excessive number of tap changer operations. These problems when found are either resolved at that time or subsequently scheduled for repair or replacement of the voltage regulator.	Typical problems discovered are loose connections, control cabinet problems, or control problems associated with an excessive number of tap changer operations. These problems when found are either resolved at that time or subsequently scheduled for repair or replacement of the voltage regulator.	12/31/2012	Typical problems discovered are loose connections, control cabinet problems, or control problems associated with an excessive number of tap changer operations. These problems when found are either resolved at that time or subsequently scheduled for repair or replacement of the voltage regulator.	12/31/2012

1.	2.	3.	4.	5.	6.	7.
Program name	Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program finding(s) causing remedial activity	Remedial activity performed	Actual completion date	Remedial activity yet to be performed	Estimated completion date
T - Capacitor Banks GOAL - The goals are to (1) prevent unplanned outages or failures by identifying and correcting problems during scheduled inspections; and (2) reduce safety hazards, customer outages and associated call-outs for capacitor bank problems by replacing limited lifetime components in a timely manner.	TS	Prior to each peak load season (winter and/or summer) station capacitor banks are checked, typically during a monthly station inspection, to make sure that the unit is operating properly and will be available when called upon to support system voltages. Should a component failure, such as a capacitor can, fuse or vacuum bottle, be identified as part of the monthly station inspections, the failed unit is simply replaced with a new unit. Typically these repairs are made shortly after	Prior to each peak load season (winter and/or summer) station capacitor banks are checked, typically during a monthly station inspection, to make sure that the unit is operating properly and will be available when called upon to support system voltages. Should a component failure, such as a capacitor can, fuse or vacuum bottle, be identified as part of the monthly station inspections, the failed unit is simply replaced with a new unit. Typically these repairs are made shortly after	12/31/2012	Prior to each peak load season (winter and/or summer) station capacitor banks are checked, typically during a monthly station inspection, to make sure that the unit is operating properly and will be available when called upon to support system voltages. Should a component failure, such as a capacitor can, fuse or vacuum bottle, be identified as part of the monthly station inspections, the failed unit is simply replaced with a new unit. Typically these repairs are made shortly after the condition is identified.	12/31/2012

1.	2.	3.	4.	5.	6.	7.
Program name	Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program finding(s) causing remedial activity	Remedial activity performed	Actual completion date	Remedial activity yet to be performed	Estimated completion date
		the condition is identified.	the condition is identified.			

1.	2.	3.	4.	5.	6.	7.
Program name	Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program finding(s) causing remedial activity	Remedial activity performed	Actual completion date	Remedial activity yet to be performed	Estimated completion date
T - Circuit Breakers and Reclosers GOAL - The goals of this program are to (1) prevent misoperations or failures by identifying and correcting problems during scheduled inspections; and (2) reduce safety hazards, customer outages and associated call-outs for circuit breaker problems by replacing limited lifetime components in a timely manner.	TS	Of the maintenance performed on substation circuit breakers and reclosers during 2012, typical problems discovered are summarized as follows - bushings that exhibited elevated power factor test results, gas leaks, deteriorated oil based on test results, deteriorated or worn internal tank components (interrupters, elevated contact resistance, moisture intrusion), compressor system problems, and mechanism problems.	Typical remediation for bushings that exhibited elevated power factor readings would be an accelerated testing schedule or a scheduled replacement. Gas leaks are addressed based on the severity and the location of the gas leak. If the gas leak is severe, a complete overhaul of the circuit breaker may be required which would be scheduled as soon as practical. Deteriorated oil is typically cleaned and reclaimed by filtering at the time of the circuit breaker/recloser internal inspection, or replaced with new oil if the level	12/31/2012	Typical remediation for bushings that exhibited elevated power factor readings would be an accelerated testing schedule or a scheduled replacement. Gas leaks are addressed based on the severity and the location of the gas leak. If the gas leak is severe, a complete overhaul of the circuit breaker may be required which would be scheduled as soon as practical. Deteriorated oil is typically cleaned and reclaimed by filtering at the time of the circuit breaker/recloser internal inspection, or replaced with new oil if the level of deterioration warrants.	12/31/2012

1.	2.	3.	4.	5.	6.	7.
Program name	Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program finding(s) causing remedial activity	Remedial activity performed	Actual completion date	Remedial activity yet to be performed	Estimated completion date
			of deterioration warrants. Deteriorated or worn internal components are typically replaced or repaired during the circuit breaker/recloser internal inspection, however, judgment is used on continued serviceability and the circuit breaker may be placed on an accelerated inspection schedule. Compressor system problems and mechanism problems are addressed when found as these conditions can affect the timing and operation of the circuit breaker or recloser. Any moisture		Deteriorated or worn internal components are typically replaced or repaired during the circuit breaker/recloser internal inspection, however, judgment is used on continued serviceability and the circuit breaker may be placed on an accelerated inspection schedule. Compressor system problems and mechanism problems are addressed when found as these conditions can affect the timing and operation of the circuit breaker or recloser. Any moisture intrusion is typically corrected at the time of the internal inspection.	

1.	2.	3.	4.	5.	6.	7.
Program name	Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program finding(s) causing remedial activity	Remedial activity performed	Actual completion date	Remedial activity yet to be performed	Estimated completion date
			intrusion is typically corrected at the time of the internal inspection.			

1.	2.	3.	4.	5.	6.	7.
Program name	Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program finding(s) causing remedial activity	Remedial activity performed	Actual completion date	Remedial activity yet to be performed	Estimated completion date
T - Line Inspections GOAL - The intent of line inspections is to check the present condition of a line and determine if any of its components exhibit a near term potential to fail and cause an outage or a safety problem.	Т	A major portion of the conditions found involved structural components such as poles, crossarms, guying and hardware. Insulator problems (chipped, burned, broken) and conductor/shieldwire problems were the next largest group of conditions found. Relatively fewer conditions involved transmission corridor problems such as easement encroachments, landslides or washouts. Various miscellaneous conditions were also noted including, among	The line conditions remedied included the most severe structural conditions while the more moderate structural conditions were noted for subsequent corrective action. Defective insulators requiring immediate attention were also replaced. Urgent transmission corridor problems were dealt with immediately, while others may require longer-term litigation or engineering studies to resolve. Additionally, many corrective actions were made to facilities during restoration efforts	07/30/2012	The line conditions remedied included the most severe structural conditions while the more moderate structural conditions were noted for subsequent corrective action. Defective insulators requiring immediate attention were also replaced. Urgent transmission corridor problems were dealt with immediately, while others may require longer-term litigation or engineering studies to resolve. Additionally, many corrective actions were made to facilities during restoration efforts following major storm activity.	07/30/2012

1.	2.	3.	4.	5.	6.	7.
Program name	Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program finding(s) causing remedial activity	Remedial activity performed	Actual completion date	Remedial activity yet to be performed	Estimated completion date
		other things, missing structure numbering signs, damaged FAA markings and foreign attachments.	following major storm activity.			

1.	2.	3.	4.	5.	6.	7.
Program name	Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program finding(s) causing remedial activity	Remedial activity performed	Actual completion date	Remedial activity yet to be performed	Estimated completion date
T - Line Maintenance GOAL - The intent of line maintenance is to avoid line outages and/or safety concerns whenever practical and to minimize the duration of outages when they occur.	Т	Data collected as part of the line inspection program is analyzed and categorized to establish a work plan. The most serious items detected that can lead to line outages and/or safety hazards, such as broken poles or cross-arms, are scheduled for prompt corrective action. Less serious problems, such as loose bolts or broken ground wires, which have little or no chance of causing outages or safety issues are catalogued as non-critical and scheduled for replacement or repair in	Typically, these problems are corrected as general line maintenance is performed but, in some cases, may become part of a capital line rebuild or rehabilitation program.	03/29/2012	Typically, these problems are corrected as general line maintenance is performed but, in some cases, may become part of a capital line rebuild or rehabilitation program.	03/29/2012

1.	2.	3.	4.	5.	6.	7.
Program name	Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program finding(s) causing remedial activity	Remedial activity performed	Actual completion date	Remedial activity yet to be performed	Estimated completion date
		a timely, but less critical manner.				

1.	2.	3.	4.	5.	6.	7.
Program name	Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program finding(s) causing remedial activity	Remedial activity performed	Actual completion date	Remedial activity yet to be performed	Estimated completion date
T - Protection and Control GOAL - Protective relaying schemes continually monitor the power system and protect lines and station equipment from damage by isolating those facilities from system disturbances. These sophisticated protective systems are designed to minimize the number of customer outages, safety issues and pieces of equipment affected. The objectives of the maintenance program	TS	Most of the relay systems were found to be in good operating condition and did not require any corrective maintenance. In some instances, the Protection and Control maintenance program identified relays and relay schemes that were inoperative or partially inoperative due to dirty contacts, coils, associated wiring, or other components. Relays that were found to be inaccurate or inoperative were recalibrated or in some cases replaced if the physical condition warranted. Relay	Any deficiencies identified were either rectified at the time of discovery or as soon as replacement parts were available. The problems that were identified and corrected helped to ensure the safety of our system, reduce outages to customers, and prevent possible damage to other power system equipment.	12/31/2012	Any deficiencies identified were either rectified at the time of discovery or as soon as replacement parts were available. The problems that were identified and corrected helped to ensure the safety of our system, reduce outages to customers, and prevent possible damage to other power system equipment.	12/31/2012

1.	2.	3.	4.	5.	6.	7.
Program name	Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program finding(s) causing remedial activity	Remedial activity performed	Actual completion date	Remedial activity yet to be performed	Estimated completion date
are to prevent misoperation or failures of station equipment; minimize customer outages; minimize maintenance call-outs and maximize the life of station equipment.		schemes that failed to operate as designed due to component failure were restored to full functionality through a number of means including the cleaning of contacts, the adjustment of components, and the replacement of failed parts.				

1.	2.	3.	4.	5.	6.	7.
Program name	Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program finding(s) causing remedial activity	Remedial activity performed	Actual completion date	Remedial activity yet to be performed	Estimated completion date
T - Right-of-Way Vegetation Control GOAL - The intent of right of way maintenance is to minimize line outages and/or safety hazards caused by vegetation growing too near energized conductors. Trees, shrubs and vines that have the potential to grow or fall into transmission lines must be removed or their growth contained.	Т					

1.	2.	3.	4.	5.	6.	7.
Program name	Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program finding(s) causing remedial activity	Remedial activity performed	Actual completion date	Remedial activity yet to be performed	Estimated completion date
T - Station Inspections GOAL - The goals are to (1) prevent unplanned outages or failures and/or safety hazards by identifying and correcting problems during scheduled inspections; and (2) reduce customer outages and associated call-outs for station problems by detecting problems and correcting them in a timely manner.	TS	The replacement of burned out control panel and equipment lights are accomplished during the inspection. Also, station batteries are inspected for corroded terminals and any abnormal cells. Terminals are cleaned and any abnormalities are reported into the tablet computers. Battery ground lights are checked which could indicate a possible ground in the DC system, and the overall battery voltage and battery charger voltage and current are taken and recorded, with the battery charger output	Typically many of the minor items discovered as part of the Station Inspection Program can be and are remedied during the inspection. The level of resources required and the severity of the findings determine the scheduling and response if the situation cannot be dealt with during the time of the inspection.	12/31/2012	Typically many of the minor items discovered as part of the Station Inspection Program can be and are remedied during the inspection. The level of resources required and the severity of the findings determine the scheduling and response if the situation cannot be dealt with during the time of the inspection.	12/31/2012

1.	2.	3.	4.	5.	6.	7.
Program name	Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program finding(s) causing remedial activity	Remedial activity performed	Actual completion date	Remedial activity yet to be performed	Estimated completion date
		voltage adjusted as necessary during the inspection. Control house heaters, air conditioning units or heat pumps are checked to ensure these devices are operating properly. Station grounds are inspected with special attention to the fence and gates to ensure the station is secure. Any problems with the fence or gate are repaired. If permanent repairs cannot be completed at this time it is noted in the tablet computers are made. During the inspection personnel				

1.	2.	3.	4.	5.	6.	7.
Program name	Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program finding(s) causing remedial activity	Remedial activity performed	Actual completion date	Remedial activity yet to be performed	Estimated completion date
		inspect the yards, structures and equipment for broken insulators, bird nests and other yard debris.				

1.	2.	3.	4.	5.	6.	7.
Program name	Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program finding(s) causing remedial activity	Remedial activity performed	Actual completion date	Remedial activity yet to be performed	Estimated completion date
T - Transformers GOAL - The goals of this program are to (1) prevent unplanned outages or failures by identifying and correcting problems during scheduled inspections; (2) reduce safety hazards, customer outages and associated call-outs for transformer problems by replacing limited lifetime components in a timely manner; and (3) utilize best practices and technology to achieve optimum loading of all	TS	Of the maintenance performed on substation transformers during 2012, typical problems discovered are summarized as follows - bushings that exhibited elevated power factor test results, surge arresters that were found deteriorated by test, minor oil leaks, cooling system debris, temperature gauge problems, Load Tap Changer (LTC) contact wear, minor gas system leaks, and Load Tap Changer (LTC) filtration unit problems.	Typical remediation for bushings that exhibited elevated power factor readings would be an accelerated testing schedule or a scheduled replacement. Surge arresters found deteriorated based on test results are addressed by an accelerated testing schedule or a scheduled replacement. Typically, most minor oil leaks and minor gas system leaks are addressed in as much as practical on site during preventive maintenance however, leaks that cannot be easily repaired would be scheduled for repair	12/31/2012	Typical remediation for bushings that exhibited elevated power factor readings would be an accelerated testing schedule or a scheduled replacement. Surge arresters found deteriorated based on test results are addressed by an accelerated testing schedule or a scheduled replacement. Typically, most minor oil leaks and minor gas system leaks are addressed in as much as practical on site during preventive maintenance however, leaks that cannot be easily repaired would be scheduled for repair	12/31/2012

1.	2.	3.	4.	5.	6.	7.
Program name	Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program finding(s) causing remedial activity	Remedial activity performed	Actual completion date	Remedial activity yet to be performed	Estimated completion date
transformers.			based on the severity of the condition and the level of resources required. Load Tap Changer contacts exhibiting excessive wear are generally replaced during the LTC inspection process and LTC filtration units are maintained as conditions warrant. Debris in transformer cooling systems (radiators) are typically removed when found, however, transformers with coolers instead of radiators require high-pressure washing which must be scheduled. Defective gauges found are either		based on the severity of the condition and the level of resources required. Load Tap Changer contacts exhibiting excessive wear are generally replaced during the LTC inspection process and LTC filtration units are maintained as conditions warrant. Debris in transformer cooling systems (radiators) are typically removed when found, however, transformers with coolers instead of radiators require high-pressure washing which must be scheduled. Defective gauges found are either recalibrated or scheduled	

1.	2.	3.	4.	5.	6.	7.
Program name	Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program finding(s) causing remedial activity	Remedial activity performed	Actual completion date	Remedial activity yet to be performed	Estimated completion date
			recalibrated or scheduled for replacement in the normal course of business.		for replacement in the normal course of business.	

10.c. 4901:1-10-26 (B)(3)(f)(iii) Remedial Activity ... Continued ...

1.	2.	3.	4.	5.	6.	7.
Program name	Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program finding(s) causing remedial activity	Remedial activity performed	Actual completion date	Remedial activity yet to be performed	Estimated completion date
T - Voltage Regulators GOAL - The goals are to (1) prevent unplanned outages or failures by identifying and correcting problems during scheduled inspections; and (2) reduce safety hazards, customer outages and associated call-outs for voltage regulator problems by replacing limited lifetime components in a timely manner.	TS	Typical problems discovered are loose connections, control cabinet problems, or control problems associated with an excessive number of tap changer operations. These problems when found are either resolved at that time or subsequently scheduled for repair or replacement of the voltage regulator.	Typical problems discovered are loose connections, control cabinet problems, or control problems associated with an excessive number of tap changer operations. These problems when found are either resolved at that time or subsequently scheduled for repair or replacement of the voltage regulator.	12/31/2012	Typical problems discovered are loose connections, control cabinet problems, or control problems associated with an excessive number of tap changer operations. These problems when found are either resolved at that time or subsequently scheduled for repair or replacement of the voltage regulator.	12/31/2012

#### <u>Notes</u>

There are no Distribution assets associated with AEP Ohio Transmission Company.

10.d. 4901:1-10-26 (B)(3)(f) Current Year Goals

1.	2.	3.
Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program name	Program goals
DS	D - Capacitor Banks	Since capacitor banks are comprised of sealed units, with essentially no moving parts, minimal maintenance is required. Any maintenance that is required is normally scheduled to coincide with station breaker maintenance.
D	D - Circuit and Line Inspections	N/A
DS	D - Circuit Breakers and Reclosers	2013 Goal = 0 external inspections and maintenance 2013 Goal = 0 internal inspections and maintenance.
D	D - Conductors (Overhead Conductor Replacement)	N/A
D	D - Conductors (Underground Cable Rejuvenation)	N/A
D	D - Conductors (Underground Cable Replacement)	N/A
D	D - Line Capacitors	N/A
D	D - Line Electronic Reclosers (Inspections)	N/A

10.d. 4901:1-10-26 (B)(3)(f) Current Year Goals ... Continued ...

1.	2.	3.
Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program name	Program goals
D	D - Line NonElectronic Reclosers (Inspections)	N/A
D	D - Line Reclosers (Maintenance)	N/A
D	D - Line Reclosers (New Vacuum Replacements)	N/A
D	D - Network System (Vaults)	N/A
D	D - Network System (Manholes)	N/A
D	D - Network System (Protectors)	N/A
D	D - Network System (Transformers)	N/A
D	D - Padmounted Transformers	N/A
D	D - Poles (Inspection)	N/A

10.d. 4901:1-10-26 (B)(3)(f) Current Year Goals ... Continued ...

1.	2.	3.
Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program name	Program goals
D	D - Poles (Reinforcement)	N/A
D	D - Poles (Replacement)	N/A
D	D - Poles (Treatment)	N/A
DS	D - Protection and Control	2013 Goal = 0 D - discrete relay calibrations 2013 Goal = 0 D - functional trip tests on relay trip paths.
D	D - Right-of-Way Vegetation Control	N/A
DS	D - Station Inspections	2013 Goal = inspect 0 distribution stations on a monthly basis.
DS	D - Transformers	2013 Goal = 0 minor external inspections and maintenance 2013 Goal = 0 major internal inspections and maintenance.
DS	D - Voltage Regulators	Based on experience and results of previous monthly station inspections, no distribution station feeder or bus regulator maintenance was planned in 2013 for OHTCO voltage regulators. Data from monthly station inspection programs is continually monitored and evaluated. If necessary, regulator maintenance will be performed as equipment conditions warrant.
10.d. 4901:1-10-26 (B)(3)(f) Current Year Goals ... Continued ...

1.	2.	3.
Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program name	Program goals
TS	T - Capacitor Banks	Since capacitor banks are comprised of sealed units, with essentially no moving parts, minimal maintenance is required. Any maintenance that is required is normally scheduled to coincide with station breaker maintenance.
TS	T - Circuit Breakers and Reclosers	2013 Goal = 0 external inspections and maintenance 2013 Goal = 0 internal inspections and maintenance.
Т	T - Line Inspections	2013 Goal = Inspect 100% of OHTCO tranmission lines.
Т	T - Line Maintenance	The 2013 goal is to schedule and perform transmission line maintenance, as necessary, based on issues identified during inspections.
TS	T - Protection and Control	2013 Goal = 0 T - discrete relay calibrations 2013 Goal = 0 T - functional trip tests on relay trip paths.
Т	T - Right-of-Way Vegetation Control	2013 Goal = maintain 25 miles of transmission line right-of-way.
TS	T - Station Inspections	2013 Goal = inspect 0 transmission stations on a monthly basis.

10.d. 4901:1-10-26 (B)(3)(f) Current Year Goals ... Continued ...

1.	2.	3.
Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Program name	Program goals
TS	T - Transformers	2013 Goal = 0 minor external inspections and maintenance 2013 Goal = 0 major internal inspections and maintenance.
TS	T - Voltage Regulators	Based on experience and results of previous monthly station inspections, no transmission station feeder or bus regulator maintenance was planned in 2013 for OHTCO voltage regulators. Data from monthly station inspection programs is continually monitored and evaluated. If necessary, regulator maintenance will be performed as equipment conditions warrant.

#### <u>Notes</u>

There are no Distribution assets associated with AEP Ohio Transmission Company.

### 11. 4901:1-10-26 (B)(3)(f)(iv) Prevention Of Overloading Or Excessive Loading Of Facilities And Equipment Program(s)

a.	b.	с.		
Transmission or Distribution ("T" or "D")	Program or plan name	Program Description		
Т	Transmission Planning process	The planning process, as carried out in the eastern AEP area, provides the focus for establishing an appropriate level of system reliability. The planning process includes seasonal assessments of system performance; near term facility addition studies; and long term strategic planning. The planning process typically begins with a deterministic appraisal of transmission system performance. When such appraisals identify potential problems, detailed studies are conducted to evaluate the severity of the problem and to develop an optimal plan to remove or mitigate the deficiency. The projects listed in Tables 1 and 4 are the network reinforcements for the transmission systems of the Company for the next few years.		

### 12. 4901:1-10-26 (B)(3)(f)(v) Actions To Remedy Overloading Or Excessive Loading Of Equipment And Facilities

#### Program Name = Transmission Planning process

a.	b.	C.	d.	e.	f.	g.
Transmission or distribution ("T" or "D")	Sub/Circuit name	Date overloading identified	Plans to remedy overloading	Estimated completion date	Action(s) already taken to remedy overloading	Actual completion date
Т		01/01/2012	AEP and ATSI 2015 Generation retirements flagged overloads in the Coshocton area and vicinity for which system improvements need to be implemented to alleviate such. Among these are sag analysis of sag derated line, building of new circuits, reliability enhancements among others. It is not known at this time if any transmission circuit outages will be addressed by this project.	07/01/2015	none	
Т		01/01/2012	AEP and ATSI 2015 Generation retirements flagged overloads in the Southeastern Ohio area for which system improvements need to be implemented to alleviate such. Among these are sag analusis of sag derated line, building of new circuits, reliability enhancements among others. It is not known at this time if any transmission circuit outages will be addressed by this project.	07/01/2015	none	

### 12. 4901:1-10-26 (B)(3)(f)(v) Actions To Remedy Overloading Or Excessive Loading Of Equipment And Facilities ... Continued ...

#### **Program Name = Transmission Planning process**

a.	b.	C.	d.	e.	f.	g.
Transmission or distribution ("T" or "D")	Sub/Circuit name	Date overloading identified	Plans to remedy overloading	Estimated completion date	Action(s) already taken to remedy overloading	Actual completion date
Т		12/12/2012	N-1-1 overload identified in PJM's 2017 RTEP model. 138 kV through path upgrades will resolve all identified overloads. Operational procedures may be required until project can be completed. It is not known at this time if any transmission circuit outages will be addressed by this project.	12/01/2019	none	
т		12/12/2012	N-1-1 overload identified in PJM's 2017 RTEP model. 138 kV through path upgrades will resolve all identified overloads. Operational procedures may be required until project can be completed. It is not known at this time if any transmission circuit outages will be addressed by this project.	12/01/2019	none	
т		09/10/2009	Rebuild 19 miles of Bixby - West Lancaster 138 kV line. It is not known at this time if any transmission circuit outages will be addressed by this project.	05/01/2014	none	

#### 12. 4901:1-10-26 (B)(3)(f)(v) Actions To Remedy Overloading Or Excessive Loading Of Equipment And Facilities ... Continued ...

#### **Program Name = Transmission Planning process**

a.	b.	C.	d.	e.	f.	g.
Transmission or distribution ("T" or "D")	Sub/Circuit name	Date overloading identified	Plans to remedy overloading	Estimated completion date	Action(s) already taken to remedy overloading	Actual completion date
т		09/10/2009	Reconductor the Bixby - Three C - Groves, and the Bixby - Groves 138 kV double circuit lines. Reconductor the Bexley - Groves 138 kV circuit. It is not known at this time if any transmission circuit outages will be addressed by this project.	06/01/2014	none	
Т		05/03/2010	This project includes rebuilding 5.96 miles of 138 kV line between Sterling and Rockhill Station which will alleviate future overloads identified by PJM. It is not known at this time if any transmission circuit outages will be addressed by this project.	06/01/2013	none	

### 13. 4901:1-10-26 (B)(3)(f)(vi) Programs Deleted

a.	b.
Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Deleted program name

### 14. 4901:1-10-26 (B)(3)(f)(vi) Programs Modified

a.	b.
Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Modified program name

#### 15. 4901:1-10-26 (B)(3)(f)(vi) Program Added

a.	b.			
Transmission "T", distribution "D", transmission substation "TS", or distribution substation "DS"	Added program name			

16. 4901:1-10-26 (B)(4) Service Interruptions Due To Other Entity

a.	b.	С.	d.	е.	f.	g.
Date of interruption	Time of interruption	Type of entity causing interruption	Name of entity causing the interruption	Impact on transmission or distribution ("T" or "D")	Sub/Circuit(s) interrupted	Cause(s) of interruption of service

#### <u>Notes</u>

There were no Service Interruptions due to Other Entities in 2012.

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3/28/2013 3:19:49 PM

in

Case No(s). 13-0996-EL-ESS

Summary: Report -Annual Report of the AEP Ohio Transmission Company electronically filed by Mr. Steven T Nourse on behalf of AEP Ohio Transmission Company