BEFORE
THE PUBLIC UTILITIES COMMISSION OF OHIO

In the matter of the Annual Report of the Electric Service and Safety Standards, Pursuant to Rule 4901:1-10-26(B) of the Ohio Administrative Code	))))	Case No: 17-0996-EL-ESS

ANNUAL REPORT OF
Ohio Transmission Company
submitted for the year 2016

I certify that the following report accurately and completely reflects the annual report requirements pursuant to Rule 4901:1-10-26 of the Ohio Administrative Code.

Signature

Robert W. Bradish
Printed Name

VP Grid Development
Title

3/30/17
Date

Ohio Transmission Company
Rule 26 Report for 2016

1. 4901:1-10-26(B)(1), (B)(1)(b), (B)(1)(c) Future investment plan for facilities and equipment, covering period of no less than three years

Identification of project, program, or plan	Transmission or Distribution	Project description and goals	Portion of service territory affected	Characteristics of territory affected	Estimated cost	Initiation Date	Planned Completion Date
TP-2005-004	Transmission	Retire the 69 kV system in the area, which is approximately 90 years old, and transfer the load to a more bulk reliable 138 kV system.	Athens subtransmission area. This is a load area of about 400 MW.		$47,353,726	6/1/2011	3/1/2016
TP-2005-059	Transmission	Construct 138/69 kV station to reinforce Lick-Pedro 69 kV line.	This project will impact areas between Lick station and Millbrook Park station. This is a load area of about 50 MW.		$20,000,000	6/1/2012	12/31/2018
TP-2006-107	Transmission	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.		$125,000,000	2/1/2012	12/1/2017
TP-2007-020	Transmission	Install 138/69 kV 130 MVA transformer and Loop Lincoln & Park Substations w/ about 20 miles of new 69 kV line.	Delaware, Ohio. Approximately 30 MVA.		$34,000,000	5/1/2010	12/1/2018

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1. 4901:1-10-26(B)(1), (B)(1)(b), (B)(1)(c) Future investment plan for facilities and equipment, covering period of no less than three years

Identification of project, program, or plan	Transmission or Distribution	Project description and goals	Portion of service territory affected	Characteristics of territory affected	Estimated cost	Initiation Date	Planned Completion Date
TP-2011-055	Transmission	V1-012 Ipp Haviland. Connect 150 MW of new IPP generation at Haviland 138 kV Station.	Connect 150 MW of new IPP generation at Haviland 138 kV Station. Western Ohio		$500,000	1/1/2014	12/30/2017
TP-2011-065	Transmission	Convert 69/12 kV station to 138 kV. Rebuild portion of existing 69 kV radial line as double circuit 138 kV and serve from Wildcat-Kenton 138 kV line. Project will improve reliability to customers served from Sardinia station.	69 kV & 138 kV system in Southern Ohio. This is a load area of about 10 MW.	Largely rural farmland interspersed with wooded areas.	$12,000,000	1/1/2018	12/31/2020
TP-2011-075	Transmission	Rebuild existing North Findlay #1 and New Liberty 34.5 kV lines to North Baltimore	This project will reinforce the 138 and 69 kV systems in the Western Ohio area.. This is a load area of about 200 MW.		$37,250,000	2/1/2012	12/31/2019
TP-2012-104	Transmission	Install SCADA control on targeted equipment for improved reliability. 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	3/1/2014	12/1/2017

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1. 4901:1-10-26(B)(1), (B)(1)(b), (B)(1)(c) Future investment plan for facilities and equipment, covering period of no less than three years

Identification of project, program, or plan	Transmission or Distribution	Project description and goals	Portion of service territory affected	Characteristics of territory affected	Estimated cost	Initiation Date	Planned Completion Date
TP-2012-119	Transmission	Rebuild the Corner - Parkersburg 138 kV line. Loop the Crooksville - Muskingum 138 kV circuit into Philo station. Install 138 kV circuit breakers at North Muskingum and Philo station. Install 138 kV capacitor banks at Gorsuch station.	Southeastern Ohio. Southeastern Ohio area	Approximately 80 MW comprised in the area.	$19,110,171	12/1/2014	12/31/2018
TP-2012-132	Transmission	138kV CB at Saint Clair Ave Station was identified by PJM as an overdutied breaker and needs to be replaced no later than 06/2015. Additional breaker replacements were targeted in the list & it was determined to upgrade all the identified breakers & relays with this project to improve equipment conditions & system reliability with the newer units.	Columbus and North Central Columbus Area, Franklin County. Approx load in the area is 500 MVA		$3,000,000	12/7/2012	6/30/2017
TP-2012-176	Transmission	T-142 IPP	EDP Renewables IPP, 300 MW. Western Ohio		$400,000	2/6/2014	12/1/2017

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1. 4901:1-10-26(B)(1), (B)(1)(b), (B)(1)(c) Future investment plan for facilities and equipment, covering period of no less than three years

Identification of project, program, or plan	Transmission or Distribution	Project description and goals	Portion of service territory affected	Characteristics of territory affected	Estimated cost	Initiation Date	Planned Completion Date
TP-2013-009	Transmission	Upgrade 138 kV through path from Harrison station through Circleville station to Ross station. Rebuild Circleville-Harrison 138 kV line and Delano-Ross 138 kV line as double circuit.	138 kV system from Southern Columbus to South Central Ohio. This is a load area of about 200+ MW.		$125,000,000	12/12/2012	12/31/2017
TP-2013-149	Transmission	Create 69 kV loop between Trabue - Battelle - Blair and Galloway. Convert Battelle service from 40 kV to 69 kV	Southeast Columbus area, near West Jefferson. Approximately 25 MVA		$21,000,000	1/1/2014	12/1/2017
TP-2013-189	Transmission	Melmore Station: add 138 kV cap bank	Add two 138 kV capacitor banks at Melmore 138 kV Station. Western Ohio	Needed to address low volages concerns in the Fremont, Ohio area	$700,000	3/12/2014	6/1/2018
TP-2014-079	Transmission	Yager project. Construct new 138kV interconnection station with FirstEnergy. Add 138-69kV transformer source. Rebuild local 69kV lines for added capacity. All to be able to reliably serve major industrial loads in the area.	East of Dennison, Ohio, Harrison County.	Older 69kV sub-transmission system with limited capacity; has seen very large load growth due to Utica shale industry, triggering major transmission system improvments	$80,000,000	6/1/2014	12/1/2017

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Identification of project, program, or plan	Transmission or Distribution	Project description and goals	Portion of service territory affected	Characteristics of territory affected	Estimated cost	Initiation Date	Planned Completion Date
TP-2014-095	Transmission	Newcomerstown - Sugar Creek Terminal Line conversion from 34.5kV to 69kV	Newcomerstown - Sugar Creek 34kV line will be energized to 69 kV. . Eastern Ohio	Rural, Eastern Ohio	$4,200,000	1/1/2015	6/1/2018
TP-2014-125	Transmission	Construct new 138 kV Sumac Station to serve new customer load. Complete associated line and remote end work including building the 345/138 kV Cole Station	Dublin Ohio. Approximately 25 MVA		$39,000,000	6/1/2014	12/31/2017
TP-2015-096	Transmission	Expand Jug Street 138 kV Station to serve new customer load. Complete associated line and remote end work	New Albany Ohio. Approximately 25 MVA	Urban / Suburban	$9,000,000	12/1/2014	6/1/2017
TA-2011-012	Transmission	Rebuild 138kV line from West Mount Vernon to South Kenton	Northwest Ohio	Primarily rural farm lands with interspersed wooded areas.	$70,000,000	12/1/2016	12/1/2020
TP-2016-065	Transmission	Rebuild Ohio Central-Cyclops 69kV T-Line	Muskingum and Coshocton Counties	Rural, hilly area of eastern Ohio; some industrial development	$14,000,000	2/1/2017	6/1/2019
TP-2015-117	Transmission	Northeast Canton Area Upgrades: substation upgrades to improve reliability. New transmission equipment (138-69kV).	Canton, Ohio (Stark County)	Suburban residential, with some industrial sites	$13,000,000	12/1/2016	6/1/2019

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1. 4901:1-10-26(B)(1), (B)(1)(b), (B)(1)(c) Future investment plan for facilities and equipment, covering period of no less than three years

Identification of project, program, or plan	Transmission or Distribution	Project description and goals	Portion of service territory affected	Characteristics of territory affected	Estimated cost	Initiation Date	Planned Completion Date
TP-2007-102	Transmission	Canton 69kV T-Line Rebuilds: Stanley Ct-NE Canton, Harrisburg-Stadium Park, Torrey-Bliss Park 69kV	Canton, Ohio (Stark County)	Urban residential & industrial areas around Canton	$12,000,000	6/1/2016	12/1/2018
TP-2014-183	Transmission	Construct new Herlan switching station and Herlan-Blue Racer 138kV T-Line	Monroe & Noble Counties	Rural, hilly area of eastern Ohio; some recent industrial development related to shale gas & pipelines	$22,500,000	9/1/2016	6/1/2020
TP-2015-003	Transmission	Construct West Bellaire-Glencoe 138kV T-Line and expand Glencoe 138 -69kV substation	Belmont County	Rural, hilly area of eastern Ohio; some recent industrial development related to shale gas & pipelines	$35,000,000	6/1/2016	6/1/2019
A11012012 , A11012022, A11012015	Transmission	Rebuild the Glencoe-Speidel-Summerfield T-Line to 138kV standards, due to poor condition of existing line.	Noble & Belmont Counties	Rural, hilly area of eastern Ohio; some recent industrial development related to shale gas & pipelines	$40,000,000	1/1/2016	12/1/2019

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1. 4901:1-10-26(B)(1), (B)(1)(b), (B)(1)(c) Future investment plan for facilities and equipment, covering period of no less than three years

Identification of project, program, or plan	Transmission or Distribution	Project description and goals	Portion of service territory affected	Characteristics of territory affected	Estimated cost	Initiation Date	Planned Completion Date
TP-2016-118	Transmission	Install a new 69 kV line from Mt Sterlling to Zanesville. Install two 69 kV circuit breakers at Mt Sterling.	Zanesville	Mt. Sterling - South Fultonham 69 kV line as a radial line that serves Guernsey Muskingum load and AEP Ohio load. It was built and 1959. It currently had rotten and split poles. Hard to maintain as it is a radial line.	$1,200,000	2/1/2017	12/15/2020
TP-2012-061	Transmission	Macksburg - Devola rebuild: This project replaces the old Marietta 23 kV distribution circuit with a 138 kV subtransmission. The work comprises a rebuild of the South Caldwell, Lowell, Macksburg stations and replaces the existing Mill Park station. The distribution subs will be supplied by a 138 kV circuit which terminates at South Caldwell and Devola (Mill Park replacement).	The communities north and east of Marietta	Residential, commercial with some industrial sites	$35,307,202	6/1/2014	6/1/2021

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1. 4901:1-10-26(B)(1), (B)(1)(b), (B)(1)(c) Future investment plan for facilities and equipment, covering period of no less than three years

Identification of project, program, or plan	Transmission or Distribution	Project description and goals	Portion of service territory affected	Characteristics of territory affected	Estimated cost	Initiation Date	Planned Completion Date
TP-2016-121	Transmission	Friendship Loop: Creates a looped 69 kV circuit from North Portsmouth to Friendship. The Frienship circuit presently has no bckup (radial) and has reliability concerns.	Along the Ohio River, Portsmouth and neighboring communities of Friendship and Sugar Hill to the west.	Residential, commercial with some industrial sites	$11,000,000	7/9/1905	12/1/2019

Notes:

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1a. 4901:1-10-26(B)(1), (B)(1)(a) Relevant characteristics of the service territory

Transmission or Distribution	Overhead Miles	Underground Miles	Notable Characteristics
Transmission	532	8	

Notes:

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1b. 4901:1-10-26(B)(1) Future investment plan for facilities and equipment

Transmission or Distribution	2016 Planned Costs	2016 Actual Costs	2017 Planned Costs	2018 Projected Costs	2019 Projected Costs	2020 Projected Costs
Transmission	$117,587,000	$122,847,000	$323,487,000	$385,041,000	$539,759,000	$144,049,000

Notes:

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2. 4901:1-10-26(B)(1)(d), (B)(1)(f) Complaints from other entities

Entity making complaint	Date complaint received	Nature of complaint	Action taken to address complaint	Resolved (yes/no)	Date complaint resolved	If not resolved, why?
N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes: None to Report

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3a. 4901:1-10-26(B)(1)(e), (B)(1)(f) Electric Reliability Organization standards violations

Standard number	Standard name	Date of violation	Rick factor	Severity factor	Penalty dollars	Violation description	Resolved (yes/no)	Date resolved	If not resolved, why?
							N/A	N/A	N/A

Notes: AEP Ohio Transmission did not have any reportable NERC violations in 2016.

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3b. 4901:1-10-26(B)(1)(e), (B)(1)(f) Regional Transmission Organization (RTO) violations

Name of RTO violation	Violation description	Resolved (yes/no)	Date resolved	If not resolved, why?
		N/A	N/A	N/A

Notes: AEP Ohio Transmission did not have any RTO operating violations within Ohio commission's jurisdiction for the calendar year 2016.

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

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

Notes: There were no PJM/AEP TLRs- called for AEP facilities- in Ohio during 2016.

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3d. 4901:1-10-26(B)(1)(e) Top ten congestion facilities by hours of congestion

Rank	Description of facility causing congestion
1	L500.Brighton-Conastone
2	BASE
3	Nelson-Electric Junction 345kV (15502 line)
4	L230.Graceton-Bagley.2304
5	L138.NewChurch-PineyGrove.13764
6	345L0304 & Powerton CB 4-8 (multiphase SPOG 1-3-B)
7	L345.CherryValley-SilverLake.15616
8	L345.Nelson-ElectricJunction.15502
9	L500.Conastone-PeachBottom.5012
10	Dequine-Westwood 345 kV

Notes: Facilities Not Applicable to Ohio

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

Relationship between annual system improvement plan and RTO transmission expansion plan

The transmission planning process for AEP Ohio Transmission Co is performed by the AEP Service Corporation and PJM, the Regional Transmission Organization that has functional control of the AEP Ohio Transmission Co 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, projects are identified in the annual RTO Transmission Expansion Plan (RTEP).

Notes:

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4. 4901:1-10-26(B)(4) Report of implementation plans from previous reporting periods

Identification of project, program, or plan	Transmission or Distribution	Planned Completion Date	Actual Completion Date	Identification of deviation from previous plan	Reason for deviation from previous plan
TP-2014-053	Transmission	12/29/2017		Adjusted Planned End Date	Reflecting Updated Plans
TA-2010-119	Transmission	11/30/2017		Adjusted Planned End Date	Reflecting Updated Plans
TA-2011-012	Transmission	6/1/2020		None	
TP-2007-122	Transmission	7/1/2016	7/1/2016	Complete	Complete
TP-2007-152	Transmission	12/1/2017		In service date, scope and cost changed.	Scope was reduced to a just a new 138/69 kV station. In service date was advanced.
TP-2009-135	Transmission	6/1/2016	8/26/2016	Adjusted ISD from June to August 2016	Outage-scheduling conflicts
TP-2010-110	Transmission	6/1/2016	11/15/2016	Complete	Complete
TP-2010-143	Transmission	12/1/2018		Cancelled project	The project is cancelled, a large portion of this work will be completed in TP2014125
TP-2011-027	Transmission	12/31/2017		Adjusted Planned End Date	Reflecting Updated Plans
TP-2011-039	Transmission	6/1/2021		Project Cancelled or Deferred indefinitely	Project Cancelled or Deferred indefinitely
TP-2011-057	Transmission	10/1/2016	9/15/2016	Complete	Complete
TP-2011-123	Transmission	12/30/2016	12/15/2016	Complete	Complete
TP-2011-134	Transmission	12/30/2016	6/1/2015	Project Completed	
TP-2012-061	Transmission	12/1/2021		No changes	The project is being done as three seperate projects by area. Due to budgetary reasons project was pushed out.
TP-2012-161	Transmission	6/1/2016	12/1/2015	ISD changed to Dec. 2015	PJM need date accelerated

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4. 4901:1-10-26(B)(4) Report of implementation plans from previous reporting periods

Identification of project, program, or plan	Transmission or Distribution	Planned Completion Date	Actual Completion Date	Identification of deviation from previous plan	Reason for deviation from previous plan
TP-2012-179	Transmission	12/30/2017	12/8/2016	Complete	Complete
TP-2012-199	Transmission	6/1/2017	6/1/2017	Project completed.	Project completed.
TP-2013-084	Transmission	12/1/2017		Date	strategy change
TP-2013-120	Transmission	4/3/2017		End Dates. No cost for Ohio Transco.	End date , Historical date corrections
TP-2013-137	Transmission	6/1/2016	9/9/2016	ISD changed from June to Sept 2016	Conflicting 69kv system outages
TP-2013-197	Transmission	8/30/2017	6/7/2016	ISD accelerated to June 2016, to meet IPP developer's backfeed date	Changed ISD to line up with Power Plant's backfeed date, to supply construction power
TP-2014-020	Transmission	12/1/2017		Changed Planned End Date to 12/1/17	Construction Delays
TP-2014-080	Transmission	3/10/2016		Change in ISD.	Waiting for Frontier Power to schedule outages.
TP-2014-092	Transmission	12/1/2018		ISD Change	Project Delay
TP-2014-124	Transmission	6/1/2017		Change in ISD.	Through path is complete but customer connection is delayed by customer.
TP-2014-149	Transmission	2/1/2017		Delayed ISD to Feb 2017	Had to align with coal mine customer's schedule
TP-2014-163	Transmission	6/1/2016	9/1/2016	Added Actual End Date	Project complete
TP-2014-200	Transmission	6/1/2021		Pushed back Start and Completion Date; decreased cost	Plans for station delayed, due to other higher priority projects in the region
TP-2015-006	Transmission	9/1/2016	10/1/2016	Adjusted Actual Start, Planned End, and Cost	Reflecting Updated Plans

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4. 4901:1-10-26(B)(4) Report of implementation plans from previous reporting periods

Identification of project, program, or plan	Transmission or Distribution	Planned Completion Date	Actual Completion Date	Identification of deviation from previous plan	Reason for deviation from previous plan
TP-2015-007	Transmission	9/1/2016	10/1/2016	Adjusted Actual Start, Planned End, and Cost	Reflecting Updated Plans
TP-2015-008	Transmission	9/1/2019		Design voltage changed to 69kV, to meet growing customer demands in the region. ISD pushed up to Sept 2019, due to frequent reliability problems	Desire to fix reliability issues more quickly; also meeting growing industrial demands in the area
TP-2015-057	Transmission	12/1/2022		None	

Notes:

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5. 4901:1-10-26(B)(3), (B)(3)(a) Characterization of condition of company's system

Transmission or Distribution	Qualitative characterization of condition of system	Explanation of criteria used in making assessment for each characterization
Transmission	The initial construction of overhead and underground facilities follows AEP's material and construction standards that incorporate National Electric Safety Code requirements. These standards were adopted to safely and reliably operate AEP's 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.	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 Transmssion 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).

Notes:

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6. 4901:1-10-26(B)(3), (B)(3)(b) Safety and reliability complaints

Transmission or Distribution	Availability of Service	Damage	Momentary Interruption	Out of Service	Quality of Service	Repair Service	Public Safety	Total Complaints
Transmission								

Notes: None to report

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7a. 4901:1-10-26(B)(3)(c), (B)(3)(c)(i) Transmission capital expenditures

Total transmission capital expenditures in 2016	$122,847,000
Total Transmission investment as of year end	$1,810,239,420
Transmission capital expenditures as % of total transmission investment	6.79%

Notes:

7b. 4901:1-10-26(B)(3)(c), (B)(3)(c)(i) Transmission maintenance expenditures

Total transmission maintenance expenditures in 2016	$7,824,525
Total Transmission investment as of year end	$1,810,239,420
Transmission maintenance expenditures as % of total transmission investment	0.43%

Notes:

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7c. 4901:1-10-26(B)(3), (B)(3)(c)(ii), (B)(3)(c)(iii) Transmission capital expenditures - Reliability specific

Transmission capital budget category	2016 Budget	2016 Actual	% Variance	Explanation of variance if over 10%	2017 Budget
Construction Transmission - FERC Accounts 107	$117,587,000	$122,847,000	4.47%		

Notes:

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7d. 4901:1-10-26(B)(3), (B)(3)(c)(ii), (B)(3)(c)(iii) Transmission maintenance expenditures - Reliability specific

Transmission maintenance budget category	2016 Budget	2016 Actual	% Variance	Explanation of variance if over 10%	2017 Budget
Electric Transmission Operations - FERC Accounts 560 through 567	$13,506,000	$122,847,000	-60.31%	Decrease in 2016 due to lower operations expense, with projected increase in 2017.	
Electric Transmission Maintenance - FERC Accounts 568 through 573	$406,000	$122,847,000	506.94%	Increase in 2016 due to increased station maintenance expense.	

Notes:

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8a. 4901:1-10-26(B)(3)(d), (B)(3)(d)(i) Distribution capital expenditures

Total distribution capital expenditures in 2016	
Total distribution investment as of year end	
Distribution capital expenditures as % of total distribution investment	

Notes:

8b. 4901:1-10-26(B)(3)(d), (B)(3)(d)(i) Distribution maintenance expenditures

Total distribution maintenance expenditures in 2016	
Total distribution investment as of year end	
Distribution maintenance expenditures as % of total distribution investment	

Notes:

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8c. 4901:1-10-26(B)(3), (B)(3)(d)(ii), (B)(3)(d)(iii) Distribution capital expenditures - Reliability specific

Distribution capital budget category	2016 Budget	2016 Actual	% Variance	Explanation of variance if over 10%	2017 Budget

Notes:

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8d. 4901:1-10-26(B)(3), (B)(3)(d)(ii), (B)(3)(d)(iii) Distribution maintenance expenditures - Reliability specific

Distribution maintenance budget category	2016 Budget	2016 Actual	% Variance	Explanation of variance if over 10%	2017 Budget

Notes:

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9. 4901:1-10-26(B)(3)(e) Average remaining depreciation life of distribution and transmission facilities

Transmission or Distribution	Asset type	FERC account/ subaccount	Total depreciable life of asset	Total depreciated life of asset	Total remaining life of asset	Percent of remaining life of asset	How age was determined
T	Structures & Improvements	352	61	1	60	98.36%	Asset Total Depreciable Life (Yrs.) determined based on Depreciable Plant Base minus Accumulated Provision for Depreciation divided by the Depreciable Plant Base multiplied by the depreciation rate. FERC Form 1 – Pages 207, 219 and 337, and Power plant Reports.
T	Station Equipment	353	54	2	52	96.30%	Asset Total Depreciable Life (Yrs.) determined based on Depreciable Plant Base minus Accumulated Provision for Depreciation divided by the Depreciable Plant Base multiplied by the depreciation rate. FERC Form 1 – Pages 207, 219 and 337, and Power plant Reports.
T	Towers & Fixtures	354	52	0	52	100.00%	Asset Total Depreciable Life (Yrs.) determined based on Depreciable Plant Base minus Accumulated Provision for Depreciation divided by the Depreciable Plant Base multiplied by the depreciation rate. FERC Form 1 – Pages 207, 219 and 337, and Power plant Reports.
T	Poles & Fixtures	355	33	2	31	93.94%	Asset Total Depreciable Life (Yrs.) determined based on Depreciable Plant Base minus Accumulated Provision for Depreciation divided by the Depreciable Plant Base multiplied by the depreciation rate. FERC Form 1 – Pages 207, 219 and 337, and Power plant Reports.
T	OH Cond. & Devices	356	53	2	51	96.23%	Asset Total Depreciable Life (Yrs.) determined based on Depreciable Plant Base minus Accumulated Provision for Depreciation divided by the Depreciable Plant Base multiplied by the depreciation rate. FERC Form 1 – Pages 207, 219 and 337, and Power plant Reports.

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9. 4901:1-10-26(B)(3)(e) Average remaining depreciation life of distribution and transmission facilities

Transmission or Distribution	Asset type	FERC account/ subaccount	Total depreciable life of asset	Total depreciated life of asset	Total remaining life of asset	Percent of remaining life of asset	How age was determined
T	Underground Conduit	357	50	4	46	92.00%	Asset Total Depreciable Life (Yrs.) determined based on Depreciable Plant Base minus Accumulated Provision for Depreciation divided by the Depreciable Plant Base multiplied by the depreciation rate. FERC Form 1 – Pages 207, 219 and 337, and Power plant Reports.
T	Underground Conductor	358	26	3	23	88.46%	Asset Total Depreciable Life (Yrs.) determined based on Depreciable Plant Base minus Accumulated Provision for Depreciation divided by the Depreciable Plant Base multiplied by the depreciation rate. FERC Form 1 – Pages 207, 219 and 337, and Power plant Reports.

Notes:

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10. 4901:1-10-26(B)(3)(f), (B)(3)(f)(i) Inspection, maintenance, repair, and replacement of distribution transmission, and substation programs summary report

Asset type	Program Name	Program Goals	Goals achieved?
T	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.	Yes
T	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.	Yes
T	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.	No
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.	Yes
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.	Yes
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.	Yes
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.	Yes

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10. 4901:1-10-26(B)(3)(f), (B)(3)(f)(i) Inspection, maintenance, repair, and replacement of distribution transmission, and substation programs summary report

Asset type	Program Name	Program Goals	Goals achieved?
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.	Yes
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.	Yes

Notes:

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10a. 4901:1-10-26(B)(3)(f), (B)(3)(f)(i), (B)(3)(f)(ii) If response in Column "Goals achieved?" of Report 10 is "Yes"

Program Name	Explanation of how goals were achieved	Quantitative description of goal achieved	Summary of Findings
T - Line Inspections	OHTCO has a total of 372 miles of transmission lines ranging from 23 kV to 765 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.	Inspect 372 T-line miles, 100%.	No problems were identified during inspections.
T - Line Maintenance	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.	No problems were identified during inspections.	OHTCO remedied 0 identified T-line problems in 2016. No problems were identified during inspections in 2016.
T - Station Inspections	Each transmission station is inspected monthly. Identified problems are noted on the inspection report and any serious condition is immediately reported to maintenance personnel.	100%	2016 Goal = inspect 21 T-stations on a monthly basis; 2016 Results = inspected 33 T-stations on a monthly basis. (100 % of goal achieved).

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10a. 4901:1-10-26(B)(3)(f), (B)(3)(f)(i), (B)(3)(f)(ii) If response in Column "Goals achieved?" of Report 10 is "Yes"

Program Name	Explanation of how goals were achieved	Quantitative description of goal achieved	Summary of Findings
T - Circuit Breakers and Reclosers	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.	114%	External inspections & maintenance: 2016 Goal = 7; 2016 Results = 8 (114% of goal achieved); Internal inspections & maintenance: 2016 Goal = 0; 2016 Results = 0 (100% of goal achieved);
T - 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.	100%	Minor external inspections & maintenance: 2016 Goal = 4; 2016 Results = 4 (100% of goal achieved); Major internal inspections & maintenance: 2016 Goal = 0; 2016 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.

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10a. 4901:1-10-26(B)(3)(f), (B)(3)(f)(i), (B)(3)(f)(ii) If response in Column "Goals achieved?" of Report 10 is "Yes"

Program Name	Explanation of how goals were achieved	Quantitative description of goal achieved	Summary of Findings
T - Voltage Regulators	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.	Based on experience and results of previous monthly station inspections, no transmission station feeder or bus regulator maintenance was planned in 2016 for OPCO voltage regulators. Data from monthly station inspection programs is continually monitored and evaluated. If necessary, regulator maintenance will be performed as equipment conditions warrant.	The maintenance performed on voltage regulators during 2016 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.
T - Capacitor Banks	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.	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 during 2016 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.

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10a. 4901:1-10-26(B)(3)(f), (B)(3)(f)(i), (B)(3)(f)(ii) If response in Column "Goals achieved?" of Report 10 is "Yes"

Program Name	Explanation of how goals were achieved	Quantitative description of goal achieved	Summary of Findings
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. There were no Transco relays or trip paths due in 2016.	100%	T-Calibrations on discrete relays: 2016 Goal = 15; 2016 Results = 58 (100% of goal achieved); T-Functional trip tests on relay trip paths: 2016 Goal = 100; 2016 Results = 357 (100% of goal achieved)

Notes:

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10b. 4901:1-10-26(B)(3)(f), (B)(3)(f)(i), (B)(3)(f)(ii) If response in Column "Goals achieved?" of Report 10 is "No"

Program Name	Cause(s) for not achieving goals	Description of level of completion	Quantitative description of level of completion	Summary of Findings
T - Right-of-Way Vegetation Control	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. Upon review of the work, one of the lines did not have sufficient vegetation growth to warrant originally planned work.	The 2016 goal for transmission line right-of-way vegetation control was not achieved.	2016 Goal = maintain 38.5 miles of T-line right-of-way	2016 Results = maintained 36.5 miles. (95% of goal achieved)

Notes:

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

Program Name	Program finding(s) resulting in remedial action	Remedial activity performed	Completion date	Remedial activity yet to be performed	Estimated completion date
T - Line Inspections	A major portion of the conditions found involved structural components such as poles, cross arms, 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 other things, missing structure numbering signs, damaged FAA markings and foreign attachments.	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.	8/22/2016	None required.	

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

Program Name	Program finding(s) resulting in remedial action	Remedial activity performed	Completion date	Remedial activity yet to be performed	Estimated completion date
T - Line Maintenance	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.	12/31/2016	None required.	

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

Program Name	Program finding(s) resulting in remedial action	Remedial activity performed	Completion date	Remedial activity yet to be performed	Estimated completion date
T - Station Inspections	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 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 and temporary repairs are made. During the inspection personnel inspect the yards, structures and equipment for broken insulators,	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.	12/31/2016	None required.	

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

Program Name	Program finding(s) resulting in remedial action	Remedial activity performed	Completion date	Remedial activity yet to be performed	Estimated completion date
	bird nests and other yard debris.				

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

Program Name	Program finding(s) resulting in remedial action	Remedial activity performed	Completion date	Remedial activity yet to be performed	Estimated completion date
T - Circuit Breakers and Reclosers	Of the maintenance performed on substation circuit breakers and reclosers during 2016, 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 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 intrusion is typically corrected at the time of the	12/31/2016	Problems that affect reliability or safety are addressed at the time maintenance is performed. Other conditions are noted for reference in the normal course of business. Dates are recorded in the Integrated Station Inspection System (ISIS) Database.	

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

Program Name	Program finding(s) resulting in remedial action	Remedial activity performed	Completion date	Remedial activity yet to be performed	Estimated completion date
		internal inspection.			

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

Program Name	Program finding(s) resulting in remedial action	Remedial activity performed	Completion date	Remedial activity yet to be performed	Estimated completion date
T - Transformers	Of the maintenance performed on substation transformers during 2016, 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 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 for replacement in the	12/31/2016	Problems that affect reliability or safety are addressed at the time maintenance is performed. Other conditions are noted for reference in the normal course of business. Dates are recorded in the Integrated Station Inspection System (ISIS) Database.	

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

Program Name	Program finding(s) resulting in remedial action	Remedial activity performed	Completion date	Remedial activity yet to be performed	Estimated completion date
		normal course of business.			
T - Voltage Regulators	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.	12/31/2016	None required.	
T - Capacitor Banks	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.	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.	12/31/2016	None required.	

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

Program Name	Program finding(s) resulting in remedial action	Remedial activity performed	Completion date	Remedial activity yet to be performed	Estimated completion date
T - Protection and Control	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 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.	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.	12/31/2016	Problems that affect reliability or safety are addressed at the time maintenance is performed. Other conditions are noted for reference in the normal course of business. Dates are recorded in the Protection and Control Information System (PCIS) Database.	

Notes:

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

Asset Type	Program Name	Program Goals
T	T - Line Inspections	2017 Goal = Inspect 100% of OHTCO tranmission lines.
T	T - Line Maintenance	The 2017 goal is to schedule and perform transmission line maintenance, as necessary, based on issues identified during inspections.
T	T - Right-of-Way Vegetation Control	2017 Goal = maintain 65.5 miles of transmission line right-of-way.
TS	T - Station Inspections	2017 Goal = inspect 33 transmission stations on a monthly basis.
DS	D - Station Inspections	N/A
TS	T - Circuit Breakers and Reclosers	2017 Goal = 17 external inspections and maintenance; 2017 Goal = 0 internal inspections and maintenance.
TS	T - Transformers	2017 Goal = 4 minor external inspections and maintenance; 2017 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 2017 for OTC voltage regulators. Data from monthly station inspection programs is continually monitored and evaluated. If necessary, regulator maintenance will be performed as equipment conditions warrant.
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 - Protection and Control	2017 Goal = 51 T - discrete relay calibrations; 2017 Goal = 307 T - functional trip tests on relay trip paths.

Notes:

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11. 4901:1-10-26(B)(3)(f), (B)(3)(iv): Prevention of overloading or excessive loading of facilities and equipment

Transmission or Distribution	Program Name	Program Goals
Transmission	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.

Notes:

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12. 4901:1-10-26(B)(3)(f), (B)(3)(iv): Actions to remedy overloading or excessive loading of facilities and equipment

Transmission or Distribution	Sub/Circuit name	Date overloading identified	Plan to remedy overloading	Estimated completion date	Actions taken to remedy overloading	Actual completion date
Transmission	TLN160:00005 - Windsor-Canton	6/1/2011	Reconductor and rebuild the 55 mile Sunnyside-Tidd 138kV transmission line due to age (was built in 1918) and overload concerns.	6/1/2020	Can re-dispatch generation at Cardinal Plant by PJM, if needed. Can also perform 138kV switching solutions to re-route power in the area.	
Transmission	TLN130:0C911 - Poston - Floodwood TLN130:0C935 - Floodwood - Berlin	6/1/2011	Retire the 69 kV system in the area, which is approximately 90 years old, and transfer the load to a more bulk reliable 138 kV system.	3/1/2016	AEP Operational Switching, to maintain reliability in the area, and re-route power as needed.	
Transmission	TLN130:0C729 - Harrison - Circleville TLN380:0C717 - Scioto Trail - Circleville TLN130:0C727 - Delano - Scioto Trail TLN130:0C736 - Ross - Delano TLN130:0C743 - Waverly - Ross TLN380:0C734 - Poston - Ross	2/1/2012	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.	12/1/2017	AEP Operational Switching, to maintain reliability in the area, and re-route power as needed.	
Transmission	TLN160:05001 - Mount Vernon - Howard	1/1/2015	This project addresss improvements in the Mount Vernon and Newark Area.	7/1/2016	AEP Operational Switching, to maintain reliability in the area, and re-route power as needed.	7/1/2016
Transmission	TLN160:00001 - Lima-Fort Wayne	1/1/2014	V1-012 Ipp Haviland. Connect 150 MW of new IPP generation at Haviland 138 kV Station.	12/30/2017	AEP Operational Switching, to maintain reliability in the area, and re-route power as needed.	
Transmission	East Lima Substation	8/31/2011	East Lima Substation Improvement.	12/30/2016	AEP Operational Switching, to maintain reliability in the area, and re-route power as needed.	12/15/2016

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12. 4901:1-10-26(B)(3)(f), (B)(3)(iv): Actions to remedy overloading or excessive loading of facilities and equipment

Transmission or Distribution	Sub/Circuit name	Date overloading identified	Plan to remedy overloading	Estimated completion date	Actions taken to remedy overloading	Actual completion date
Transmission	TLN130:0C854 - Parkersburg (APS) - Corner	12/1/2014	Rebuild the Corner - Parkersburg 138 kV line. Loop the Crooksville - Muskingum 138 kV circuit into Philo station. Install 138 kV circuit breakers at North Muskingum and Philo station. Install 138 kV capacitor banks at Gorsuch station.	12/31/2018	AEP Operational Switching, to maintain reliability in the area, and re-route power as needed.	
Transmission	Southwest Lima Substation	12/5/2015	N-1-1 overload identified in PJM's 2017 RTEP model. Reposition transformer #2 to a new bay location. Add two new 345 kV circuit breakers and two new 138 kV circuit breakers.	6/1/2017	AEP Operational Switching, to maintain reliability in the area, and re-route power as needed.	1/22/2016
Transmission	TLN130:0C729 - Harrison - Circleville TLN380:0C717 - Scioto Trail - Circleville TLN130:0C727 - Delano - Scioto Trail TLN130:0C736 - Ross - Delano TLN130:0C743 - Waverly - Ross TLN380:0C734 - Poston - Ross	12/12/2012	Upgrade 138 kV through path from Harrison station through Circleville station to Ross station. Rebuild Circleville-Harrison 138 kV line and Delano-Ross 138 kV line as double circuit.	12/31/2017	AEP Operational Switching, to maintain reliability in the area, and re-route power as needed.	
Transmission	TLN160:01048 - Dillonvale - Amsterdam	9/1/2014	Rebuild East Amsterdam-Miller Switch 69kV circuit due to overload. Build at 138kV specs to allow future voltage conversion. In the hear of the Utica Shale play, with high growth prospects.	6/1/2016	AEP 69kV system switching solutions, to re-route power.	9/9/2016

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12. 4901:1-10-26(B)(3)(f), (B)(3)(iv): Actions to remedy overloading or excessive loading of facilities and equipment

Transmission or Distribution	Sub/Circuit name	Date overloading identified	Plan to remedy overloading	Estimated completion date	Actions taken to remedy overloading	Actual completion date
Transmission	TLN160:01167 - South Cadiz-Consolidation Coal	9/1/2014	Nottingham Switch-South Cadiz 138 kV. New 138kV switching station and new 138kv T-Lines.	12/1/2017	AEP Operational Switching, to maintain reliability in the area, and re-route power as needed.	
Transmission	TLN160:01195 - Dennison-Desert Rd	6/1/2014	Yager project. Construct new 138kV interconnection station with FirstEnergy. Add 138-69kV transformer source. Rebuild local 69kV lines for added capacity. All to be able to reliably serve major industrial loads in the area.	12/1/2017	69kV switching procedures by Transmission Operations, to sectionalize the 69kV network other 69kV lines have already been reconductored nearby.	
Transmission	TLN 160:04085 - East Cambridge - Senecaville TLN160:04083 - Mineral Siding - Antrim	2/1/2016	Install a new 69kV line from Flushing station to Smyrna station (approximately 12 miles). Install 69 kV circut breakers at Flushing station, Smyrna station and Vail Sw. station. Install new distribution equipment at Flushing and Smyrna stations.	9/1/2019	Limit the amount of load that can attach to the existing 34.5kV circuit, until this project is completed.	
Transmission	TLN160:04001 - Ohio Central-Cyclops	2/1/2017	Rebuild Ohio Central-Cyclops 69kV T-Line.	6/1/2019	Carefully monitor area power flows and re-route power during emergencies (switching solutions).	
Transmission	TLN160:00046 - Muskingum-Summerfield	9/1/2016	Construct new Herlan switching station and Herlan-Blue Racer 138kV T-Line.	6/1/2020	Carefully monitor area power flows and re-route power during emergencies (switching solutions).	
Transmission	TLN160:01099 - Glencoe-Speidel TLN160:01095 - Robyville-South Cadiz	6/1/2016	Construct West Bellaire-Glencoe 138kV T-Line and expand Glencoe 138-69kV substation.	6/1/2019	Carefully monitor area power flows and re-route power during emergencies (switching solutions).	

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12. 4901:1-10-26(B)(3)(f), (B)(3)(iv): Actions to remedy overloading or excessive loading of facilities and equipment

Transmission or Distribution	Sub/Circuit name	Date overloading identified	Plan to remedy overloading	Estimated completion date	Actions taken to remedy overloading	Actual completion date

Notes:

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13. 4901:1-10-26(B)(3)(f), (B)(3)(f)(vi): Programs deleted

Facility Type	Deleted Program Name

Notes:

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14. 4901:1-10-26(B)(3)(f), (B)(3)(f)(vi): Programs modified

Facility Type	Deleted Program Name

Notes:

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15. 4901:1-10-26(B)(3)(f), (B)(3)(f)(vi): Programs added

Facility Type	Deleted Program Name

Notes:

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16. 4901:1-10-26(B)(4): Service interruptions due to other entity

Date of Interruption	Time of Interruption	Type of entity causing interruption	Name of entity causing interruption	Impact on Transmission or Distribution	Sub/Circuit Interrupted	Cause of interruption

Notes: None to report

Summary: Report - Annual Report of Ohio Transmission Company Submitted for the Year 2016 electronically filed by Mr. Steven T Nourse on behalf of AEP Ohio Transmission Company