### **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: 21 -0996 -EL-ESS
ANNUAL RI Ohio Power submitted for th	r Company
I certify that the following report accurately and comple to Rule 4901:1-10-26 of the Ohio Administrative Code.	
Signature	THOMAS A KRATT  Printed Name
VP DISTRIBUTION OPERATIONS Title	03.3[. 202 <sub>]</sub>

# 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

		no iess man	unce 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 Completior Date
TP2019150, s2160	Transmission	Rebuild 31.6 miles of Crooksville - North Newark 138 kV line to address condition, performance and risk issues associated with the line.	Licking and Perry County, Ohio	Rural/Residential	\$5.0	12/18/2019	11/1/2023
TP2019220, s2215, b3290	Transmission and Distribution	Rebuild/Construct approximately 38 miles of line with associated switch/station work to address condition, performance and risk issues, operational flexibility concerns along with baseline issues associated with facilities around Paulding and Putnam County.	Paulding and Putnam County, Ohio	Rural/Residential	\$4.1	3/19/2020	10/20/2025

# 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

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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
Tp2019055, s2224	Transmission and Distribution	Rebuild 8 miles of the Elliot - Lee 69 kV line as 138 kV, convert Lee station to 138 kV, rebuild 3.7 miles of the Lemaster - Strouds Run - Crooksville 138 kV line as double circuit, along with associated station work at Elliot and Strouds Run station to address condition, performance and risk issues, operational flexibility concerns along with baseline issues in the Area	Athens County, Ohio	Rural/Residential	\$25.0	3/19/2020	12/30/2024
TP2019216, s2216	Transmission	Construct 10 miles of new 69 kV line between Lamping and Woodsfield with associated station work to address condition, performance and risk issues and operational flexibility concerns with facilities in the area.	Monroe County, Ohio	Rural	\$2.0	3/19/2020	11/28/2024

# 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

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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
TP20192019, s2221	Transmission	Construct 2.5 miles of new 69 kV line to provide loop service to the GMEC's Senecaville delivery to address condition, performance and risk issues and operational flexibility concerns with facilities in the area.	Guernsey County, Ohio	Rural	\$2.6	3/19/2020	8/14/2023
TP2019113, s2223	Transmission	Rebuild of 12 miles of the Crooksville - Philo 138 kV circuit to address condition, performance and risk issues.	Muskingum County, Ohio	Rural	\$2.5	3/19/2020	2/7/2024
TP2019017, s2282	Transmission and Distribution	Rebuild about 10 miles of 138 kV lines around Shannon station with associated station work to address condition, performance and risk issues and operational flexibility concerns with facilities in the area.	Franklin County, Ohio	Urban	\$25.9	6/19/2020	10/1/2024
TP2019211, s2283	Transmission	Construct 3.75 miles of new 138 kV line to provide transmission service to Consolidated Co-op 's delivery at Lott	Delaware County, Ohio	Rural	\$9.9	6/19/2020	5/16/2024

# 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

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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
TP2019143, s2395	Transmission and Distribution	Wide area system improvement project to address condition, performance and risk issues and operational flexibility concerns with facilities in Hardin, Hancock, and Wyandot Counties	Hardin, Hancock, and Wyandot County, Ohio	Rural/Residential	\$28.5	9/11/2020	11/3/2025
TP2020015, s2394	Transmission	Rebuild 23.6 miles of the Haviland - South Hicksville 69 kV line, reconductor another 2.7 miles along with some associated switch/station work to address condition, performance and risk issues with the circuit	Paulding County, Ohio	Rural/Residential	\$8.8	9/11/2020	5/22/2025
TP2020017, b3273	Transmission and Distribution	Convert 17.6 miles of 34.5 kV line between East Leipsic and New Liberty to 138 kV along with associated station work to solve wide area voltage and thermal issue in the subtransmission network near Leipsic and Lima	Putnam and Hancock Counties	Residential/Industrial/Rur al	\$5.0	11/4/2020	2/10/2025

# 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

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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
TP2020889, b3312	Transmission	Replace W. Mt Vernon 138/69 kV XF and rebuild 4 miles of 69 kV line between W. Mt Vernon and Mt. Vernon stations that are overloading	Knox County, Ohio	Urban/Residential	\$2.0	12/1/2020	6/1/2025
DP17C0010	Distribution	To relieve multi-circuit overload and provide capacity for new loads, install a 138/13 kV, 50 MVA transformer, feeder regulators, and four Distribution feeders and perform associated distribution line improvements.	Columbus, OH	Urban and commercial.	\$15.4	6/5/2017	1/27/2022

Notes: Estimated costs in millions

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

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or Distribution	Overhead Miles	Underground Miles	Notable Characteristics
Transmission	7,708	46	
Distribution	36,611	9,269	

Notes:

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

Transmission or Distribution	2020 Planned Costs	2020 Actual Costs	2021 Planned Costs	2022 Projected Costs	2023 Projected Costs	2024 Projected Costs
Transmission	\$50,896,000	\$87,250,000	\$102,174,000	\$95,949,000	\$91,556,000	\$97,483,000
Distribution	\$537,151,930	\$525,881,155	\$586,329,096	\$585,690,922	\$604,215,131	\$705,606,299

**Notes:** Ohio Power Distribution amounts include all Capital expenditures including those associated with gridSmart, as filed under the Electric Security Plan. Ohio Power's 2021-2024 control budget/long-range plan, and is subject to future review and changes.

# 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?
South Central Power	1/11/2020	Outage	Glencoe-Speidel 69kv circuit locked out during wind/rain event. Line patrol revealed that a tree fell into the circuit between Glencoe and La Mira Switch at structure 39.	Yes	1/11/2020	
Holmes-Wayne Elec. Coop., Inc.	1/18/2020	Outage	lcing on the lines and galloping conductors.	Yes	1/18/2020	
South Central Power	2/7/2020	Outage	The Harrison-Madison 69kv circuit locked due to a car striking a pole at 14200 St Rt 56 between switch 904 and Madison.	Yes	2/7/2020	
South Central Power Company	3/19/2020	Outage	Tree on circuit on customer owned portion.	Yes	3/19/2020	
Licking Rural Electrification, Inc.	3/20/2020	Outage	The Newark Center-Owens Corning locked out. A tree was discovered between Newark Center and Owens Corning.	Yes	3/20/2020	

# 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?
Holmes-Wayne Elec. Coop., Inc.	3/20/2020	Outage	The Beartown-Moreland Sw. 69kv circuit operated and isolated between Beartown and Billiar. A tree from outside of the right of way contacted the circuit at structure 62 between Beartown and West Wilont Jct Switch.	Yes	3/20/2020	
South Central Power	3/29/2020	Outage	Fallen tree from outside right of way near structure 35.	Yes	3/29/2020	
Licking Rural Electrification, Inc.	3/29/2020	Outage	Tree contact from outside of right of way near structure 269.	Yes	3/29/2020	
Guernsey- Muskingum Elec. Coop.	3/29/2020	Outage	Tree damaged static wire	Yes	3/29/2020	
Washington Electric Cooperative	4/9/2020	Outage	Tree from outside right of way on line near structure 158.	Yes	4/9/2020	
Carroll Electric Coop., Inc.	4/9/2020	Outage	Broken insulator at structure 178 between Hammondsville and Sugargrove on the Hammondsville-South Toronto 69kv circuit.	Yes	4/9/2020	

# 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?
Buckeye Rural Electric Coop	4/9/2020	Outage	Damaged insulator just outside South Point station	Yes	4/9/2020	
South Central Power	4/18/2020	Outage	Glencoe-Somerton 69kv circuit locked out between Alledonia Sw and Danford SW. A landslide at structure 24 between Alledonia and Captina SW took the circuit out.	Yes	4/18/2020	
South Central Power	4/18/2020	Outage	Glencoe-Somerton 69kv circuit locked out between Alledonia Sw and Danford SW. A landslide at structure 24 between Alledonia and Captina SW was the cause of the outage.	Yes	4/18/2020	
North Central Electric Cooperative, Inc	4/26/2020	Outage	Birds nest caused CB to flash over at South Berwick station. Transfer scheme at Hurd Switch failed to operate and had to be manually closed.	Yes	4/26/2020	
Holmes-Wayne Elec. Coop., Inc.	5/10/2020	Outage	Broken conductor from tree outside of right of way between structures 83 & 85.	Yes	5/10/2020	
Washington Electric Cooperative	5/19/2020	Outage	Tree from outside right of way contacted circuit near structure 61.	Yes	5/19/2020	

# 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?
Mid-Ohio Energy Cooperative, Inc.	5/22/2020	Outage	Uncapher was on a radial feed from North Waldo, due to a line rebuild of the Uncapher-South Morral circuit section. TR 1 at North Waldo trip from service from a Tr Differential operation. An investigation of the trip did not reveal any issues with the transformer and it was returned to service.	Yes	5/22/2020	
Washington Electric Cooperative	5/26/2020	Outage	Tree from outside right of way damaged conductor at structure 28.	Yes	5/26/2020	
North Central Electric Cooperative, Inc	6/10/2020	Outage	Broken pole between West Rockaway Sw and Sycamore	Yes	6/10/2020	
Carroll Electric Coop., Inc.	6/10/2020	Outage	Storm Damage between Sugar Grove SW and Stratton	Yes	6/10/2020	
Guernsey- Muskingum Elec. Coop.	7/21/2020	Outage	Shield wire came down on the South Caldwell-South Cumberland 138kv circuit, which outaged the South Cumberland station	Yes	7/22/2020	

# 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?
South Central Power	8/25/2020	Outage	Storm blew tree into circuit at structure 77 taking conductor down between Enterprise SW and North Logan	Yes	8/25/2020	
South Central Power	8/25/2020	Outage	Storm blew a tree into the circuit at structure 103 between Geneva and North Logan.	Yes	8/25/2020	
Mid-Ohio Energy Cooperative, Inc.	11/15/2020	Outage	Tree fell into circuit from outside of right of way between Ada and Lafayette	Yes	11/15/2020	
Licking Rural Electrification, Inc.	11/15/2020	Outage	Galloping conductor, due to high wind between Palmyra and North Liberty SW.	Yes	11/15/2020	
South Central Power Company	12/24/2020	Outage	Circuit locked out with strong wind and ice in the area. Circuit was patrolled and nothing was found. Suspected ice caused the lockout.	Yes	12/24/2020	
Guernsey- Muskingum Elec. Coop	12/25/2020	Outage	Circuit was patrolled and nothing was found. There was ice in the area and that is the suspected cause of the outage.	Yes	12/25/2020	

# 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?
Guernsey- Muskingum Elec. Coop	12/25/2020	Outage	Circuit was patrolled and nothing was found. There was ice in the area and that is the suspected cause of the outage.	Yes	12/25/2020	
The Frontier Power Company	1/11/2020	Outage	Unknown	Yes	1/11/2020	
Washington Electric Cooperative	4/6/2020	Outage	3 phase down due to tree out of row at 865 Leap Run Rd	Yes	4/6/2020	
The Frontier Power Company	6/10/2020	Outage	Poles down between North Newcomerstown and Stone Creek Stations	Yes	6/11/2020	
Lorain-Medina Rural Elec. Coop	7/6/2020	Outage	Phase C Broken Standoff Insulator @ the Station near pole 1959076725242	Yes	7/6/2020	
The Frontier Power Company	7/19/2020	Outage	Tree on the line going from West Lafayette to Manning Tap with wire down and Tree on second section between West Lafayette to Isleta	Yes	7/20/2020	
Washington Electric Cooperative	7/21/2020	Outage	No cause could be found storm had rolled through area that night	Yes	7/22/2020	

# 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?
Midwest Energy Cooperative	10/18/2020	Outage	Copper clad shield wire rusted	Yes	10/18/2020	
Holmes-Wayne Elec. Coop., Inc.	10/18/2020	Outage	Copper clad shield wire rusted	Yes	10/18/2020	
Hancock-Wood Electric Coop., Inc	10/18/2020	Outage	Copper clad shield wire rusted	Yes	10/18/2020	

Notes:

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

Standard number	Standard name	Date of violation	Risk factor	Severity factor	Penalty dollars	Violation description	Resolved (yes/no)	Date resolved	If not resolved, why?
Ohio Power Company did not have any reportable NERC violations in 2020	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:

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

Name of RTO violation	Violation	Resolved	Date	If not resolved,
	description	(yes/no)	resolved	why?
Ohio Power Company did not have any RTO operating violations within Ohio commission's jurisdiction for the calendar year 2020.	N/A	N/A	N/A	N/A

Notes: N/A

# 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
There were no PJM/AEP TLRs- called for AEP facilities- in Ohio during 2020.	N/A	N/A	N/A	N/A	N/A

Notes: N/A

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

# Rank Description of facility causing congestion 1 EASTON 69 KV EAS-EMU 2 BAGLEY 230 KV BAG-GRA 3 SAYRECON230 KV SAY-SAY 4 MONR AE 69 KV MON-VINE 5 MOUN UGI230 KV 2 6 BAGLEY 230 KV BAG-GRAC 7 PA-CENT contingency 1 8 WHITESTN115 KV 65A 9 LENOX-NMESHOPP NML 1090 B 115 KV 10 DOEX530 345 KV 203T

Notes: 1 - 9: Not in Ohio Territory

10: In Ohio not owned by AEP Ohio Transmission Company

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

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

### 4. 4901:1-10-26(B)(2) 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
TP2019-013	Transmission	12/1/2023	N/A	Planned Completion date changed	Completion date adjusted for constructability / outage reasons
DP17C0001	Distribution	7/1/2021	N/A	Planned completion date changed.	Completion date adjusted for constructability / outage reasons
DP17C0013	Distribution	12/1/2020	12/1/2020	Completed	Completed
DP18C0011	Distribution	3/13/2020	3/6/2020	Completed	Completed
DP18C0013	Distribution	05/21/2021	N/A	Planned completion date changed.	Completion date adjusted for constructability / outage reasons
DR18C0001	Distribution	10/13/2020	12/15/2020	Completed	Completed
DR19C0007	Distribution	11/19/2020	12/15/2020	Completed	Completed
TA-2016-801	Transmission	3/25/2020	3/25/2020	Completed	Completed
TP-2006-107	Transmission	4/28/2023	N/A	Planned completion date changed.	Siting challenges associated with Hopetown station.
TP-2010-142 TA-2011-012 TP-2016-106	Transmission	6/1/2023	N/A	Planned completion date changed.	Completion date adjusted for constructability / outage reasons
TP-2011-059	Transmission	7/22/2021	N/A	Planned completion date changed.	Completion date adjusted for constructability / outage reasons
TP-2011-065	Transmission	12/31/2020	7/24/2020	Completed	Completed
TP-2011-075	Transmission	12/26/2022	N/A	N/A	N/A
TP-2012-061	Transmission	12/8/2020	12/28/2020	Completed	Completed
TP-2015-057	Distribution	12/1/2022	N/A	N/A	N/A

# 4. 4901:1-10-26(B)(2) 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-2015-065	Transmission	4/1/2021	N/A	Planned completion date changed.	Completion date adjusted for constructability / outage reasons
TP-2015-069	Transmission	N/A	N/A	Project to be replaced by new Parsons 138 kV Conversion Project	Cost of original plan has increased substantially above original expectations.
TP-2015-117	Transmission & Distribution	12/1/2020	5/15/2020	Completed	Completed
TP2016086	Transmission	6/20/2020	6/20/2020	Completed	Completed
TP-2016-108	Transmission & Distribution	12/1/2022		N/A	N/A
TP-2016-117	Transmission	12/14/2021	N/A	Planned completion date changed.	Completion date adjusted for constructability / outage reasons
TP-2016-121	Transmission	12/21/2023	N/A	Planned completion date changed.	Completion date adjusted for constructability / outage reasons
TP-2016-126	Transmission & Distribution	3/2/2020	N/A	Planned completion date changed.	Planned completion date changed.
TP-2016-134	Transmission	4/29/2022	N/A	Planned completion date changed.	Completion date adjusted for constructability / outage reasons
TP-2016-137	Transmission	6/1/2022	N/A	Planned completion date changed.	Completion date adjusted for constructability / outage reasons
TP-2017-003	Transmission	4/26/2021	N/A	Planned completion date changed.	N/A
TP-2017-018	Transmission	11/18/2021	N/A	N/A	N/A
TP-2017-054	Transmission	6/1/2021	N/A	Planned completion date changed.	Completion date adjusted for constructability / outage reasons

# 4. 4901:1-10-26(B)(2) 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-2017-100	Transmission	10/31/2022	N/A	N/A	N/A
TP2017117	Transmission	12/1/2021	N/A	N/A	N/A
TP-2017-215	Transmission	5/17/2022	N/A	Planned Completion date changed	Completion date adjusted for constructability / outage reasons
TP-2017-242	Transmission	07/01/2020	8/21/2020	Completed	Completed
TP-2018-009	Transmission	11/22/2022	N/A	Planned Completion date changed	Completion date adjusted for constructability / outage reasons
TP2018115	Transmission	12/9/2021	N/A	N/A	N/A
TP-2018-116	Transmission	5/23/2023	N/A	Planned Completion date changed	Completion date adjusted for constructability / outage reasons
TP-2018-141	Transmission	7/1/2022	N/A	N/A	N/A
TP-2018-156	Transmission	2/18/2022	N/A	Planned Completion date changed	Completion date adjusted for constructability / outage reasons
TP-2018-173	Transmission	6/16/2021	N/A	Planned Completion date changed	Completion date adjusted for constructability / outage reasons
TP-2019-007	Transmission	6/1/2022	N/A	N/A	N/A
TP2019082 TP2019193 TP2019194	Transmission & Distribution	9/23/2025	N/A	Planned Completion date changed	Completion date adjusted for constructability / outage reasons
TP2018195	Transmission & Distribution	12/13/2022	N/A	Planned Completion date changed	Completion date adjusted for constructability / outage reasons
TP2016081	Transmission	8/2/2021	N/A	N/A	N/A

### 4. 4901:1-10-26(B)(2) 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
DP19C0009	Distribution	3/24/2022	N/A	Planned Completion date changed	Completion date adjusted for constructability / outage reasons
TP2019006	Transmission	12/4/2024	N/A	N/A	N/A
TP2019103	Transmission	12/3/2024	N/A	Planned Completion date changed	Completion date adjusted for constructability / outage reasons
DP17C0005	Distribution	7/1/2021	N/A	N/A	N/A
TP2019133	Transmission	11/18/2022	N/A	Planned Completion date changed	Completion date adjusted for constructability / outage reasons
TP2019105	Transmission	8/6/2024	N/A	Planned Completion date changed	Completion date adjusted for constructability / outage reasons
TP2019120	Transmission	12/12/2022	N/A	Planned Completion date changed	Completion date adjusted for constructability / outage reasons
TP2019151	Transmission	4/25/2024	N/A	Planned Completion date changed	Completion date adjusted for constructability / outage reasons
DP14C0006	Distribution	6/31/2020	5/8/2020	N/A	N/A
DP15C0014	Distribution	5/31/2020	2/1/2021	Completion date changed from 5/31/2020 to 02/01/2021	ROW issues required re-engineering of underground section and switches
DP17C0013	Distribution	1/20/2022	N/A	Completion date changed from 12/01/2020 to 01/20/22	Issues in ROW acquisition and crew availability.
DP18C0013	Distribution	12/31/2022	N/A	Completion date changed from 12/01/2022 to 12/31/2022	Incorrect equipment delivered resulting in delay in project.
DP17C0001 (1)	Distribution	3/28/2022	N/A	Completion date changed from 8/1/2021 to 03/28/2022	Issues in ROW acquisition and crew availability.

### 4. 4901:1-10-26(B)(2) 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
DP17C0005 (2)	Distribution	4/21/2022	N/A	Completion date changed from 01/31/2022 to 04/21/22	Issues with agreement for re- imbursement for Duct and Man Hole with the City of Dublin.

Notes: (1) Was on tab 1 last year, now on tab 4.

(2) Was on tab 1 last year, now on tab 4.

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

be demonstrated in AEP's annual operation and maintenance plans.

Transmission or Distribution	Qualitative characterization of condition of system	Explanation of criteria used in making assessment for each characterization
Transmission	Please reference AEP's website for our "AEP Transmission Planning Criteria for End-Of-Life and Other Asset Management Needs": https://aep.com/requiredpostings/AEPTransmissionStudies	Please reference AEP's website for our "Transmission Planning Reliability Criteria - AEP PJM": https://aep. com/requiredpostings/AEPTransmissionStudies
Distribution	The initial construction of overhead and underground facilities follows AEP's material and construction standards that incorporate National Electrical 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/OPCO Distribution currently provides safe, adequate and reliable service to approximately 1,501,570 customers within Ohio. These facilities have the capacity to serve our existing customers and provide a solid foundation for service extension for any new additional customers. AEP plans to provide safe, adequate, and reliable power for its Ohio customers through the company's continuous distribution planning process. This process relies on distribution planners strategically located throughout AEP's Ohio service territories who continually monitor the effect of changes in customer load and other requirements on the AEP system. This is accomplished, in part, by: routine comprehensive distribution load forecasting; continual analysis of the impact of present and projected loading on substation and distribution equipment; determination of safe, effective, and reliable overcurrent protection systems; and the development of cost-effective future short and long-range distribution system infrastructure plans which will allow AEP to meet the needs of its Ohio customers.
Distribution	Industry research and AEP's 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 AEP's 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	AEP/OPCO's inspection and maintenance programs have been developed and implemented with the objective of achieving optimal performance in safety, reliability and cost efficiencies over the life-cycle of the assets. These inspection and maintenance programs, in addition to closely monitoring customer complaints to gain insight into areas that may require process improvement efforts, provide the "checks and balances" required to maintain a reliable distribution system.

Notes:

# 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	1	0	9	0	2	0	0	12
Distribution	1	2	0	2	8	1	2	16

Notes:

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

Total transmission capital expenditures in 2020	\$87,250,000
Total Transmission investment as of year end	\$2,829,331,359
Transmission capital expenditures as % of total transmission investment	3.08%

Notes:

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

Total transmission maintenance expenditures in 2020	\$27,168,000
Total Transmission investment as of year end	\$2,829,331,359
Transmission maintenance expenditures as % of total transmission investment	0.96%

Notes:

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

Transmission capital budget category	2020 Budget	2020 Actual	% Variance	Explanation of variance if over 10%	2021 Budget
Construction Transmission - FERC Accounts 107	\$50,896,000	\$87,250,000	71.43%	Due to increased asset replacement spend.	\$102,174,000

Notes:

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

Transmission maintenance budget category	2020 Budget	2020 Actual	% Variance	Explanation of variance if over 10%	2021 Budget
Electric Transmission Operations - FERC Accounts 560 through 567	\$16,174,000	\$18,010,000	11.35%	Variance attributed to Operations Supervision & Engineering.	\$14,323,000
Electric Transmission Maintenance - FERC Accounts 568 through 573	\$21,560,000	\$27,168,000	26.01%	Variance attributed to increased station and overhead line maintenance.	\$20,502,000

Notes:

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

Total distribution capital expenditures in 2020	\$525,881,155
Total distribution investment as of year end	\$5,706,016,685
Distribution capital expenditures as % of total distribution investment	9.22%

Notes:

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

Total distribution maintenance expenditures in 2020	\$85,773,708
Total distribution investment as of year end	\$5,706,016,685
Distribution maintenance expenditures as % of total distribution investment	1.50%

Notes:

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

Distribution capital budget category	2020 Budget	2020 Actual	% Variance	Explanation of variance if over 10%	2021 Budget
Reliability Spend	\$134,270,632	\$157,599,050	17.37%	The control budget was adjusted lower for 2020 as a result of an increased spend in other aspects of the budget, specifically work supporting new customer and capacity requests. As a result, a number of reliability projects planned for 2020 were deferred to control costs and adhere to the budget, but the budget was still overspent due to work carried over from previous years that was completed having higher spend than projected.	\$125,486,712

Notes: Ohio Power's reliability control budget/long-range plan, and is subject to future review and changes.

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

Distribution maintenance budget category	2020 Budget	2020 Actual	% Variance	Explanation of variance if over 10%	2021 Budget
Electric Distribution Operations - FERC Accounts 580 through 589	\$67,306,568	\$86,719,231	28.84%	Higher spending on Customer Service and Other Miscellaneous Expenses.	\$73,145,615
Electric Distribution Maintenance - FERC Accounts 590 through 598	\$111,999,002	\$85,773,708	-23.42%	Lower than budgeted distribution maintenance is offset by higher spending on distribution operations. In total, distribution O&M spend was only 3.80% less than budget.	\$109,322,059

Notes:

# 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(1)	Structures & Improvements	352	55.00	24.00	31.00	56.36%	Asset Remaining Life (Yrs) determined based on Depreciable Plant Base minus Accumulated Provision for Depreciation divided by the Depreciable Plant Base multiplied by the applied depreciation rate. FERC Form 1 – Pages 207, 219 and 337, and Powerplant Reports.
T(1)	Station Equipment	353	43.00	11.00	32.00	74.42%	Asset Remaining Life (Yrs) determined based on Depreciable Plant Base minus Accumulated Provision for Depreciation divided by the Depreciable Plant Base multiplied by the applied depreciation rate. FERC Form 1 – Pages 207, 219 and 337, and Powerplant Reports.
T(1)	Towers & Fixtures	354	60.00	49.00	11.00	18.33%	Asset Remaining Life (Yrs) determined based on Depreciable Plant Base minus Accumulated Provision for Depreciation divided by the Depreciable Plant Base multiplied by the applied depreciation rate. FERC Form 1 – Pages 207, 219 and 337, and Powerplant Reports.
T(1)	Poles & Fixtures	355	39.00	18.00	21.00	53.85%	Asset Remaining Life (Yrs) determined based on Depreciable Plant Base minus Accumulated Provision for Depreciation divided by the Depreciable Plant Base multiplied by the applied depreciation rate. FERC Form 1 – Pages 207, 219 and 337, and Powerplant Reports.

# 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(1)	OH Cond. & Devices	356	44.00	13.00	31.00	70.45%	Asset Remaining Life (Yrs) determined based on Depreciable Plant Base minus Accumulated Provision for Depreciation divided by the Depreciable Plant Base multiplied by the applied depreciation rate. FERC Form 1 – Pages 207, 219 and 337, and Powerplant Reports.
T(1)	Underground Conduit	357	50.00	34.00	16.00	32.00%	Asset Remaining Life (Yrs) determined based on Depreciable Plant Base minus Accumulated Provision for Depreciation divided by the Depreciable Plant Base multiplied by the applied depreciation rate. FERC Form 1 – Pages 207, 219 and 337, and Powerplant Reports.
T(1)	Underground Conductor	358	50.00	34.00	16.00	32.00%	Asset Remaining Life (Yrs) determined based on Depreciable Plant Base minus Accumulated Provision for Depreciation divided by the Depreciable Plant Base multiplied by the applied depreciation rate. FERC Form 1 – Pages 207, 219 and 337, and Powerplant Reports.
D(2)	Structures & Improvements	361	65.00	21.00	44.00	67.69%	Asset Remaining Life (Yrs) determined based on Depreciable Plant Base minus Accumulated Provision for Depreciation divided by the Depreciable Plant Base multiplied by the applied depreciation rate. FERC Form 1 – Pages 207, 219 and 337, and Powerplant Reports.

# 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
D(2)	Station Equipment	362	45.00	14.00	31.00	68.89%	Asset Remaining Life (Yrs) determined based on Depreciable Plant Base minus Accumulated Provision for Depreciation divided by the Depreciable Plant Base multiplied by the applied depreciation rate. FERC Form 1 – Pages 207, 219 and 337, and Powerplant Reports.
D(2)	Storage Battery Equipment	363	15.00	12.00	3.00	20.00%	Asset Remaining Life (Yrs) determined based on Depreciable Plant Base minus Accumulated Provision for Depreciation divided by the Depreciable Plant Base multiplied by the applied depreciation rate. FERC Form 1 – Pages 207, 219 and 337, and Powerplant Reports.
D(2)	Poles, Tower & Fixtures	364	36.00	27.00	9.00	25.00%	Asset Remaining Life (Yrs) determined based on Depreciable Plant Base minus Accumulated Provision for Depreciation divided by the Depreciable Plant Base multiplied by the applied depreciation rate. FERC Form 1 – Pages 207, 219 and 337, and Powerplant Reports.
D(2)	Overhead Conductor & Devices	365	32.00	11.00	21.00	65.63%	Asset Remaining Life (Yrs) determined based on Depreciable Plant Base minus Accumulated Provision for Depreciation divided by the Depreciable Plant Base multiplied by the applied depreciation rate. FERC Form 1 – Pages 207, 219 and 337, and Powerplant Reports.

#### 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
D(2)	Underground Conduit	366	64.00	10.00	54.00	84.38%	Asset Remaining Life (Yrs) determined based on Depreciable Plant Base minus Accumulated Provision for Depreciation divided by the Depreciable Plant Base multiplied by the applied depreciation rate. FERC Form 1 – Pages 207, 219 and 337, and Powerplant Reports.
D(2)	Underground Conductor	367	43.00	17.00	26.00	60.47%	Asset Remaining Life (Yrs) determined based on Depreciable Plant Base minus Accumulated Provision for Depreciation divided by the Depreciable Plant Base multiplied by the applied depreciation rate. FERC Form 1 – Pages 207, 219 and 337, and Powerplant Reports.
D(2)	Line Transformers	368	30.00	12.00	18.00	60.00%	Asset Remaining Life (Yrs) determined based on Depreciable Plant Base minus Accumulated Provision for Depreciation divided by the Depreciable Plant Base multiplied by the applied depreciation rate. FERC Form 1 – Pages 207, 219 and 337, and Powerplant Reports.
D(2)	Services Overhead	369	41.00	24.00	17.00	41.46%	Asset Remaining Life (Yrs) determined based on Depreciable Plant Base minus Accumulated Provision for Depreciation divided by the Depreciable Plant Base multiplied by the applied depreciation rate. FERC Form 1 – Pages 207, 219 and 337, and Powerplant Reports.

#### 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
D(2)	Meters	370	27.00	1.00	26.00	96.30%	Asset Remaining Life (Yrs) determined based on Depreciable Plant Base minus Accumulated Provision for Depreciation divided by the Depreciable Plant Base multiplied by the applied depreciation rate. FERC Form 1 – Pages 207, 219 and 337, and Powerplant Reports.
D(2)	Meters - gridSMART	370.16	15.00	4.00	11.00	73.33%	Asset Remaining Life (Yrs) determined based on Depreciable Plant Base minus Accumulated Provision for Depreciation divided by the Depreciable Plant Base multiplied by the applied depreciation rate. FERC Form 1 – Pages 207, 219 and 337, and Powerplant Reports.
D(2)	Installations on Customers Premises	371	14.00	11.00	3.00	21.43%	Asset Remaining Life (Yrs) determined based on Depreciable Plant Base minus Accumulated Provision for Depreciation divided by the Depreciable Plant Base multiplied by the applied depreciation rate. FERC Form 1 – Pages 207, 219 and 337, and Powerplant Reports.
D(2)	Installations on Customers Premises - gridSMART	371 AMI	14.00	10.00	4.00	28.57%	Asset Remaining Life (Yrs) determined based on Depreciable Plant Base minus Accumulated Provision for Depreciation divided by the Depreciable Plant Base multiplied by the applied depreciation rate. FERC Form 1 – Pages 207, 219 and 337, and Powerplant Reports.

#### 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
D(2)	Installations on Customers Premises - Energy Bridge	371 Energy Bridge	14.00	7.00	7.00	50.00%	Asset Remaining Life (Yrs) determined based on Depreciable Plant Base minus Accumulated Provision for Depreciation divided by the Depreciable Plant Base multiplied by the applied depreciation rate. FERC Form 1 – Pages 207, 219 and 337, and Powerplant Reports.
D(2)	Leased Property on Cust. Premises	372	40.00	30.00	10.00	25.00%	Asset Remaining Life (Yrs) determined based on Depreciable Plant Base minus Accumulated Provision for Depreciation divided by the Depreciable Plant Base multiplied by the applied depreciation rate. FERC Form 1 – Pages 207, 219 and 337, and Powerplant Reports.
D(2)	Street Lighting & Signal Systems	373	20.00	13.00	7.00	35.00%	Asset Remaining Life (Yrs) determined based on Depreciable Plant Base minus Accumulated Provision for Depreciation divided by the Depreciable Plant Base multiplied by the applied depreciation rate. FERC Form 1 – Pages 207, 219 and 337, and Powerplant Reports.

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 (1): Transmission assets noted above do not include GSU's

Note (2): Distribution assets noted above do not include Account 360. Account 360 - Land and Land Rights represents non-depreciable assets.

# 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 - 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
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.	Υ
TS	T - Circuit Breakers and Reclosers	The goals of this program are to (1) prevent mis-operations 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.	Υ
DS	D - Circuit Breakers and Reclosers	The goals of this program are to (1) prevent mis-operations 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.	Υ
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
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

# 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 - 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
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
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
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
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.	Υ
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.	Υ
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 mis-operation or failures of station equipment; minimize customer outages; minimize maintenance call-outs and maximize the life of station equipment.	Y

# 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?
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 mis-operation or failures of station equipment; minimize customer outages; minimize maintenance call-outs and maximize the life of station equipment.	Y
Т (1)	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
D	D - Poles (Inspection & Treatment)	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
D	D - Poles (Replacement)	Replacement of poles with internal or external decay and inadequate strength that are not reinforceable.	Υ
D	D - Poles (Reinforcement)	Reinforcement of poles with internal or external decay and inadequate strength.	Υ
D	D - Circuit and Line Inspections	Conduct overhead circuit inspections based on a five year cycle.	Υ
D	D - Primary and Secondary Enclosures	Conduct primary enclosure and secondary enclosure inspections based on a five year cycle.	Υ
D	D - Line Reclosers (Maintenance)	Maintain reclosers on a 6 (+/-) year cycle.	N
D	D - Line Reclosers (New Vacuum Replacements)	Replace hydraulic reclosers with new vacuum interrupting reclosers	Υ
D (2)	D - Conductors (Overhead conductors Replacement)	Replacement of overhead conductors based on age, condition and reliability history.	N

# 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?
D (3)	D - Conductors (Underground Cable Replacement)	Replacement of primary underground cable based on age, condition and reliability history.	N
D (4)	D - Conductors (Underground Cable Rejuvenation)	Rejuvenation of primary underground cable based on age, condition and reliability history.	N
D	D - Network System - Vaults	Inspect all Network vaults annually	N
D	D - Network System - Manholes	Inspect Network manholes on a 4-year cycle	N
D	D - Network System - Protectors	Inspect all Network protectors annually	Υ
D	D - Network System - Transformers	Structurally Inspect all Network transformers annually	Υ
D	D - Vegetation Right of Way Control	4-year cycle program	Υ
D (5)	D - Line Electronic Reclosers (Inspections)	Full inspection annually plus a second inspection each year for battery check. 3182 reclosers, 6364 inspections	Υ
D (6)	D - Line NonElectronic Reclosers (Inspections)	Inspect all nonelectronic line reclosers annually. 6995 reclosers, 6995 inspections	Υ
D (7)	D - Line Capacitors	Inspect all line capacitors annually. 3150 banks, 3150 inspections on 1/1/20; adjusted to 3091, see comments.	Υ

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

Goals
Asset type Program Name Program Goals achieved?

Notes: (1) Performed additional work on lines that were either high profile or deemed critical in nature. This work took resources away from 2020 work-plan, thus not completing all the miles.

- (2) Work in this area was reduced to maintain budget.
- (3) Work in this area was reduced to maintain budget.
- (4) Work in this area was reduced to maintain budget.
- (5) Some of the nonelectronic units were replaced with electronic units, and new units were added. This made the total inspections completed shown in 10a greater than the goal for units.
- (6) There were 313 units replaced during the year prior to the annual inspection. These replacment units are inspected as part of the installation and counted in the total
- (7) With replacements and unit retirements, the number to inspect was reduced to 3091 units. Inspections were completed on those units.

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 - 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.	2020 Goal: Inspect 234 T- station on a monthly basis.	2020 Results = inspected 237 T-stations on a monthly basis. (100 % of goal achieved)
D - Station Inspections	Each distribution station is inspected monthly. Identified problems are noted on the inspection report and any serious condition is immediately reported to maintenance personnel.	2020 Goal: Inspect 459 D- stations on a monthly basis.	2020 Results = inspected 469 D-stations on a monthly basis. (100% of goal achieved)
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.	2020 Goal; 79 external inspections & maintenance; 90 internal inspections & maintenance.	External inspections & maintenance: 2020 Goal = 79; 2020 Results = 79 (100% of goal achieved); Internal inspections & maintenance: 2020 Goal = 90; 2020 Results = 93 (103% of goal achieved).

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
D - 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.	2020 Goal: 3 external inspections & maintenance; 343 internal inspections & maintenance	External inspections & maintenance: 2020 Goal = 3; 2020 Results = 4 (133% of goal achieved); Internal inspections & maintenance: 2020 Goal = 343; 2020 Results = 344 (100% of goal achieved).
T - Transformers (1)	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.	2020 Goal: 26 minor external inspections & maintenance; 0 major internal inspection & maintenance	Minor external inspections & maintenance: 2020 Goal = 26; 2020 Results = 25 (100% of goal achieved); Major internal inspections & maintenance: 2020 Goal = 0; 2020 Results = 1 (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.
D - 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.	2020 Goal: 61 minor external inspections & maintenance; 0 major internal inspections & maintenance	Minor external inspections & maintenance: 2020 Goal = 61; 2020 Results = 80 (131% of goal achieved); Major internal inspections & maintenance: 2020 Goal = 0; 2020 Results = 1 (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.

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 2020 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 2020 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.
D - 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 distribution station feeder or bus regulator maintenance was planned in 2020 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 2020 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.

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 - 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.	Because 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 2020 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 - 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.	Because 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 2020 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.
T - Line Inspections	AEP Ohio has a total of 6,507 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 6,507 T-line miles, 100%.	2020 Goal = inspect 6,507 T-line miles; 2020 Results = 100% of transmission lines inspected. Please see below for additional information of the findings.
Report date: 3/29/2021			

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 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.	Scheduled and performed transmission line maintenance, as necessary, based on issues identified during inspections.	AEP Ohio remedied 687 identified T-line problems in 2020.
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 mis-operation or failures of station equipment; minimize customer outages; minimize maintenance call-outs and maximize the life of station equipment.	820 T - discrete relay calibrations; 3,895 T - functional trip tests on relay trip paths	T-Calibrations on discrete relays: 2020 Goal = 820; 2020 Results = 998 (100% of goal achieved); T-Functional trip tests on relay trip paths: 2020 Goal = 3,895; 2020 Results = 4,662 (100% of goal achieved).

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
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 mis-operation or failures of station equipment; minimize customer outages; minimize maintenance call-outs and maximize the life of station equipment.	670 D - discrete relay calibrations; 2,500 D - functional trip tests on relay trip paths	D-Calibrations on discrete relays: 2020 Goal = 670; 2020 Results = 832 (100% of goal achieved); D-Functional trip tests on relay trip paths: 2020 Goal = 2,500; 2020 Results = 3,223 (100% of goal achieved).
T - Rights-of-Way Vegetation Control (2)	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.	Maintain 1,896 miles of T-line rights-of-way	2020 Goal = maintain 1,896 miles of T-line rights-of-way, 2020 results = maintained 1,879 miles (99% of goal achieved)
D - Poles (Inspection & Treatment)	Goals were achieved using Contractor work force.	2020 projection = 56,300 poles.	59,244 poles (105%).
D - Poles (Replacement)	Goals were achieved using a combination of Company and Contractor work forces.	2020 projection = 5,000 poles.	5,830 poles (117%).
D - Poles (Reinforcement)	Goals were achieved using Contractor work force.	2020 projection = 100 poles.	215 poles (215%)
D - Circuit and Line Inspections	Goals were achieved using Company and Contractor work force.	2020 projection = 307 circuits.	309 circuits (101%).
D - Primary and Secondary Enclosures	Goals were achieved using Contractor work force.	2020 projection = 36,500 structures.	37,783 structures (104%).

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

Program Name	Explanation of how goals were achieved	Quantitative description of goal achieved	Summary of Findings
D - Line Reclosers (New Vacuum Replacements) (3)	Goals were achieved using Company and Contractor work force.	2020 projection = 31 reclosers.	79 reclosers (255%).
D - Network System - Protectors	Goals were achieved utilizing AEP company work force	Completed inspections of all Network protectors. 360 protector inspections were completed (2020 projection was 347 protectors) - 104%	Two protectors failed the Megger insulation test, and one was found to have defective resistors.
D - Network System - Transformers	Goals were achieved utilizing AEP company work force	Completed structural inspections of all Network transformers - 345 transformers. Oil Analysis was completed on 158 transformers (2020 projection for oil analysis was 150 transformers) - 105%	One transformer was discovered to have a dissolved gas issue with the oil.
D - Vegetation Right of Way Control	Goals were achieved utilizing a contractor work force for the actual tree work, and internal work force for management of the program.	Completeted the mileage projection shown for 2020 (7903.9 miles). The actual mileage goal for 2020 was 8613.2 miles due to carry-over mileage from 2019, and other circuit adjustments (reconfigurations, retirement of line sections, etc.) Based on the projected mileage, and the mileage completed (8331.9), the Vegetation Right of Way Control program met 105% of that projected goal.	N/A

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
D - Line Electronic Reclosers (Inspections)	Goals were achieved using Company work force.	3290 reclosers, 6350 inspections were completed	The full inspection and a second partial inspection (battery only) was completed on most units. A job to inspect the recloser is generated every six months, if a recloser is replaced before it is inspected, the job is cancelled, and a new job will generate in the next six month cycle. When a recloser is replaced, the unit being installed is inspected as part of the installation. Some new reclosers were installed during the year and also inspected.
D - Line NonElectronic Reclosers (Inspections)	Goals were achieved using Company work force.	6995 reclosers were completed (6682 thru the annual inspection program plus 313 during replacement)	Inspect all reclosers annually. If a recloser is replaced during the year prior to inspection, an inspection of the new unit is not necessary because it is inspected during the installation. All necessary inspections were completed.
D - Line Capacitors	Goals were achieved using Company work force.	3091 banks, 3091 inspections were completed	Inspect all line capacitors annually. If a capacitor is replaced during the year prior to inspection, an inspection of the new unit is done during the installation. Fifty-nine units were removed prior to inspection, which reduced the original goal.

Notes: (1) 1 scheduled Minor external inspection became a Major internal inspection due to equipment conditions of the asset.

- (2) Performed additional work on lines that were either high profile or deemed critical in nature. This work took resources away from 2020 work-plan, thus not completing all the miles.
- (3) Corrected 2020 Target from 52 to 31

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 - Station Inspections	N/A	N/A	N/A	N/A
D - Station Inspections	N/A	N/A	N/A	N/A
T - Circuit Breakers and Reclosers	N/A	N/A	N/A	N/A
D - Circuit Breakers and Reclosers	N/A	N/A	N/A	N/A
T - Transformers	One Minor inspection reclassified to one Major inspection.	N/A	N/A	N/A
D - Transformers	N/A	N/A	N/A	N/A
T - Voltage Regulators	N/A	N/A	N/A	N/A
D - Voltage Regulators	N/A	N/A	N/A	N/A
T - Capacitor Banks	N/A	N/A	N/A	N/A
D - Capacitor Banks	N/A	N/A	N/A	N/A
T - Line Inspections	N/A	N/A	N/A	N/A
T - Line Maintenance	N/A	N/A	N/A	N/A
T - Protection and Control	N/A	N/A	N/A	N/A
D - Protection and Control	N/A	N/A	N/A	N/A

Report date: 3/30/2021

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 (1)	Performed additional work on lines that were either high profile or deemed critical in nature. This work took resources away from 2020 work-plan, thus not completing all the miles.	The goal for 2020 was the completion of 1,896 miles of which only 1,879 were completed	99% of the goal was attained	N/A
D - Line Reclosers (Maintenance) (2)	Maintained fewer reclosers than projected but upgraded more reclosers.	More units were upgraded.	2020 projection = 592 reclosers.	566 reclosers (96%).
D - Conductors (Overhead conductors Replacement)	Mileage projected was based on the workplan and a budget. More funding went to required customer work, lessening resources and budget to complete the discretionary work.	238 miles	238 miles of 333 miles completed - 71%	N/A
D - Conductors (Underground Cable Replacement)	Mileage projected was based on the workplan and a budget. More funding went to required customer work, lessening resources and budget to complete the discretionary work.	70 miles	70 miles of 94 miles completed - 74%	N/A

Report date: 3/30/2021

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
D - Conductors (Underground Cable Rejuvenation)	Mileage projected was based on the workplan and a budget. More funding went to required customer work, lessening resources and budget to complete the discretionary work.	66 miles	66 miles of 72 miles completed - 91%	N/A
D - Network System - Vaults	Projection for 2020 was 312 vaults. The number of vaults triggered for inspection in 2020 was actually 317. Cancellations due to retirement of vaults left the total number of vaults inspected at 309.	309 vaults inspected	309 vault inspections completed (2020 projection 312 vaults) - 99%	Sump pumps in need of repair or replacement, clogged or faulty plumbing, concrete requires more in depth inspection.
D Network System - Manholes	Projection for 2020 was 288 manholes. The number of manholes triggered for inspection in 2020 was 289. Cancellations due to retirement of manholes left the total number of manholes inspected at 287.	287 manholes inspected	287 manhole inspections completed (2020 projection 288 manholes) - 99%	General maintenance including power washing, additional concrete inspection.

**Notes:** (1) Performed additional work on lines that were either high profile or deemed critical in nature. This work took resources away from 2020 work-plan, thus not completing all the miles.

(2) Corrected 2020 Target from 650 to 592

Report date: 3/30/2021

## 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, bird nests and other yard debris.	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.	12/31/2020	None required.	N/A

## 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
D - 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, bird nests and other yard debris.	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.	12/31/2020	None required.	N/A

## 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 2020, 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 internal inspection.	12/31/2020	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.	N/A

## 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
D - Circuit Breakers and Reclosers	Of the maintenance performed on substation circuit breakers and reclosers during 2020, 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 internal inspection.	12/31/2020	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.	N/A

## 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		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 normal course of	12/31/2020	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.	N/A

#### 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
D - Transformers	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 highpressure washing which must be scheduled. Defective gauges found are either recalibrated or scheduled for replacement in the normal course of business.	12/31/2020	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.	N/A
T - Voltage Regulators	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		12/31/2020	None required.	N/A

## 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
D - Voltage Regulators	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	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.	12/31/2020	None required.	N/A
T - Capacitor Banks	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	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	12/31/2020	None required.	N/A
D - Capacitor Banks	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	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	12/31/2020	None required.	N/A

## 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, 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 other things, missing structure numbering signs, damaged FAA markings and foreign attachments.	the most severe structural conditions while the more moderate structural	12/31/2020	None required.	N/A
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 noncritical 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.	12/31/2020	None required.	N/A

## 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.	12/31/2020	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 Intelligent Process Solutions (IPS) Database.	N/A

## 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
D - 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 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.	12/31/2020	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 Intelligent Process Solutions (IPS) Database.	N/A
T - Rights-of-Way Vegetation Control	Performed additional work on lines that were either high profile or deemed critical in nature. This work took resources away from 2020 work-plan, thus not completing all the miles.	Work not completed shifted to 2021 work plan	12/31/2020	None required.	N/A
D - Poles (Inspection & Treatment)	Above and below ground inspection and treatment of poles.	Treated all poles that met criteria.	12/31/2020	None required.	
D - Poles (Replacement)	5,763 reject poles found in 2020.	704 poles completed.	12/31/2020	5059 poles remain; 2019 program, 402 poles remain; 2018 program, 484 poles remain; 2017 program, 2 poles remain	Priority 12/31/2021; Non- Priority 12/31/2023
D - Poles (Reinforcement)	553 restorable poles found in 2020.	78 completed.	12/31/2020	Poles will be reinforced or replaced	12/31/2023

## 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
D - Circuit and Line Inspections	4,938 deficiencies found in 2020	4808 deficiencies repaired.	12/31/2020	130 deficiencies remain to be repaired.	12/31/2021
D - Primary and Secondary Enclosures	4,747 deficiencies found in 2020	1,222 deficiencies repaired.	12/31/2020	3525 deficiencies remain to be reviewed for repair; 2019 program 1,508 deficiencies remain; 2018 program 1,681 deficiencies remain; 2017 program 827 deficiencies remain; 2016 program 421 deficiencies remain.	12/31/2021
D - Line Reclosers (Maintenance)	Reclosers in service 6 (+/-) years were identified and scheduled for replacement.	Replaced reclosers with reconditioned or new units.	12/31/2020	None required.	
D - Line Reclosers (New Vacuum Replacements)	A limited number of hydraulic reclosers in service 6 (+/-) years were identified and scheduled for replacement with vacuum units.	Replaced hydraulic reclosers with new vacuum reclosers.	12/31/2020	None required.	
D - Conductors (Overhead conductors Replacement)	N/A	None required.	12/31/2020	None required.	N/A
D - Conductors (Underground Cable Replacement)	N/A	None required.	12/31/2020	None required.	N/A
D - Conductors (Underground Cable Rejuvenation)	N/A	None required.	12/31/2020	None required.	N/A
D - Network System - Vaults	Sump pumps in need of repair or replacement, clogged or faulty plumbing, concrete requires more in depth inspection.	Plumbing repaired, sump pumps replaced in year inspected.	12/31/2020	Additional inspections scheduled on concrete condition and any subsequent repairs completed in 2021	6/30/2021
D - Network System - Manholes	General maintenance including power washing, additional concrete inspection.	General maintenance including power washing	12/31/2020	Additional concrete inspection and any subsequent repairs	6/30/2021

## 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
D - Network System - Protectors	Two protectors failed the Megger insulation test, and one was found to have defective resistors.	Replaced three protectors due to issues found during inspection and testing	12/31/2020		
D - Network System - Transformers	One transformer was discovered to have a dissolved gas issue with the oil.	Replaced one transformer due to issue with gas found in oil	12/31/2020		
D- Right of Way Vegetation Control	N/A	N/A	N/A	N/A	N/A
D - Line Electronic Reclosers (Inspections)	There were 87 locations found requiring action. Of the conditions found requiring action, 6% involved low battery, 11% involved arresters, 32% hardware issues, 9% cut grounds, and 42% involved connections, insulators, etc.	Batteries were replaced. All other defects found have been referred to the line department for follow-up.	12/31/2020	Make repairs to remaining defects identified during the inspection.	12/31/2021
D - Line NonElectronic Reclosers (Inspections)	There were 74 locations found requiring action. Of the conditions found requiring action, approximately 5% were blown lightning arresters, 38% cut grounds, hardware 15%, and 42% miscellaneous problems such as, connections/offline, etc.	Miscellaneous defects involving ground connections were repaired. All other defects found have been referred to the line department for follow-up.	12/31/2020	Make repairs to remaining defects identified during the inspection.	12/31/2021
D - Line Capacitors	There were 351 capacitors found in need of repairs. Of the conditions found, approximately 19% involved capacitor fuses assemblies, 19% involved switch or switch operation, 17% involved hardware, and 45% miscellaneous matters associated to insulators, connections, lightning arresters, controls, ground connections not continuous, etc.	Controls were repaired or replaced. Other defects were reported to the line department for follow-up.	12/31/2020	Make repairs to remaining defects identified during the inspection.	12/31/2021

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

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

Notes:

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

Asset Type	Program Name	Program Goals
TS	T - Station Inspections	2021 Goal = inspect 237 transmission stations on a monthly basis.
DS	D - Station Inspections	2021 Goal = inspect 469 distribution stations on a monthly basis.
TS	T - Circuit Breakers and Reclosers	2021 Goal = 91 external inspections and maintenance; 2021 Goal = 56 internal inspections and maintenance.
DS	D - Circuit Breakers and Reclosers	2021 Goal = 8 external inspection and maintenance; 2021 Goal = 258 internal inspections and maintenance.
TS	T - Transformers	2021 Goal = 34 minor external inspections and maintenance; 2021 Goal = 0 major internal inspections and maintenance.
DS	D - Transformers	2021 Goal = 46 minor external inspections and maintenance; 2021 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 2021 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.
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 2021 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.
TS	T - Capacitor Banks	Because 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.
DS	D - Capacitor Banks	Because 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.
Т	T - Line Inspections	2020 Goal = Inspect 100% of OPCO transmission lines.

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

Asset Type	Program Name	Program Goals
Т	T - Line Maintenance	The 2020 goal is to schedule and perform transmission line maintenance, as necessary, based on issues identified during inspections.
TS	T - Protection and Control	2021 Goal = 949 T - discrete relay calibrations; 2021 Goal = 3,402 T - functional trip tests on relay trip paths.
DS	D - Protection and Control	2021 Goal = 914 D - discrete relay calibrations; 2021 Goal = 2,880 D - functional trip tests on relay trip paths.
Т	T - Right-of-Way Vegetation Control	2021 Goal = 1,838
D	D - Poles (Inspection)	2021 projection = 54,150 poles.
D	D - Poles (Replacement)	2021 projection = 4,650 poles.
D	D - Poles (Reinforcement)	2021 projection = 0 poles.
D	D - Circuit and Line Inspections	2021 projection = 309 circuits.
D	D - Primary and Secondary Enclosures	2021 projection = 37,800 structures.
D	D - Line Reclosers (Maintenance)	2021 projection = 506 reclosers.
D	D - Line Reclosers (New Vacuum Replacements)	2021 projection = 33 reclosers.
D	D - Conductors (Overhead conductors Replacement)	2021 projection = 210 miles
D	D - Conductors (Underground Cable Replacement)	2021 projection = 66 miles

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

Asset Type	Program Name		Program Goals
D	D - Conductors (Underground Cable Rejuvenation)	20	021 project = 24 miles
D	D - Network System Vaults	2020 Goal - 312	Vaults; (2021 projection - 314 Vaults)
D	D - Network System Manholes	2020 Goal - 288 M	anholes; (2021 projection - 322 Vaults)
D	D - Network System Protectors	2020 Goal - 347 Prot	ectors; (2021 projection - 365 Protectors)
D	D - Network System Transformers		- Oil Sampled; (2021 projection - 91 Transformers) ral Integrity Inspection; (2021 projection - 345 Transformers)
D	D - Vegetation Right of Way Control	2020 Goal - 7903.	9 miles; (2021 projection - 8323 miles)
D	D - Line Electronic Reclosers (Inspections)	3182 reclosers, 6364 inspections	(2021 projection = 3702 reclosers, 7404 inspections)
D	D - Line NonElectronic Reclosers (Inspections)	6995 reclosers, 6995 inspections	(2021 projection = 7121 reclosers, 7121 inspections)
D	D - Line Capacitors	3150 banks, 3150 inspections	(2021 projection = 3156 banks, 3156 inspections)

Notes:

#### 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.
Distribution	Distribution Load Forecast and Capacity Review Process	The actual and projected thermal demands based on projected load growth and anticipated new loads are evaluated for substation equipment and circuit main feeders each year following the summer and winter peak seasons. This is the "Load Forecast Process". Overloads and projected overloads identified are further analyzed during the "Capacity Review Process" to see if simple remedies such as load balancing, power factor correction, load transfers, etc. can be done or if more involved improvement plans need to be developed. If overloads are anticipated to occur within the next peak load cycle, short-term remedies are implemented or contingency plans are prepared in the event that loading would reach certain levels. In addition, long-term improvement plans are developed for consideration in the next budgeting cycle.

Notes:

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

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	Beatty-Galloway 69kV & Blair-Galloway 69kV	8/15/2017	Rebuild limiting sections of 69kV line. Upgrade Beatty 138/69kV XF, and install Cole 138/69kV XF and improve protection to eliminate conditions that overload the line.	10/31/2022	N/A	N/A
Transmission	Bethel-Brookside 138kV & Brookside-Sawmill 138kV	1/2/2018	Rebuild and upgrade 138kV line from Bethel to Brookside to Sawmill.	5/17/2022	N/A	N/A
Transmission	New Liberty - N. Findlay, Findlay - Morrical - New Liberty	10/26/2018	Rebuild New Liberty - Findlay and New Liberty - North Baltimore 34.5 kV Lines. Install one line 138kV circuit breaker, low side T1 34.5 kV circuit breaker, and high side T1 138kV circuit switcher at N. Findlay Station. Install second 138/69/34.5kV transformer and two low side circuit breakers for T1 and T2 at Ebersole Station.	6/1/2021	N/A	N/A
Transmission	N. Findlay - Plaza St 34.5kV, Plaza St - Findlay Center 34.5kV, Findlay - Findlay Center 34.5kV	5/31/2017	Rebuild Midland Sw - Plaza St, Plaza St - E. Findlay, and Findlay - Findlay Center 34.5kV lines.	5/23/2023	N/A	N/A
Transmission	TLN160:04085 - 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). Installa 69 kV circut breakers at Flushing station, Smyrna station and Vail Sw. station. Install new distribution equipment at Flushing and Smyrna stations.	6/1/2021	Operating procedure to be submitted to PJM if needed.	12/23/2019

#### 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	Polaris - Westerville 138 kV	7/11/2019	Perform a sag study on the Polaris - Westerville 138 kV line to increase its rating	6/1/2020	5/22/2020	NA
Transmission	Haviland - North Delphos 138 kV	8/31/2018	Rebuild the Haviland - North Delphos 138 kV line (~15.6 miles), replace line relays and wave traps at Haviland nad East Lima Stations	12/18/2020	12/19/2019	NA
Transmission	Hyatt - Maliszewski 138 kV	7/11/2019	Perform a Sag Study on Hyatt - Maliszewski to increase its rating	6/1/2020	NA	2/25/2019
Transmission	East Lima - Haviland 138 kV	9/25/2019	Replace terminal equipment at East Lima and Haviland.	12/1/2024	NA	NA
Tranmission	Overloading 34.5 kV and 69 kV facilities in Leipsic, Lima area	11/4/2020	Rebuild and convert the existing East Leipsic - New Liberty 34.5 kV line to 138 kV	6/1/2025	NA	NA
Tranmission	Tidd - Wheeling Steel	10/16/2020	Replace risers at Tidd that are overloading	6/1/2025	N/A	N/A
Tranmission	West Mt Vernon XF, West Mt Vernon - Mt Vernon 69 KV	12/1/2020	Replace W. Mt Vernon 138/69 kV XF and rebuild 4 miles of 69 kV line between W. Mt Vernon and Mt. Vernon stations that are overloading	6/1/2025	NA	NA
Distribution	Cole/8401, 8402, 8403, 8404	7/1/2016	This plan includes the addition of a 50 MVA transformer to relieve an overload and provide capacity for new load growth.	1/20/2022	N/A	

#### 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
Distribution	Dublin F-2306 (99.60%), F -2310 (85.94%), F-2309 (78%), Davidson F-2201 (83.98%), F-2202 (81.05%), Hilliard F-2108 (92.36%), F -2102 (85.95%), F-2104 (72.28%)	11/1/2018	Install Hayden/F-1601, F-1602, F-1603	4/21/2022	Minor load transfers	
Distribution	Zuber/ 9105, 9106	6/5/2017	This plan includes the addition of a 50 MVA transformer to relieve an overload and provide capacity for new load growth.	1/27/2022	N/A	

Notes:

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

Facility Type	Deleted Program Name
D	None
Т	None
TS	None
TD	None
D	None

Notes:

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

Facility Type	Deleted Program Name
D	None
Т	None
TS	None
TD	None
D	None

Notes:

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

Facility Type	Deleted Program Name
D	None
Т	None
TS	None
TD	None
D	None

Notes:

#### 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
11/15/20	11:22 AM	Utliity	First Energy	Transmission	Lemoyne - West End Fostoria - Woodville 138kV	Broken Pole
6/4/20	9:42 AM	Co-Op	Paulding Putnam	Sub Transmission	Mark Center - Paulding	Failed Switch
3/10/20	10:40 AM	Municipality	City of Columbus	Distribution	0006411	Other Utility
3/22/20	9:30 PM	Municipality	City of Jackson	Distribution	0024203	Other Utility
3/29/20	12:14 PM	Municipality	City of Columbus	Distribution	0000717	Other Utility
4/15/20	3:51 PM	Municipality	City of Columbus	Distribution	0003003	Other Utility
5/7/20	3:12 PM	Municipality	City of Columbus	Distribution	0002002	Other Utility
5/22/20	3:15 PM	EDU	First Energy	Distribution	0030572	Other Utility
6/22/20	7:30 AM	Cooperative	Midwest Electric Coop	Distribution	7223001	Other Utility
8/17/20	12:12 AM	Municipality	City of Columbus	Distribution	0007703	Other Utility
10/16/20	4:19 AM	EDU	First Energy	Distribution	0036476	Other Utility
10/20/20	8:02 AM	Transmission	First Energy	T/D	7506001, 7506002, 7506401, 7506402	Other Utility
11/15/20	10:43 AM	Transmission	Dayton Power & Light	T/D	7208401, 7227401, 7227402	Other Utility
11/26/20	7:17 PM	EDU	First Energy	Distribution	0036476	Other Utility
12/15/20	4:46 PM	Municipality	City of Columbus	Distribution	0007702	Other Utility

Notes:

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Summary: Report - Ohio Power Company 2020 Rule 26 Report electronically filed by Ms. Christen M. Blend on behalf of Ohio Power Company