

BEFORE
THE PUBLIC UTILITIES COMMISSION OF OHIO

In the matter of the Annual Report of the)
Electric Service and Safety Standards,) Case No: 18 -0999 -EL-ESS
Pursuant to Rule 4901:1-10-26(B) of the Ohio)
Administrative Code)

ANNUAL REPORT OF
Duke Energy Ohio
submitted for the year 2017 .

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

James Sochacki
Signature

JAMES SOCHACKI
Printed Name

Vice-President Construction & Maint.
Title

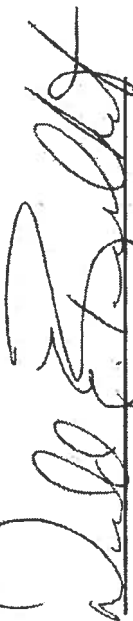
3/28/2018
Date

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


Signature

Donald E. Beaghtel
Printed Name

GM TRANSMISSION
Title

3-28-18
Date

Duke Energy Ohio
Rule 26 Report for 2017

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

Identification of project, program, or plan	Transmission or Distribution	Project description and goals	Portion of service territory affected	Characteristics of territory affected	Estimated cost	Initiation Date	Planned Completion Date
TOH1928	Transmission	Garver 138kV Expansion	North	Rural/Suburban	\$18,823,339	10/30/2017	6/1/2021
TOH2041	Transmission	Ford-Sharonville Install Ring Bus	North	Rural/Suburban	\$5,852,437	12/30/2017	6/30/2020

Notes:

Duke Energy Ohio
Rule 26 Report for 2017

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

Transmission or Distribution	Overhead Miles	Underground Miles	Notable Characteristics
Distribution	8,196	4,149	
Transmission	1,373	11	

Notes:

Duke Energy Ohio
Rule 26 Report for 2017

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

Transmission or Distribution	2017 Planned Costs	2017 Actual Costs	2018 Planned Costs	2019 Projected Costs	2020 Projected Costs	2021 Projected Costs
Distribution	\$183,096,885	\$211,173,620	\$198,746,203	\$217,108,157	\$219,166,164	\$223,025,284
Transmission	\$101,327,318	\$78,447,238	\$118,544,683	\$118,873,870	\$128,759,088	\$124,466,185

Notes:

Duke Energy Ohio
Rule 26 Report for 2017

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?
Unknown	Duke Energy was made aware of the complaint on October 6, 2017	Unknown	None	Yes	Duke Energy was informed the matter was resolved on October 6, 2017	N/A

Notes: Duke Energy was made aware, by NERC via email, of a complaint on October 6, 2017. No details were provided regarding the nature of the complaint, its origins, or its applicability to interests in Ohio.
NERC does not plan any further action on this item.

Duke Energy Ohio
Rule 26 Report for 2017

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?
CIP-004-6, R2.2.	Cyber Security - Personnel & Training	3/8/2017	Pending	Pending		Confidential, non-public information			
CIP-004-6, R5.1.	Cyber Security - Personnel & Training	4/13/2017	Pending	Pending		Confidential, non-public information			
CIP-006-6, R1.4.	Cyber Security - Physical Security of BES Cyber Systems	4/28/2017	Pending	Pending		Confidential, non-public information			
CIP-011-2, R1.1.,R1.2.	Cyber Security - Information Protection	6/30/2017	Pending	Pending		Confidential, non-public information			

Notes:

Duke Energy Ohio
Rule 26 Report for 2017

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

Name of RTO violation	Violation description	Resolved (yes/no)	Date resolved	If not resolved, why?
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Notes: There were no RTO Violations in 2017

**Duke Energy Ohio
Rule 26 Report for 2017**

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
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Notes: There were no TLR Events in 2017

**Duke Energy Ohio
Rule 26 Report for 2017**

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

Rank	Description of facility causing congestion
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Notes: There were no congested facilities in 2017

**Duke Energy Ohio
Rule 26 Report for 2017**

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

Notes: No such relationship in 2017

Duke Energy Ohio
Rule 26 Report for 2017

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
AMOH0616	Distribution	3/1/2017	10/16/2017	Planned Completion date changed	Permit delayed by Sycamore Twp
X04C7993	Transmission	6/1/2018		Planned Completion date changed	Weather delayed completion, waiting to schedule customer outage
AMOH0194	Transmission	12/31/2017	5/12/2017		
X14C8959	Distribution	5/2/2018			
TOH1455	Transmission	6/1/2018			
TOH1488	Transmission	12/31/2018			
TOH1409	Transmission	12/31/2018			
TOH1423	Transmission	12/31/2018			
DOH1598	Distribution	3/1/2019			
TOH1504	Transmission	6/1/2019			
TOH1848	Transmission	12/31/2019			
TOH1072	Transmission	12/31/2020			
TOH1605	Transmission	12/31/2020			
TOH1442	Transmission	12/31/2020			
TOH1443	Transmission	12/31/2020			
DOH1651	Distribution	10/26/2021			
TOH1439	Transmission	12/31/2021			

Notes:

Report date: 3/29/2018

Duke Energy Ohio
Rule 26 Report for 2017

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

Transmission or Distribution	Qualitative characterization of condition of system	Explanation of criteria used in making assessment for each characterization
Transmission	The condition of the Duke Energy Ohio electric system meets or exceeds industry standards and customer expectations for delivery of safe and reliable electric service. Duke Energy Ohio recognizes that the electric system infrastructure continues to age, and on-going preventive maintenance and corrective actions are necessary. Duke Energy Ohio continues to strive to provide safe and reliable electric service to our customers at a reasonable price. The quality of electric service and the condition of the electric system will parallel each other. Therefore, the quality of electric service can be used to measure the condition of the electric system.	Scheduled inspections
Distribution	The condition of the Duke Energy Ohio electric system meets or exceeds industry standards and customer expectations for delivery of safe and reliable electric service. Duke Energy Ohio recognizes that the electric system infrastructure continues to age, and on-going preventive maintenance and corrective actions are necessary. Duke Energy Ohio continues to strive to provide safe and reliable electric service to our customers at a reasonable price. The quality of electric service and the condition of the electric system will parallel each other. Therefore, the quality of electric service can be used to measure the condition of the electric system.	Scheduled inspections

Notes:

**Duke Energy Ohio
Rule 26 Report for 2017**

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
Distribution	157	1	27	0	191	1	2	379

Notes:

Duke Energy Ohio
Rule 26 Report for 2017

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

Total transmission capital expenditures in 2017	\$78,447,238
Total Transmission investment as of year end	\$809,377,209
Transmission capital expenditures as % of total transmission investment	9.69%

Notes:

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

Total transmission maintenance expenditures in 2017	\$8,318,473
Total Transmission investment as of year end	\$809,377,209
Transmission maintenance expenditures as % of total transmission investment	1.03%

Notes:

Duke Energy Ohio
Rule 26 Report for 2017

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

Transmission capital budget category	2017 Budget	2017 Actual	% Variance	Explanation of variance if over 10%	2018 Budget
Major Cap and R&I	\$17,259,383	\$30,831,061	78.63%	Increased spend in capacity, inactive line removals and retail capacity.	\$21,009,260
Region Reliability & Integrity	\$72,879,506	\$34,765,308	-52.30%	Less Transmission FERC spend in NERC CIP due to more Distribution FERC work. Less spend in Asset Management programs due to outage scheduling and resource availability.	\$80,171,863
Vegetation Management	\$1,205,824	\$2,374,762	96.94%	More vegetation line clearing than budgeted.	\$2,768,618

Notes:

Duke Energy Ohio
Rule 26 Report for 2017

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

Transmission maintenance budget category	2017 Budget	2017 Actual	% Variance	Explanation of variance if over 10%	2018 Budget
Insp/Maint Prog	\$2,249,126	\$1,471,146	-34.59%	Preventive/Corrective maintenance cycles	\$6,731,948
Project O&M	\$1,901,131	\$1,995,173	4.95%		\$9,572,834
Vegetation Management	\$2,780,122	\$3,169,497	14.01%	Non-NERC herbicide program	\$21,835,484

Notes:

Duke Energy Ohio
Rule 26 Report for 2017

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

Total distribution capital expenditures in 2017	\$231,250,932
Total distribution investment as of year end	\$2,553,244,981
Distribution capital expenditures as % of total distribution investment	9.06%

Notes:

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

Total distribution maintenance expenditures in 2017	\$61,535,675
Total distribution investment as of year end	\$2,553,244,981
Distribution maintenance expenditures as % of total distribution investment	2.41%

Notes:

Duke Energy Ohio
Rule 26 Report for 2017

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

Distribution capital budget category	2017 Budget	2017 Actual	% Variance	Explanation of variance if over 10%	2018 Budget
Major Cap and R&I	\$36,048,053	\$43,102,355	19.57%	Change in labor strategy that resulted in use of contract labor on Time and Equipment (T&E)	\$39,941,901
Region Reliability & Integrity	\$101,215,562	\$110,278,805	8.95%		\$109,801,432
Vegetation Management	\$4,961,992	\$1,989,009	-59.92%	Resources allocated to circuit maintenance	\$5,487,087

Notes:

Duke Energy Ohio
Rule 26 Report for 2017

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

Distribution maintenance budget category	2017 Budget	2017 Actual	% Variance	Explanation of variance if over 10%	2018 Budget
Insp/Maint Prog	\$4,933,541	\$5,373,565	8.92%		\$6,731,948
Project O&M	\$6,533,911	\$12,662,829	93.80%	Increased maintenance spending due to increase in capital spend	\$9,572,834
Region Reliability & Integrity	\$1,620,817	\$1,509,038	-6.90%		\$1,610,872
Vegetation Management	\$12,178,220	\$21,717,920	78.33%	Higher circuit maintenance costs	\$21,835,484

Notes:

Duke Energy Ohio
Rule 26 Report for 2017

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
Distribution	Structures and Improvements	361	65.00	14.00	51.00	78.46%	Case No. 12-1683-EL-AIR
Distribution	Station Equipment	362	60.00	15.00	45.00	75.00%	Case No. 12-1683-EL-AIR
Distribution	Major Equipment	3622	60.00	18.00	42.00	70.00%	Case No. 12-1683-EL-AIR
Distribution	Distribution Station Equipment	3635	20.00	0.00	20.00	100.00%	Case No. 12-1683-EL-AIR
Distribution	Poles, Towers and Fixtures	364	50.00	13.00	37.00	74.00%	Case No. 12-1683-EL-AIR
Distribution	Overhead Conductors and Devices	365	50.00	6.00	44.00	88.00%	Case No. 12-1683-EL-AIR
Distribution	Underground Conduit	366	65.00	14.00	51.00	78.46%	Case No. 12-1683-EL-AIR
Distribution	Underground Conduit and Devices	367	58.00	11.00	47.00	81.03%	Case No. 12-1683-EL-AIR
Distribution	Line Transformers	368/3681	42.00	15.00	27.00	64.29%	Case No. 12-1683-EL-AIR
Distribution	Customer Transformer Install	3682	45.00	33.00	12.00	26.67%	Case No. 12-1683-EL-AIR
Distribution	Services - Underground	3691	65.00	14.00	51.00	78.46%	Case No. 12-1683-EL-AIR
Distribution	Services - Overhead	3692	43.00	12.00	31.00	72.09%	Case No. 12-1683-EL-AIR
Distribution	Services - Multi Occupancy	3693	0.00	0.00	0.00	0.00%	Case No. 12-1683-EL-AIR
Distribution	Meters / Leased Meters	370/3701	19.00	19.00	0.00	0.00%	Case No. 12-1683-EL-AIR
Distribution	Meters - Utility of Future (Smart)	3702	15.00	3.00	12.00	80.00%	Case No. 12-1683-EL-AIR
Distribution	Company Owned Outdoor Lighting	3710/3712	15.00	15.00	0.00	0.00%	Case No. 12-1683-EL-AIR
Distribution	Leased Property on Customer Premises	372	25.00	25.00	0.00	0.00%	Case No. 12-1683-EL-AIR

Report date: 3/29/2018

Duke Energy Ohio
Rule 26 Report for 2017

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
Distribution	Street Lighting - Overhead	3731	28.00	38.00	-10.00	-35.71%	Case No. 12-1683-EL-AIR
Distribution	Street Lighting - Boulevard	3732	45.00	13.00	32.00	71.11%	Case No. 12-1683-EL-AIR
Distribution	Street Lighting - Customer Private Outdoor	3733	30.00	75.00	-45.00	-150.00%	Case No. 12-1683-EL-AIR
Transmission	Structures and Improvements	352	60.00	9.00	51.00	85.00%	Case No. 08-709-EL-AIR
Transmission	Structures and Improvements - CD/CCD	352	60.00	23.00	37.00	61.67%	Case No. 08-709-EL-AIR
Transmission	Structures and Improvements - CGE - Ky	352	60.00	28.00	32.00	53.33%	Case No. 08-709-EL-AIR
Transmission	Station Equipment	3530	53.00	8.00	45.00	84.91%	Case No. 08-709-EL-AIR
Transmission	Station Equipment - Major Equipment	3532	55.00	19.00	36.00	65.45%	Case No. 08-709-EL-AIR
Transmission	Station Equipment - RTU	3535	20.00	0.00	20.00	100.00%	Case No. 08-709-EL-AIR
Transmission	Towers & Fixtures	354	80.00	61.00	19.00	23.75%	Case No. 08-709-EL-AIR
Transmission	Towers & Fixtures - CD/CCD	354	80.00	0.00	80.00	100.00%	Case No. 08-709-EL-AIR
Transmission	Towers & Fixtures - CGE - Ky	354	80.00	0.00	80.00	100.00%	Case No. 08-709-EL-AIR
Transmission	Poles and Fixtures	355	55.00	10.00	45.00	81.82%	Case No. 08-709-EL-AIR
Transmission	Poles and Fixtures - CD/CCD	355	55.00	0.00	55.00	100.00%	Case No. 08-709-EL-AIR
Transmission	Poles and Fixtures - CGE - Ky	355	55.00	0.00	55.00	100.00%	Case No. 08-709-EL-AIR
Transmission	Overhead Conductors and Devices	356	62.00	18.00	44.00	70.97%	Case No. 08-709-EL-AIR

Report date: 3/29/2018

Duke Energy Ohio
Rule 26 Report for 2017

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
Transmission	Overhead Conductors and Devices - CD/CCD	356	62.00	0.00	62.00	100.00%	Case No. 08-709-EL-AIR
Transmission	Overhead Conductors and Devices - CGE - Ky	356	62.00	4.00	58.00	93.55%	Case No. 08-709-EL-AIR
Transmission	Underground Conduit	357	65.00	38.00	27.00	41.54%	Case No. 08-709-EL-AIR
Transmission	Underground Conduit and Devices	358	45.00	15.00	30.00	66.67%	Case No. 08-709-EL-AIR

Notes:

**Duke Energy Ohio
Rule 26 Report for 2017**

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?
Distribution	Capacitor Maintenance	Visually inspect 100%, functionally inspect 100%, either on-site or remotely.	YES
Distribution	Line recloser inspection	Inspect line reclosers annually	YES
Distribution	URD Cable Replacement	Complete budgeted cable replacements	YES
Distribution	Distribution Pole Groundline Inspection and Treatment	Inspect all distribution poles every 10 years and treat as needed. All Ohio distribution poles will be inspected within ten years	YES
Distribution	Inspection of poles, towers, conductors, and pad mount transformers	Inspect distribution lines every 5 years	YES
Distribution	Distribution vegetation management	Achieve 4-year cycle for vegetation line clearing on distribution circuits. Complete an average of 25% of target circuit miles per year.	NO
Distribution Substation	Inspection of Distribution Substations	Inspect distribution substations monthly	NO
Transmission Substation	Inspection of transmission substations	Inspect transmission substations monthly	YES
Transmission	Transmission pole groundline inspection and treatment	Inspect all transmission poles every 10 years and treat as needed.	YES
Transmission	Inspection of poles, towers, conductors, and pad mount transformers	Inspect transmission lines each year	YES
Transmission	Transmission vegetation management	Achieve 6-year cycle for vegetation line clearing on transmission circuits. Complete an average of 16% of target circuit miles per year.	YES

Notes:

Report date: 3/29/2018

Duke Energy Ohio
Rule 26 Report for 2017

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
Capacitor Maintenance	Automated capacitors have health check, non-electronic capacitors have "walking" inspection	In 2017, all 2191 capacitors were inspected (194 non-electronic, 1,997 electronic) - 100% of capacitors	As a result of 2017 capacitor inspections, 301 follow up work orders were generated. 161 of those 301 work orders are complete as of 3/26/2018.
Line recloser inspection (Distribution)	(walking) inspections	Annual inspection of 627 recloser installations were completed in 2017.	As a result of 2017 recloser inspections, 805 follow up work orders were generated. 246 follow up work order remaining to be completed as of 3/23/2018.
URD Cable Replacement (Distribution)	During 2016, URD cable replacements continued as needed.	100% of needed projects were scheduled. 530,855 feet of new, replacement URD cable was installed in 2017.	none
Distribution Pole Groundline Inspection and Treatment	(walking) inspection of each pole	In 2017, 35,334 wood poles were inspected - 26,738 Duke owned wood poles, and 8,596 foreign owned wood poles. During 2017, 10.18% of Duke Energy Ohio distribution wood poles received inspections	As a result of 2017 wood pole inspections, 6,900 follow up work orders were opened. 1,647 of those 6,900 work orders are complete as of 3/14/2018.
Inspection of poles, towers, conductors, and pad mount transformers (Distribution)	(walking and driving) inspection along distribution circuits	During 2017, the distribution inspection program for Ohio completed inspection of 168 distribution circuits	As a result of 2017 distribution circuit inspections, 3,224 follow up work orders were opened. 1,436 of those 3,224 work orders are complete as of 3/14/2018.
Inspection of Transmission substations	(walking) inspection of each substation	201 monthly inspections were performed on Duke Energy Ohio's 17 transmission substations in 2017. 1 substation was put into service March 9th, and had 9 inspections performed.	As a result of 2017 transmission substation inspections, 137 follow up work orders were opened. 29 of those 137 work orders remain open as of 3/11/2018.

Report date: 3/29/2018

Duke Energy Ohio
Rule 26 Report for 2017

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
Inspection of poles, towers, and conductors (Transmission)	inspection flights along transmission lines	During 2017, the transmission circuit inspection program for Ohio completed inspection of 132 transmission circuits - 100% of circuits with overhead mileage.	As a result of 2017 inspection flights, 158 follow up work orders were generated from the inspections, and all of them remain to be completed.
Transmission pole groundline inspection and treatment	(walking) inspection of each pole	In 2017, 3,865 transmission designated wood poles were inspected.	As a result of 2017 wood transmission pole inspection, 479 follow up work orders were generated. 46 of the 479 work orders have been completed.
Transmission vegetation management	(walking and driving) vegetation clearing along transmission circuits	In 2017, total line clearing maintenance was completed on 299 transmission circuit miles. 21.9% of Duke Energy Ohio transmission circuit miles were cleared in 2017.	none

Notes:

Report date: 3/29/2018

Duke Energy Ohio
Rule 26 Report for 2017

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
Distribution vegetation management	Unable to complete work plan due to current constricted labor market for qualified resources. Discussions are ongoing with commission for a reliability based program.	21.8% of Duke Energy Ohio distribution circuit miles were cleared in 2017.	In 2017, total line clearing maintenance was completed on 1,790.9 distribution circuit miles.	
Distribution Substation	Unable to complete the 3 missed inspections in allotted time due to combined factors of the Work Management System rollout with holidays and weather at the due dates.	2616 inspections were completed for all 218 distribution substations in 2017. 3 of these inspections missed the 40 day inspection requirement, ranging from 1 to 4 days over the 40 day requirement.	100% of inspections were completed, but 99.89% completed within 40 day requirement.	

Notes:

Duke Energy Ohio
Rule 26 Report for 2017

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
Capacitor Maintenance	As a result of 2017 capacitor inspections, 301 work orders were opened.	161 of the 301 work orders are complete as of 3/26/2018		140 work orders remain to be completed	12/31/2018
Line recloser inspection (Distribution)	As a result of 2017 recloser inspections, 805 follow up work orders were generated.	Of the follow up work orders generated as a result of the 2017 line recloser inspections, 559 of the follow up work orders were completed.		246 follow up work orders remaining to be completed as of 3/23/2018.	12/31/2018
URD Cable Replacement	none	none		none	none
Distribution Pole Groundline Inspection and Treatment	As a result of 2017 wood pole inspections, 6,900 follow up work orders were opened.	1,647 of those 6,900 work orders are complete as of 3/14/2018.		5,253 work orders remain to be completed from the 2017 inspections. 79 work orders remain from the 2016 inspections. 1 work order remains from the 2015 inspections.	12/31/2018
Distribution Inspection of poles, towers, conductors, and pad mount transformers	As a result of 2017 distribution circuit inspections, 3,224 follow up work orders were opened.	1,436 of the 3,224 follow up work orders are complete as of 3/14/2018.		1,788 follow up work orders remain to be completed from the 2017 inspections. 5 work orders remain from the 2016 inspections.	12/31/2018
Distribution vegetation management	Unable to complete work plan due to current constricted labor market for qualified resources.	none		Discussions are ongoing with commission for a reliability based program.	none
Inspection of Distribution Substations	As a result of 2017 distribution substation inspections, 1,229 follow up work orders were opened.	1,047 of those 1,229 work orders are complete as of 3/11/2018.		182 work orders remain to be completed from the 2017 inspections. 63 Work orders remain from 2016 inspections. 16 Work orders remain from inspections prior to 2016.	12/31/2018

Report date: 3/29/2018

Duke Energy Ohio
Rule 26 Report for 2017

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
Inspection of Transmission substations	As a result of 2017 transmission substation inspections, 137 follow up work orders were opened.	108 of those 137 work orders are complete as of 3/11/2018.		29 work orders remain to be completed from the 2017 inspections. 13 Work orders remain from 2016 inspections. 2 Work orders remain from inspections prior to 2016.	12/31/2018
Transmission pole groundline inspection and treatment	As a result of 2017 wood pole inspections, 479 follow up work orders were opened.	46 of the 479 work orders are complete as of 3/7/2018		433 work orders remain to be completed from 2017 inspections. 91 work orders remain from the 2016 inspections. 38 work orders remain from inspections prior to 2016.	12/31/2018
Transmission Inspection of poles, towers, conductors, and pad mount transformers	As a result of 2017 inspection flights, 158 follow up work orders were opened.	0 of the 158 work orders have been completed as of 3/15/2018.		158 follow up work orders remain to be completed from the 2017 inspections. 36 work orders remain from the 2016 inspections.	12/31/2018
Transmission vegetation management	none	none		none	none

Notes:

Report date: 3/29/2018

Duke Energy Ohio
Rule 26 Report for 2017

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

Asset Type	Program Name	Program Goals
Distribution	Capacitor Maintenance	Visually inspect 100%, functionally inspect 100%, either on-site or remotely. 100% of capacitors planned to be inspected in 2018, either on-site or remotely. Capacitors with communication are remotely monitored.
Distribution	Line recloser inspection	Inspect line reclosers annually. 622 Reclosers planned for 2018 Line Recloser inspections.
Distribution	URD Cable Replacement	Complete budgeted cable replacements
Distribution	Distribution Pole Groundline Inspection and Treatment	Inspect all distribution poles every 10 years and treat as needed. All Ohio distribution poles will be inspected within ten years. 39,243 poles planned for Distribution Pole Groundline Inspection and Treatment in 2018.
Distribution	Inspection of poles, towers, conductors, and pad mount transformers	Inspect distribution lines every 5 years. 113 circuits planned for inspection of poles, towers, conductors and pad mount transformers in 2018.
Distribution	Distribution vegetation management	Achieve 4-year cycle for vegetation line clearing on distribution circuits. Complete an average of 25% of target circuit miles per year. Discussions are ongoing with commission for a reliability based program.
Distribution Substation	Inspection of Distribution Substations	Inspect distribution substations monthly
Transmission Substation	Inspection of transmission substations	Inspect transmission substations monthly
Transmission	Transmission pole groundline inspection and treatment	Inspect all transmission poles every 10 years and treat as needed.
Transmission	Inspection of poles, towers, conductors, and pad mount transformers	Inspect transmission lines each year
Transmission	Transmission vegetation management	Achieve 6-year cycle for vegetation line clearing on transmission circuits. Complete an average of 16% of target circuit miles per year.

Report date: 3/29/2018

Duke Energy Ohio
Rule 26 Report for 2017

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

Asset Type	Program Name	Program Goals
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Notes:

Duke Energy Ohio
Rule 26 Report for 2017

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
Distribution	103H9056	Columbia 138 kV 22.4 MVA Sub - 103H9056
Distribution	414H8992	Brighton Sub - Convert 4kV - 414H8992
Distribution	AMOH1086	Nickel_Inst Ckts 44 and 45 - AMOH1086
Distribution	AMOH1112	South Fairmount Inst New Sub & UG Exits - AMOH1112
Distribution	DOH1108	E Provident Dr New Ckts - DOH1108
Distribution	DOH1120	Charles Sub L_M_O 4kV Conv - DOH1120
Distribution	DOH1138	Linwood 12kV Ckt Upg Cbl OH Reco - DOH1138
Distribution	DOH1284	Oakley P_Reco Ckt 40 - DOH1284
Distribution	DOH1584	West End 42 Upg - DOH1584
Distribution	DOH1595	Hyde Park Relief - DOH1595
Distribution	DOH1596	Goodwin 10 5 MVA XTR Ckt 41-42 DOH1596
Distribution	DOH1597	Hamlet 10.5 MVA XTR, CKT 42 DOH1597
Distribution	DOH1598	N Rich 10 5 MVA XTR Ckt 42_43 - DOH1598
Distribution	DOH1599	Delhi 43 Reco Pedretti DOH1599
Distribution	DOH1636	Madeira New Ckt 43 Rbld 41 42 - DOH1636
Distribution	DOH1651	Brown 52 N Pole 41 Rbld Ext - DOH1651
Distribution	DOH1653	Rem 53-42 Rbld Reco Humphrey Rd - DOH1653
Distribution	DOH1685	Morgan 53 Conv Stepdown - DOH1685
Distribution	DOH1769	Bethany 45 4kV Conversion DOH1769

Report date: 3/29/2018

Duke Energy Ohio
Rule 26 Report for 2017

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
Distribution	DOH1770	Kleenman 46 Repl Cond - DOH1770
Distribution	DOH1772	Terminal 42-44 Repl Cond - DOH1772
Distribution	DOH1778	Rochelle 43_48 Reco MLK Blvd - DOH1778
Distribution	DOH1781	Inst Seward Xtr 3 DOH1781
Distribution	DOH1782	Seward 44 Reco DOH1782
Distribution	DOH1879	Fairfax 43 Ext_Ret Oakley 829 SCER DOH1879
Distribution	DOH1899	Felicity A Conv Rel 4kV DOH1899
Distribution	DOH1907	Ebenezer 41 Reco Muddy Creek DOH1907
Distribution	DOH1909	Amanda Inst 12 kV Feeders - DOH1909
Distribution	DOH1910	Amanda Sub 12kV Conv DOH1910
Distribution	DOH1939	Eastwood 52 Conv 4kV SR 286 - DOH1939
Distribution	DOH1945	Oakley 52 853 Rcnfgr DOH1945
Distribution	DOH1962	Deer Park Prop Purch - DOH1962
Distribution	DOH1963	Banning 41 Reco OH Exit DOH1963
Distribution	DOH1964	Rochelle 45 Reco Euclid Auburn DOH1964
Distribution	DOH1976	Felicity 41 Conv Vern Hill Rd DOH1976
Distribution	DOH1985	Finneytown 41 Reco Compton DOH1985
Distribution	DOH2007	Manchester 41 Reco DOH2007
Distribution	DOH2028	Oak Knoll 34.5kV Conv DOH2028

Report date: 3/29/2018

Duke Energy Ohio
Rule 26 Report for 2017

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
Distribution	DOH2043	Vera Cruz 10.5 MVA XTR CKT 42 DOH2043
Distribution	DOH2109	Mitchell 41 Reco Cliftn Woolper DOH2109
Distribution	DOH2119	Simpson 43 58 Add 600A Swi DOH2119
Distribution	DOH2120	Olive Branch 22.4 MVA XTR - DOH2120
Distribution	DOH2154	Columbia 41 UG Exit DOH2154
Distribution	DOH2174	Trenton BK 4 DOH2174
Distribution	DOH2180	Newtown 44 Reco Round-Bottom Rd DOH2180
Distribution	DOH2181	Allen 43_Instl 12kV Fdr DOH2181
Distribution	DOH2182	Hensley 42 Instl Fdr DOH2182
Distribution	DOH2196	Union 42 Reco and Ext DOH2196
Distribution	DOH2273	Seward 46 Cap Inst DOH2273
Distribution	DOH2414	Bethany 42 Reco DOH2414
Distribution	DOH2488	Franklin 41 Reco DOH2488
Distribution	DOH2530	Princeton 42 Fdr Ext DOH2530
Transmission	AMOH0194	West End-Brent Spence Bridge - AMOH0194
Transmission	AMOH0765	Beckjord P_C Separation - AMOH0765
Transmission	AMOH0833	Feeder 8887-Purchase Property - AMOH0833
Transmission	AMOH1012	Evendale_69 kV Rcnfgr - AMOH1012
Transmission	AMOH1013T	Shaker Run-Liberty Inst 69kV Ckt - AMOH1013

Report date: 3/29/2018

Duke Energy Ohio
Rule 26 Report for 2017

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	AMOH1085	Ford-Sharonville-Inst Loop Feed - AMOH1085
Transmission	AMOH1202	Black Start Portable Gen Conn - AMOH1202
Transmission	AMOH1276	Fdr 3861 Ext - AMOH1276
Transmission	AMOH1367	F9064 Trnth-Colnsvl Rbld ORP - AMOH1367
Transmission	AMOH1369	F4666 Evndl-Pt Un Rbld ORP - AMOH1369
Transmission	TOH1423	Miami Fort-Exp 345 kV Ring Bus - TOH1423
Transmission	TOH1504	Ebenezer_138kV Rcnfr - TOH1504
Transmission	TOH1556	868 Senco_Summerside Rbld OTIP - TOH1556
Transmission	TOH1557	868 Oakley_Fairfax Rbld OTIP - TOH1557
Transmission	TOH1560	3261 Trnth_Pmctn Rbld OTIP - TOH1560
Transmission	TOH1561	3261 Pmctn_Pt Un RBLD - TOH1561
Transmission	TOH1562	5680 Warren Nickel Rbld OTIP - TOH1562
Transmission	TOH1605	Todhuntr_Rpl CB 913_919_925_93 - TOH1605
Transmission	TOH1661	F4501 Pierce-Beckjord Rem - TOH1661
Transmission	TOH1847	F3263 Ext and Rcnfr - TOH1847
Transmission	TOH1848	5863 Rebuild Brown to South Bethel - TOH1848
Transmission	TOH1870	F3881_Wards Corner Re-feed - TOH1870
Transmission	TOH1903	Beckjord P_C Cntrl Bldg Rmv - TOH1903
Transmission	TOH1928	Garver 138kV Exp - TOH1928

Report date: 3/29/2018

Duke Energy Ohio
Rule 26 Report for 2017

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	TOH2032	F3881-5483 Purc Prop - TOH2032
Transmission	X04C7993	F868-Reconductor Fairfax-Senco - X04C7993

Notes:

Duke Energy Ohio
Rule 26 Report for 2017

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
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Notes: Duke Energy had no overloading events in 2017.

**Duke Energy Ohio
Rule 26 Report for 2017**

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

Facility Type	Deleted Program Name
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Notes: Duke Energy did not delete any inspection, maintenance, repair, or replacement programs during 2017.

Duke Energy Ohio
Rule 26 Report for 2017

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

Facility Type	Deleted Program Name
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Notes: Duke Energy did not modify any inspection, maintenance, repair, or replacement programs during 2017.

Duke Energy Ohio
Rule 26 Report for 2017

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

Facility Type	Deleted Program Name
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Notes: Duke Energy did not add any inspection, maintenance, repair, or replacement programs during 2017.

**Duke Energy Ohio
Rule 26 Report for 2017**

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
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Notes: Duke Energy Ohio had no customer service interruptions that were due solely to the actions or inactions of another electric utility, regional transmission entity, and/or a competitive retail electric supplier in 2017.

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Case No(s). 18-0999-EL-ESS

Summary: Annual Report Duke Energy Ohio Annual Report of Electric Distribution System Reliability Pursuant to 4901:1-10-26 electronically filed by Dianne Kuhnell on behalf of Duke Energy Ohio, Inc. and Rocco D'Ascenzo and Watts, Elizabeth H.