

**BEFORE
THE PUBLIC UTILITIES COMMISSION OF OHIO**

In the matter of the Annual Report of)
Electric Distribution System Reliability) Case No: 22 -0992 -EL-ESS
Pursuant to Rule 4901:1-10-10(C))

Pursuant to Rule 4901:1-10-10(C) of the Ohio Administrative Code,
Ohio Power Company
hereby submits the attached annual report for the year 2021 .

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



Signature

THOMAS A KRATT

Printed Name

VP DISTRIBUTION OPERATIONS

Title

03.30.2022

Date

**Ohio Power Company
Rule 10 Report for 2021**

1. 4901:1-10-10(C)(1): CAIDI (Customer Average Interruption Duration Index)

<u>Performance Standard</u>	<u>After Exclusions</u>	<u>Before Exclusions</u>
148.00	132.13	169.30

2. 4901:1-10-10(C)(1): SAIFI (System Average Interruption Frequency Index)

<u>Performance Standard</u>	<u>After Exclusions</u>	<u>Before Exclusions</u>
1.18	1.17	1.36

3. 4901:1-10-10(C)(1): Supporting Data

Customers <u>Served</u>	CI* <u>After Exclusions</u>	CI <u>Before Exclusions</u>	CMI* <u>After Exclusions</u>	CMI <u>Before Exclusions</u>
1,509,795	1,760,437	2,059,592	232,611,797	348,696,804

Notes:

Standards and actuals use differing major event definitions

*CI = Customer Interruptions

CMI = Customer Minutes Interrupted

**Ohio Power Company
Rule 10 Report for 2021**

4. 4901:1-10-10(C)(2): Major Event Outages

Date	Description	CI	CMI	CAIDI	SAIFI
1/22/2021	Major Event Day: Non-Storm	19,171	10,952,825	571.32	0.01
2/15/2021	Major Event Day - Storms	17,727	42,322,842	2,387.48	0.01
3/26/2021	Major Event Day - Storms	54,186	16,161,589	298.26	0.04
12/11/2021	Major Event Day - Storms	71,802	20,539,426	286.06	0.05
Totals:		162,886	89,976,682		

Notes: Transmission influence included

**Ohio Power Company
Rule 10 Report for 2021**

5a. 4901:1-10-10(C)(2): Transmission Outages

Outage Start Date	Transmission Circuit Impacted	Outage Start Time	Circuit kV	Outage Cause	Outage Length (minutes)
1/1/2021	Haviland - Payne	2:59 PM	69	EQUIPMENT FAILURE	365
1/6/2021	Saltillo - South Fultonham	12:43 PM	69	EQUIPMENT FAILURE	72
1/14/2021	South Berwick-Upper Sandusky	10:08 AM	69	SCHEDULED COMPANY	37
1/14/2021	Compton SW - East Wooster	3:05 PM	69	ERROR - FIELD	14
1/21/2021	Dolahard - East Lima	3:36 AM	69	ERROR - FIELD	218
2/16/2021	Bellefonte - South Point No. 2	12:58 AM	69	EQUIPMENT FAILURE	2,444
2/18/2021	Bellefonte - South Point No. 2	1:28 PM	69	WEATHER - ICE (1/2 INCH OR > 6 " SNOW)	379
2/24/2021	Ross - Vigo	9:18 AM	69	SCHEDULED COMPANY	422
2/25/2021	Ross - Vigo	8:00 AM	69	SCHEDULED COMPANY	481
2/28/2021	Firebrick - Lick	2:42 PM	69	EQUIPMENT FAILURE	448
3/6/2021	East Logan - New Lexington	5:00 AM	69	SCHEDULED COMPANY	75
3/22/2021	East End Fostoria - Riverview	9:23 PM	69	EQUIPMENT FAILURE	293
3/23/2021	Philo Sw. - South Canton	8:00 AM	138	SCHEDULED COMPANY	210
3/24/2021	Carrollton - Gable SW	10:25 AM	138	SCHEDULED COMPANY	120
4/1/2021	East Beaver - North Portsmouth	5:06 PM	69	TREE OUT OF ROW	185
4/9/2021	Dennison - Schoenbrunn	1:28 PM	69	EQUIPMENT FAILURE	55
4/9/2021	South Delphos Station (2120)	5:00 PM	69	EQUIPMENT FAILURE	90
4/12/2021	North Spencerville - West Moul	8:38 AM	69	SCHEDULED COMPANY	161
4/15/2021	Harrison - Madison	12:42 PM	69	VEHICLE ACCIDENT (NON AEP)	97
4/19/2021	Glencoe - Speidel	9:56 AM	69	SCHEDULED COMPANY	275
4/21/2021	Wilson - Briggsdale	3:04 AM	40	EQUIPMENT FAILURE	701
4/21/2021	Greif - Hyatt	3:16 AM	138	RELAY MIS-OPERATION	1,204
4/29/2021	Divelbiss - Lexington - North Bellville	9:15 AM	69	TREE OUT OF ROW	383
4/30/2021	Harrison - Madison	2:17 PM	69	EQUIPMENT FAILURE	116

**Ohio Power Company
Rule 10 Report for 2021**

5a. 4901:1-10-10(C)(2): Transmission Outages

Outage Start Date	Transmission Circuit Impacted	Outage Start Time	Circuit kV	Outage Cause	Outage Length (minutes)
5/1/2021	East Logan - New Lexington	4:57 AM	69	SCHEDULED COMPANY	75
5/3/2021	Glencoe - Speidel	8:23 AM	69	SCHEDULED COMPANY	287
5/3/2021	Crooksville - Lemaster - Strouds Run	3:01 PM	138	EQUIPMENT FAILURE	466
5/9/2021	Saltillo - South Fultonham	5:44 PM	69	EQUIPMENT FAILURE	236
5/12/2021	Dennison - Schoenbrunn	9:47 AM	69	SCHEDULED COMPANY	105
5/16/2021	Harpster - DeCliff	4:57 PM	34	EQUIPMENT FAILURE	109
5/22/2021	East Amsterdam - Tidd	12:00 PM	138	SCHEDULED COMPANY	151
5/22/2021	Academia - Divelbiss	11:01 PM	69	SCHEDULED COMPANY	343
5/26/2021	Glencoe - West Bellaire	4:38 PM	69	TREE INSIDE ROW	82
5/28/2021	Rockhill - South Side Lima	11:05 PM	34	EQUIPMENT FAILURE	6
6/1/2021	Fort Steuben - Tidd #1	5:33 AM	69	VINE	352
6/1/2021	North Delphos - North Spencerville	9:12 PM	69	VEHICLE ACCIDENT (NON AEP)	331
6/6/2021	Coshocton - North Coshocton	9:00 AM	69	SCHEDULED OUTSIDE REQUEST > 1 CUSTOMER	608
6/13/2021	Broom Road - Newcomerstown	4:00 PM	69	TREE OUT OF ROW	93
6/18/2021	Kirk - West Granville	10:03 PM	69	WEATHER - LIGHTNING	262
6/19/2021	East Amsterdam - Tidd	12:00 PM	138	SCHEDULED COMPANY	246
7/1/2021	Brues - Martins Ferry	10:43 AM	69	SCHEDULED COMPANY	197
7/7/2021	Hammondsville - South Toronto	3:36 PM	69	TREE OUT OF ROW	61
7/9/2021	Dennison - Schoenbrunn	9:41 AM	69	ERROR - FIELD	9
7/9/2021	Proposed Crawfis College - Pandora	7:44 PM	69	TREE OUT OF ROW	261
7/13/2021	Cornerstone - Millbrook Park	8:40 AM	69	SCHEDULED COMPANY	220
7/16/2021	Newcomerstown - West New Philadelphia	3:05 PM	34	WEATHER - LIGHTNING	83
7/17/2021	Canal Road - Wooster	8:34 AM	23	TREE OUT OF ROW	203

**Ohio Power Company
Rule 10 Report for 2021**

5a. 4901:1-10-10(C)(2): Transmission Outages

Outage Start Date	Transmission Circuit Impacted	Outage Start Time	Circuit kV	Outage Cause	Outage Length (minutes)
7/31/2021	Somerset - Zion	7:30 AM	69	SCHEDULED COMPANY	194
8/4/2021	Canal Road - East Union	10:26 AM	69	VEHICLE ACCIDENT (NON AEP)	506
8/7/2021	North Baltimore - Portage	11:59 PM	34	SCHEDULED COMPANY	416
8/9/2021	Glencoe - West Bellaire	5:59 PM	69	EQUIPMENT FAILURE	235
8/10/2021	Brues - Martins Ferry	2:08 PM	69	WEATHER - LIGHTNING	147
8/10/2021	Moundsville - West Bellaire	2:09 PM	69	WEATHER - LIGHTNING	113
8/11/2021	Ross - Vigo	8:05 AM	69	SCHEDULED COMPANY	220
8/11/2021	1085: Killbuck - South Millersburg	5:30 PM	34	TREE OUT OF ROW	445
8/12/2021	Lazelle - Sawmill	12:16 PM	69	EQUIPMENT FAILURE	119
8/12/2021	Newcomerstown - West New Philadelphia	8:52 PM	34	TREE OUT OF ROW	967
8/13/2021	Glenmont - Killbuck	7:27 AM	34	TREE OUT OF ROW	997
8/14/2021	Bane - Hammondsville	1:34 AM	69	TREE OUT OF ROW	120
8/16/2021	Sardinia - Wildcat	7:28 AM	138	TREE OUT OF ROW	142
8/16/2021	North Baltimore - Portage	9:09 PM	34	ANIMAL - BIRD	271
8/19/2021	Ross - Vigo	8:00 AM	69	SCHEDULED COMPANY	324
8/20/2021	Ross - Vigo	8:00 AM	69	SCHEDULED COMPANY	468
8/23/2021	Ross - Vigo	11:31 AM	69	SCHEDULED COMPANY	319
8/24/2021	Ross - Vigo	7:57 AM	69	SCHEDULED COMPANY	479
8/25/2021	Howard - Willard	12:03 PM	69	EQUIPMENT FAILURE	421
8/25/2021	North Willard - Willard	1:13 PM	69	EQUIPMENT FAILURE	515
9/5/2021	Rockhill - South Side Lima	3:35 AM	34	EQUIPMENT FAILURE	60
9/7/2021	Kirk - West Granville	1:20 PM	69	EQUIPMENT FAILURE	370
9/14/2021	Moundsville - West Bellaire	2:12 PM	69	EQUIPMENT FAILURE	109
9/16/2021	Harpster - DeCliff	11:56 AM	34	EQUIPMENT FAILURE	27

**Ohio Power Company
Rule 10 Report for 2021**

5a. 4901:1-10-10(C)(2): Transmission Outages

Outage Start Date	Transmission Circuit Impacted	Outage Start Time	Circuit kV	Outage Cause	Outage Length (minutes)
9/24/2021	Kaiser Junction Sw. - Newark - Newark Center	10:54 PM	69	TREE OUT OF ROW	130
9/30/2021	South Cadiz - Sparrow Switch	3:51 PM	69	EQUIPMENT FAILURE	7
10/2/2021	Heppner - Vigo	7:00 AM	69	SCHEDULED COMPANY	286
10/16/2021	East Cambridge - West Cambridge	4:02 AM	69	TREE OUT OF ROW	436
10/23/2021	Adena - Biers Run	6:50 AM	69	SCHEDULED COMPANY	552
10/24/2021	South Cadiz - Sparrow Switch	11:54 AM	69	SCHEDULED COMPANY	336
10/24/2021	Dillonvale - Robyville - South Cadiz	6:21 PM	69	EQUIPMENT FAILURE	78
10/30/2021	Highland Terrace Station (5171)	9:00 AM	69	SCHEDULED COMPANY	201
11/11/2021	Haviland - Payne	9:27 AM	69	EQUIPMENT FAILURE	290
11/12/2021	Bannock Road - Flushing	12:57 AM	69	WEATHER - UNKNOWN	10
11/14/2021	Astor - East Broad Street	12:31 PM	138	TREE OUT OF ROW	121
11/19/2021	Mill Creek - Williamstown	2:24 PM	23	EQUIPMENT FAILURE	168
11/21/2021	Moundsville - West Bellaire	6:10 AM	69	SCHEDULED COMPANY	107
11/25/2021	Center Street - Hanging Rock	9:35 AM	69	WEATHER - LIGHTNING	81
11/27/2021	New Liberty Station (2108)	4:01 AM	138	SCHEDULED COMPANY	12
12/12/2021	Findlay Center - South Findlay	1:02 PM	34	WEATHER - UNKNOWN	186
12/16/2021	Findlay Center - South Findlay	3:01 PM	34	VEHICLE ACCIDENT (NON AEP)	138
12/21/2021	Ohio City - West Van Wert	11:47 AM	34	EQUIPMENT FAILURE	308

Notes: Excludes Major Event Outages. Transmission outages reported in this table are from the Distribution Reporting System. This data reflects distribution customers affected by Transmission Outages. Transmission outages reported in Rule 27 (C) are from the Transmission Outage Reporting System. That system is based on Transmission circuits and does not reflect Distribution circuits. As such, the Distribution Outage Reporting System does not reflect Transmission circuit information. Therefore data variances will exist between data shown in this table and that of Table 6c and in that of Rule 27(C). Many of these "transmission caused" outages (especially the scheduled ones) are not full distribution circuit outages resulting from loss of source, but partial distribution circuit interruptions because of nearby transmission facilities.

**Ohio Power Company
Rule 10 Report for 2021**

5b. 4901:1-10-10(C)(2): Distribution Circuits Impacted by Transmission Outages

Outage Start Date	CI per Outage	CMI per Outage	# of Impacted Circuits	IDs for Impacted Circuits	CI per Circuit	CMI per Circuit
1/1/2021	2,099	414,653	6	7207801	689	104,039
1/1/2021	2,099	414,653	6	7207802	154	23,254
1/1/2021	2,099	414,653	6	7209501	587	136,835
1/1/2021	2,099	414,653	6	7209502	469	105,525
1/1/2021	2,099	414,653	6	7209901	199	44,775
1/1/2021	2,099	414,653	6	7209902	1	225
1/6/2021	220	15,840	1	7223002	220	15,840
1/14/2021	1	37	1	7201705	1	37
1/14/2021	566	7,924	1	7119804	566	7,924
1/21/2021	5,251	547,693	5	7204301	1,691	86,241
1/21/2021	5,251	547,693	5	7204302	1,264	64,464
1/21/2021	5,251	547,693	5	7204303	620	31,620
1/21/2021	5,251	547,693	5	7211801	945	206,010
1/21/2021	5,251	547,693	5	7211802	731	159,358
2/16/2021	550	902,669	1	7411601	550	902,669
2/18/2021	746	213,575	2	7411601	547	157,457
2/18/2021	746	213,575	2	7411602	199	56,118
2/24/2021	2	844	1	0017901	2	844
2/25/2021	2	962	1	0017901	2	962
2/28/2021	5,744	384,562	4	0014203	40	2,560

3/28/2022

**Ohio Power Company
Rule 10 Report for 2021**

5b. 4901:1-10-10(C)(2): Distribution Circuits Impacted by Transmission Outages

Outage Start Date	CI per Outage	CMI per Outage	# of Impacted Circuits	IDs for Impacted Circuits	CI per Circuit	CMI per Circuit
2/28/2021	5,744	384,562	4	0014501	1,734	102,412
2/28/2021	5,744	384,562	4	0014502	1,652	97,468
2/28/2021	5,744	384,562	4	0014503	2,318	182,122
3/6/2021	2,326	173,248	2	7401203	1,124	84,300
3/6/2021	2,326	173,248	2	7401204	1,202	88,948
3/22/2021	1,635	347,165	2	7201301	1,030	301,790
3/23/2021	1,635	347,165	2	7201303	605	45,375
3/23/2021	3	630	1	7113101	3	630
3/24/2021	1	120	1	7100702	1	120
4/1/2021	4,061	751,285	4	7410701	1,661	307,285
4/1/2021	4,061	751,285	4	7410702	717	132,645
4/1/2021	4,061	751,285	4	7427101	805	148,925
4/1/2021	4,061	751,285	4	7427102	878	162,430
4/9/2021	1,394	76,670	1	7121801	1,394	76,670
4/9/2021	1,611	144,990	2	7212001	605	54,450
4/9/2021	1,611	144,990	2	7212002	1,006	90,540
4/12/2021	52	8,372	1	7215401	52	8,372
4/15/2021	1,460	142,710	2	0000801	545	53,955
4/15/2021	1,460	142,710	2	0000802	915	88,755
4/19/2021	4	1,100	1	7361903	4	1,100

3/28/2022

**Ohio Power Company
Rule 10 Report for 2021**

5b. 4901:1-10-10(C)(2): Distribution Circuits Impacted by Transmission Outages

Outage Start Date	CI per Outage	CMI per Outage	# of Impacted Circuits	IDs for Impacted Circuits	CI per Circuit	CMI per Circuit
4/21/2021	57	39,957	1	0002001	57	39,957
4/21/2021	8,645	3,334,178	5	0001931	673	368,313
4/21/2021	8,645	3,334,178	5	0001932	4,186	2,030,670
4/21/2021	8,645	3,334,178	5	0001933	775	194,525
4/21/2021	8,645	3,334,178	5	0001934	2,993	736,278
4/21/2021	8,645	3,334,178	5	0024006	18	4,392
4/29/2021	5,060	1,391,412	6	7402101	1,238	474,154
4/29/2021	5,060	1,391,412	6	7402102	2	760
4/29/2021	5,060	1,391,412	6	7402103	688	263,504
4/29/2021	5,060	1,391,412	6	7403801	1,004	234,936
4/29/2021	5,060	1,391,412	6	7403802	270	63,180
4/29/2021	5,060	1,391,412	6	7408501	1,858	354,878
4/30/2021	1,461	162,148	2	0000801	545	63,220
4/30/2021	1,461	162,148	2	0000802	916	98,928
5/1/2021	2,314	170,193	2	7401203	1,119	80,568
5/1/2021	2,314	170,193	2	7401204	1,195	89,625
5/3/2021	16	4,592	1	7361902	16	4,592
5/3/2021	85	38,736	1	0023003	85	38,736
5/10/2021	6,263	991,080	6	7207201	1,050	247,800
5/10/2021	6,263	991,080	6	7207202	1,151	271,636

**Ohio Power Company
Rule 10 Report for 2021**

5b. 4901:1-10-10(C)(2): Distribution Circuits Impacted by Transmission Outages

Outage Start Date	CI per Outage	CMI per Outage	# of Impacted Circuits	IDs for Impacted Circuits	CI per Circuit	CMI per Circuit
5/9/2021	6,263	991,080	6	7212001	1,216	159,296
5/9/2021	6,263	991,080	6	7212002	2,008	246,984
5/10/2021	6,263	991,080	6	7223001	620	48,360
5/10/2021	6,263	991,080	6	7223002	218	17,004
5/12/2021	8	840	1	7104105	8	840
5/16/2021	1,159	126,331	2	7202701	387	42,183
5/16/2021	1,159	126,331	2	7202702	772	84,148
5/22/2021	878	130,822	2	7516801	544	81,056
5/22/2021	878	130,822	2	7516802	334	49,766
5/22/2021	1,935	661,612	3	7402101	1,242	426,006
5/22/2021	1,935	661,612	3	7402102	2	666
5/22/2021	1,935	661,612	3	7402103	691	234,940
5/26/2021	1	82	1	7337602	1	82
5/28/2021	737	4,422	1	7206102	737	4,422
6/1/2021	1,338	470,976	2	7517801	587	206,624
6/1/2021	1,338	470,976	2	7517802	751	264,352
6/1/2021	543	63,321	1	7231401	543	63,321
6/6/2021	1	608	1	7109003	1	608
6/13/2021	398	37,014	1	7405601	398	37,014
6/18/2021	6,667	1,023,674	4	7413801	1,900	497,800

3/28/2022

**Ohio Power Company
Rule 10 Report for 2021**

5b. 4901:1-10-10(C)(2): Distribution Circuits Impacted by Transmission Outages

Outage Start Date	CI per Outage	CMI per Outage	# of Impacted Circuits	IDs for Impacted Circuits	CI per Circuit	CMI per Circuit
6/18/2021	6,667	1,023,674	4	7413802	3,786	405,102
6/18/2021	6,667	1,023,674	4	7413803	903	100,336
6/18/2021	6,667	1,023,674	4	7414001	78	20,436
6/19/2021	1,429	214,474	2	7516801	543	129,234
6/19/2021	1,429	214,474	2	7516802	886	85,240
7/1/2021	1	197	1	7502002	1	197
7/7/2021	343	20,923	2	7503701	42	2,562
7/7/2021	343	20,923	2	7503702	301	18,361
7/9/2021	558	5,022	1	7104106	558	5,022
7/9/2021	1,246	325,206	1	7517001	1,246	325,206
7/13/2021	15	3,294	2	7440203	12	2,640
7/13/2021	15	3,294	2	7440204	3	654
7/16/2021	181	15,023	3	7105401	140	11,620
7/16/2021	181	15,023	3	7105402	39	3,237
7/16/2021	181	15,023	3	7111101	2	166
7/17/2021	10	1,806	1	7111001	10	1,806
7/31/2021	131	25,414	1	7404501	131	25,414
8/4/2021	1,734	409,895	2	7111201	947	225,737
8/4/2021	1,734	409,895	2	7111202	787	184,158
8/7/2021	610	253,760	1	7216201	610	253,760

**Ohio Power Company
Rule 10 Report for 2021**

5b. 4901:1-10-10(C)(2): Distribution Circuits Impacted by Transmission Outages

Outage Start Date	CI per Outage	CMI per Outage	# of Impacted Circuits	IDs for Impacted Circuits	CI per Circuit	CMI per Circuit
8/9/2021	1,353	309,285	1	7500901	1,353	309,285
8/10/2021	978	135,506	1	7501001	978	135,506
8/10/2021	5,532	625,116	7	7502601	1,508	170,404
8/10/2021	5,532	625,116	7	7502602	633	71,529
8/10/2021	5,532	625,116	7	7511001	222	25,086
8/10/2021	5,532	625,116	7	7511004	440	49,720
8/10/2021	5,532	625,116	7	7511101	1,223	138,199
8/10/2021	5,532	625,116	7	7511102	931	105,203
8/10/2021	5,532	625,116	7	7511103	575	64,975
8/11/2021	77	16,940	1	0017902	77	16,940
8/11/2021	487	216,715	1	7123401	487	216,715
8/12/2021	144	17,136	1	0009801	144	17,136
8/12/2021	179	173,093	2	7105401	140	135,380
8/12/2021	179	173,093	2	7105402	39	37,713
8/13/2021	212	211,364	1	7104901	212	211,364
8/14/2021	816	97,920	2	7336501	62	7,440
8/14/2021	816	97,920	2	7336502	754	90,480
8/16/2021	1,295	160,256	2	0015501	386	54,812
8/16/2021	1,295	160,256	2	0015502	909	105,444
8/16/2021	610	165,310	1	7216201	610	165,310

**Ohio Power Company
Rule 10 Report for 2021**

5b. 4901:1-10-10(C)(2): Distribution Circuits Impacted by Transmission Outages

Outage Start Date	CI per Outage	CMI per Outage	# of Impacted Circuits	IDs for Impacted Circuits	CI per Circuit	CMI per Circuit
8/19/2021	77	24,948	1	0017902	77	24,948
8/20/2021	77	36,036	1	0017902	77	36,036
8/23/2021	77	24,563	1	0017902	77	24,563
8/24/2021	77	36,883	1	0017902	77	36,883
8/25/2021	537	182,852	1	7202301	537	182,852
8/25/2021	5,350	2,520,747	9	7205302	517	213,004
8/25/2021	5,350	2,520,747	9	7205303	214	88,168
8/25/2021	5,350	2,520,747	9	7228601	1,070	551,050
8/25/2021	5,350	2,520,747	9	7228602	1,542	794,130
8/25/2021	5,350	2,520,747	9	7228603	238	122,570
8/25/2021	5,350	2,520,747	9	7231601	1,156	491,300
8/25/2021	5,350	2,520,747	9	7240401	1	425
8/25/2021	5,350	2,520,747	9	7240402	427	181,475
8/25/2021	5,350	2,520,747	9	7240403	185	78,625
9/5/2021	225	13,500	1	7206102	225	13,500
9/7/2021	2,431	812,548	2	7413801	1,979	645,308
9/7/2021	2,431	812,548	2	7413803	452	167,240
9/14/2021	935	101,915	1	7511102	935	101,915
9/16/2021	1,158	31,266	2	7202701	386	10,422
9/16/2021	1,158	31,266	2	7202702	772	20,844

**Ohio Power Company
Rule 10 Report for 2021**

5b. 4901:1-10-10(C)(2): Distribution Circuits Impacted by Transmission Outages

Outage Start Date	CI per Outage	CMI per Outage	# of Impacted Circuits	IDs for Impacted Circuits	CI per Circuit	CMI per Circuit
9/24/2021	4,905	631,421	5	7401604	62	7,936
9/24/2021	4,905	631,421	5	7418801	899	115,971
9/24/2021	4,905	631,421	5	7418802	877	114,010
9/24/2021	4,905	631,421	5	7418803	2,139	273,792
9/24/2021	4,905	631,421	5	7418804	928	119,712
9/30/2021	1,959	13,713	2	7506901	915	6,405
9/30/2021	1,959	13,713	2	7506902	1,044	7,308
10/2/2021	2,463	701,142	2	0018701	1,371	392,106
10/2/2021	2,463	701,142	2	0018702	1,092	309,036
10/16/2021	754	312,904	2	7408301	753	312,488
10/16/2021	754	312,904	2	7408302	1	416
10/23/2021	1,511	833,270	2	0010901	802	441,902
10/23/2021	1,511	833,270	2	0010902	709	391,368
10/24/2021	1,013	276,957	2	7506901	919	245,373
10/24/2021	1,013	276,957	2	7506902	94	31,584
10/24/2021	998	77,844	2	7500701	470	36,660
10/24/2021	998	77,844	2	7500702	528	41,184
10/30/2021	991	199,191	1	7517101	991	199,191
11/11/2021	1,231	314,262	4	7206801	234	42,354
11/11/2021	1,231	314,262	4	7206802	158	28,598

3/28/2022

**Ohio Power Company
Rule 10 Report for 2021**

5b. 4901:1-10-10(C)(2): Distribution Circuits Impacted by Transmission Outages

Outage Start Date	CI per Outage	CMI per Outage	# of Impacted Circuits	IDs for Impacted Circuits	CI per Circuit	CMI per Circuit
11/11/2021	1,231	314,262	4	7207801	683	198,070
11/11/2021	1,231	314,262	4	7207802	156	45,240
11/12/2021	2,087	20,870	3	7503101	663	6,630
11/12/2021	2,087	20,870	3	7506701	436	4,360
11/12/2021	2,087	20,870	3	7517101	988	9,880
11/14/2021	10,747	1,186,244	13	0001407	4	224
11/14/2021	10,747	1,186,244	13	0004601	2,391	253,446
11/14/2021	10,747	1,186,244	13	0004602	1,356	147,804
11/14/2021	10,747	1,186,244	13	0004603	474	51,192
11/14/2021	10,747	1,186,244	13	0004604	1,718	185,544
11/14/2021	10,747	1,186,244	13	0004605	253	28,589
11/14/2021	10,747	1,186,244	13	0004606	1	113
11/14/2021	10,747	1,186,244	13	0004607	600	63,000
11/14/2021	10,747	1,186,244	13	0004609	22	2,552
11/14/2021	10,747	1,186,244	13	0004610	1,601	177,711
11/14/2021	10,747	1,186,244	13	0004611	843	96,945
11/14/2021	10,747	1,186,244	13	0004613	88	10,208
11/14/2021	10,747	1,186,244	13	0004614	1,396	168,916
11/19/2021	368	45,249	2	0030971	140	17,145
11/19/2021	368	45,249	2	0030972	228	28,104

**Ohio Power Company
Rule 10 Report for 2021**

5b. 4901:1-10-10(C)(2): Distribution Circuits Impacted by Transmission Outages

Outage Start Date	CI per Outage	CMI per Outage	# of Impacted Circuits	IDs for Impacted Circuits	CI per Circuit	CMI per Circuit
11/21/2021	3,407	355,963	4	7511004	440	45,320
11/21/2021	3,407	355,963	4	7511101	1,460	151,276
11/21/2021	3,407	355,963	4	7511102	941	98,805
11/21/2021	3,407	355,963	4	7511103	566	60,562
11/25/2021	1,347	109,107	1	7425401	1,347	109,107
11/27/2021	2,540	30,480	2	7210801	1,376	16,512
11/27/2021	2,540	30,480	2	7210802	1,164	13,968
12/12/2021	7	1,302	1	7222901	7	1,302
12/16/2021	4,425	610,650	5	7215001	753	103,914
12/16/2021	4,425	610,650	5	7215002	806	111,228
12/16/2021	4,425	610,650	5	7215003	786	108,468
12/16/2021	4,425	610,650	5	7215004	911	125,718
12/16/2021	4,425	610,650	5	7215005	1,169	161,322
12/21/2021	1,337	411,796	3	7208401	134	41,272
12/21/2021	1,337	411,796	3	7227401	835	257,180
12/21/2021	1,337	411,796	3	7227402	368	113,344

**Ohio Power Company
Rule 10 Report for 2021**

5b. 4901:1-10-10(C)(2): Distribution Circuits Impacted by Transmission Outages

Outage Start Date	CI per Outage	CMI per Outage	# of Impacted Circuits	IDs for Impacted Circuits	CI per Circuit	CMI per Circuit
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Notes: Excludes Major Event Outages

**Ohio Power Company
Rule 10 Report for 2021**

5c. 4901:1-10-10(C)(2): Index values during transmission outages

Outage start date	CAIDI during outage	SAIFI during outage
1/1/2021	198.0000	0.0010
1/6/2021	72.0000	0.0000
1/14/2021	37.0000	0.0000
1/14/2021	14.0000	0.0000
1/21/2021	104.0000	0.0030
2/16/2021	1,641.0000	0.0000
2/18/2021	286.0000	0.0000
2/24/2021	422.0000	0.0000
2/25/2021	481.0000	0.0000
2/28/2021	67.0000	0.0040
3/6/2021	74.0000	0.0020
3/22/2021	212.0000	0.0010
3/23/2021	210.0000	0.0000
3/24/2021	120.0000	0.0000
4/1/2021	185.0000	0.0030
4/9/2021	55.0000	0.0010
4/9/2021	90.0000	0.0010
4/12/2021	161.0000	0.0000
4/15/2021	98.0000	0.0010
4/19/2021	275.0000	0.0000
4/21/2021	701.0000	0.0000
4/21/2021	386.0000	0.0060
4/29/2021	275.0000	0.0030
4/30/2021	111.0000	0.0010
5/1/2021	74.0000	0.0020
5/3/2021	287.0000	0.0000
5/3/2021	456.0000	0.0000
5/9/2021	158.0000	0.0040
5/12/2021	105.0000	0.0000

**Ohio Power Company
Rule 10 Report for 2021**

5c. 4901:1-10-10(C)(2): Index values during transmission outages

Outage start date	CAIDI during outage	SAIFI during outage
5/16/2021	109.0000	0.0010
5/22/2021	149.0000	0.0010
5/22/2021	342.0000	0.0010
5/26/2021	82.0000	0.0000
5/28/2021	6.0000	0.0000
6/1/2021	352.0000	0.0010
6/1/2021	117.0000	0.0000
6/6/2021	608.0000	0.0000
6/13/2021	93.0000	0.0000
6/18/2021	154.0000	0.0040
6/19/2021	150.0000	0.0010
7/1/2021	197.0000	0.0000
7/7/2021	61.0000	0.0000
7/9/2021	9.0000	0.0000
7/9/2021	261.0000	0.0010
7/13/2021	220.0000	0.0000
7/16/2021	83.0000	0.0000
7/17/2021	181.0000	0.0000
7/31/2021	194.0000	0.0000
8/4/2021	236.0000	0.0010
8/7/2021	416.0000	0.0000
8/9/2021	229.0000	0.0010
8/10/2021	139.0000	0.0010
8/10/2021	113.0000	0.0040
8/11/2021	220.0000	0.0000
8/11/2021	445.0000	0.0000
8/12/2021	119.0000	0.0000
8/12/2021	967.0000	0.0000
8/13/2021	997.0000	0.0000

**Ohio Power Company
Rule 10 Report for 2021**

5c. 4901:1-10-10(C)(2): Index values during transmission outages

Outage start date	CAIDI during outage	SAIFI during outage
8/14/2021	120.0000	0.0010
8/16/2021	124.0000	0.0010
8/16/2021	271.0000	0.0000
8/19/2021	324.0000	0.0000
8/20/2021	468.0000	0.0000
8/23/2021	319.0000	0.0000
8/24/2021	479.0000	0.0000
8/25/2021	341.0000	0.0000
8/25/2021	471.0000	0.0040
9/5/2021	60.0000	0.0000
9/7/2021	334.0000	0.0020
9/14/2021	109.0000	0.0010
9/16/2021	27.0000	0.0010
9/24/2021	129.0000	0.0030
9/30/2021	7.0000	0.0010
10/2/2021	285.0000	0.0020
10/16/2021	415.0000	0.0000
10/23/2021	551.0000	0.0010
10/24/2021	273.0000	0.0010
10/24/2021	78.0000	0.0010
10/30/2021	201.0000	0.0010
11/11/2021	255.0000	0.0010
11/12/2021	10.0000	0.0010
11/14/2021	110.0000	0.0070
11/19/2021	123.0000	0.0000
11/21/2021	104.0000	0.0020
11/25/2021	81.0000	0.0010
11/27/2021	12.0000	0.0020
12/12/2021	186.0000	0.0000

**Ohio Power Company
Rule 10 Report for 2021**

5c. 4901:1-10-10(C)(2): Index values during transmission outages

Outage start date	CAIDI during outage	SAIFI during outage
12/16/2021	138.0000	0.0030
12/21/2021	308.0000	0.0010

Notes: Excludes Major Event Outages

**Ohio Power Company
Rule 10 Report for 2021**

6a. 4901:1-10-10(C)(3)(a): Data excluding major events and transmission outages

Outage Cause	Events	Customers Interrupted	Customers Minutes Interrupted
Abnormal Feed	63	37,172	4,212,108
Accidental Ground	162	36,855	2,140,999
Animal	5,107	119,896	9,878,007
Blast/Explosion	5	83	31,180
Contamination/Flashover	18	418	87,788
Corrosion	256	3,364	563,152
Customer Equipment	58	3,240	257,824
Distribution Station	191	150,999	15,917,270
Equipment Hardware Failure	8,095	423,727	53,015,413
Facilitation of Work	88	12,456	941,116
Fire/Police	105	6,965	1,227,815
Flooding/Slide	7	1,076	246,611
High Winds	16	1,166	646,633
Ice/Sleet/Snow	102	8,381	4,570,725
Lightning	524	22,638	3,182,761
Object in Line	82	7,957	684,138
Operations Incident	916	37,957	1,921,200
Other	38	1,985	384,283
Other Utility	31	3,258	483,109
Overload	102	9,189	598,022
Scheduled/Planned	11,205	127,488	12,126,590
Tree/Vegetation Removal	115	8,002	1,490,717
Trees Inside RoW	536	18,220	3,041,550

**Ohio Power Company
Rule 10 Report for 2021**

6a. 4901:1-10-10(C)(3)(a): Data excluding major events and transmission outages

Outage Cause	Events	Customers Interrupted	Customers Minutes Interrupted
Trees Outside RoW	5,391	250,255	57,587,810
UG, Const/Dig-ins	269	15,024	1,654,969
Unbalance	7	151	16,057
Unknown	3,585	189,913	15,926,561
Unknown By Weather	486	34,722	5,251,969
Vandalism	59	1,631	240,032
Vehicle Accident/Auto Damage	1,044	226,249	34,285,388
Totals:	38,663	1,760,437	232,611,797

Notes: Metrics excluding transmission and major event days (influenced by transmission)

**Ohio Power Company
Rule 10 Report for 2021**

6b. 4901:1-10-10(C)(3)(b): Data for major events only

Outage Cause	Events	Customers Interrupted	Customers Minutes Interrupted
Abnormal Feed	1	744	23,064
Accidental Ground	1	1	5,638
Animal	15	129	32,722
Corrosion	10	20	7,281
Customer Equipment	5	5	4,629
Equipment Hardware Failure	331	53,161	24,326,624
Facilitation of Work	2	26	2,468
Fire/Police	2	1,849	244,473
High Winds	81	12,427	4,185,713
Ice/Sleet/Snow	69	7,265	21,846,999
Lightning	12	1,504	289,594
Object in Line	8	57	18,365
Other	13	128	12,395
Scheduled/Planned	41	2,793	56,925
Tree/Vegetation Removal	6	878	147,355
Trees Inside RoW	73	3,865	858,526
Trees Outside RoW	803	53,190	31,536,407
Unbalance	1	1	646
Unknown	20	448	89,106
Unknown By Weather	167	23,103	5,790,024
Vandalism	1	1	79
Vehicle Accident/Auto Damage	16	1,291	497,649
Totals:	1,678	162,886	89,976,682

Notes: Metrics on major event days, including transmission

**Ohio Power Company
Rule 10 Report for 2021**

6c. 4901:1-10-10(C)(3)(c): Data for transmission outages only

Outage Cause	Events	Customers Interrupted	Customers Minutes Interrupted
Abnormal Feed	3	2,325	247,435
Accidental Ground	7	6,375	560,639
Animal	1	610	165,310
Equipment Hardware Failure	70	42,465	8,515,576
Ice/Sleet/Snow	2	746	213,575
Lightning	18	14,705	1,908,426
Relay Mis-Operation	8	8,645	3,334,178
Scheduled/Planned	45	22,039	4,187,492
Trees Inside RoW	3	1,339	471,058
Trees Outside RoW	42	28,733	5,324,083
Unknown By Weather	2	670	7,932
Vehicle Accident/Auto Damage	9	7,617	1,172,621
Totals:	210	136,269	26,108,325

Notes: Metrics for transmission only, excluding major event days

**Ohio Power Company
Rule 10 Report for 2021**

7. 4901:1-10-10(C)(4): Momentary Interruptions

Total Number =

Notes: Data regarding momentary outages is not available

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3/31/2022 3:52:08 PM

in

Case No(s). 22-0992-EL-ESS

Summary: Report Ohio Power Company's 2021 Rule 10 Report electronically filed
by Michael J. Schuler on behalf of Ohio Power Company