

**BEFORE  
THE PUBLIC UTILITIES COMMISSION OF OHIO**

In the matter of the Annual Report of            )  
Electric Distribution System Reliability        ) Case No: 23 -0995 -EL-ESS  
Pursuant to Rule 4901:1-10-10(C)            )

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Pursuant to Rule 4901:1-10-10(C) of the Ohio Administrative Code,  
AES Ohio  
hereby submits the attached annual report for the year 2022 .

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.

*Kathryn N Storm*  
Signature

Kathryn N. Storm

Printed Name

Vice President, T&D Operations

Title

March 29, 2023

Date

**AES Ohio**  
**Rule 10 Report for 2022**

**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>
125.04	125.50	174.06

**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>
0.88	0.78	1.05

**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>
604,737	474,144	632,375	59,506,242	110,073,298

**Notes:**

\*CI = Customer Interruptions  
 CMI = Customer Minutes Interrupted

**AES Ohio**  
**Rule 10 Report for 2022**

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

<b>Date</b>	<b>Description</b>	<b>CI</b>	<b>CMI</b>	<b>CAIDI</b>	<b>SAIFI</b>
3/31/2022	Wind	15,092	5,325,729	352.88	1.00
6/13/2022	Thunderstorm	29,249	16,973,010	580.29	1.00
6/14/2022	Thunderstorm	18,270	8,492,106	464.81	1.00
7/23/2022	Thunderstorm	18,975	5,382,364	283.66	1.00
11/5/2022	Wind	15,657	3,183,913	203.35	1.00
12/23/2022	Wind and Subzero Temperatures	18,025	4,890,714	271.33	1.00
<b>Totals:</b>		<b>115,268</b>	<b>44,247,836</b>		

**Notes:**

**AES Ohio**  
**Rule 10 Report for 2022**

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

<b>Outage Start Date</b>	<b>Transmission Circuit Impacted</b>	<b>Outage Start Time</b>	<b>Circuit kV</b>	<b>Outage Cause</b>	<b>Outage Length (minutes)</b>
02/11/2022	Transmission Bus	12:00 AM	12 kV	Transmission Trouble	24,638
02/17/2022	Transmission Bus	12:00 AM	12 kV	Transmission Trouble	152,159
02/18/2022	Logan - Shelby [13830]	12:00 AM	138 kV	Galloping Conductors	201,421
02/18/2022	Transmission Bus	12:00 AM	12 kV	Transmission Trouble	26,190
02/18/2022	Transmission Bus	12:00 AM	12 kV	Transmission Trouble	36,375
03/30/2022	Hutchings - Crystal [6602]	12:00 AM	69 kV	High Winds	2,141,203
03/31/2022	Caesars Creek - Webb Road - Wilmington [6917]	12:00 AM	69 kV	High Winds	160,718
03/31/2022	Caesars Creek - Webb Road - Wilmington [6917]	12:00 AM	69 kV	High Winds	221,470
05/18/2022	Indian Lake - New Hampshire [3307]	12:00 AM	33 kV	Equipment/Hardware Failure	32,234
05/30/2022	Manning - Moraine [6655]	12:00 AM	69 kV	Undesired Relay Operation	103
06/06/2022	Garage Road - New Westville [3302]	12:00 AM	33 kV	Equipment/Hardware Failure	544,596
06/11/2022	Garage Road - New Westville [3302]	12:00 AM	33 kV	Equipment/Hardware Failure	407,037
06/14/2022	Logan - Shelby [13830]	12:00 AM	138 kV	Equipment/Hardware Failure	885,913
06/22/2022	Washington C.H. - Wilmington [6637]	12:00 AM	69 kV	Trees Out of ROW	147,414
06/22/2022	Washington C.H. - Wilmington [6637]	12:00 AM	69 kV	Trees Out of ROW	233,165
07/16/2022	Indian Lake - New Hampshire [3307]	12:00 AM	33 kV	Equipment/Hardware Failure	31,030
07/17/2022	Trebein - Yellow Springs [6659]	12:00 AM	69 kV	Trees Out of ROW	6,521
07/23/2022	Covington - Greenville [6644]	12:00 AM	69 kV	Trees Out of ROW	166,432
07/23/2022	Botkins - Jackson Center [6930]	12:00 AM	69 kV	Trees Out of ROW	231,499
07/27/2022	Transmission Bus	12:00 AM	69 kV	Unknown	9,161
09/03/2022	Sidney - Amsterdam [6628]	12:00 AM	69 kV	Forced Outage	279,871

3/15/2023

**AES Ohio**  
**Rule 10 Report for 2022**

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

<b>Outage Start Date</b>	<b>Transmission Circuit Impacted</b>	<b>Outage Start Time</b>	<b>Circuit kV</b>	<b>Outage Cause</b>	<b>Outage Length (minutes)</b>
09/11/2022	Indian Lake - New Hampshire [3307]	12:00 AM	33 kV	Equipment/Hardware Failure	38,903
12/03/2022	Coldwater - Rossburg [6684]	12:00 AM	69 kV	Other Electric Utility	306,818

**Notes:**

**AES Ohio**  
**Rule 10 Report for 2022**

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

<b>Outage Start Date</b>	<b>CI per Outage</b>	<b>CMI per Outage</b>	<b># of Impacted Circuits</b>	<b>IDs for Impacted Circuits</b>	<b>CI per Circuit</b>	<b>CMI per Circuit</b>
02/17/2022	839	152,159	3	BB1201	80	17,373
02/17/2022	839	152,159	3	BB1205	275	48,835
02/17/2022	839	152,159	3	BB1207	484	85,950
02/18/2022	1,455	201,421	2	EF1202	882	122,098
02/18/2022	1,455	201,421	2	EF1206	573	79,322
02/18/2022	1,455	36,375	2	EF1202	882	22,050
02/18/2022	1,455	36,375	2	EF1206	573	14,325
02/18/2022	1,455	26,190	2	EF1202	882	15,876
02/18/2022	1,455	26,190	2	EF1206	573	10,314
02/11/2022	675	24,638	1	MC1211	675	24,638
03/30/2022	9,891	2,141,203	8	MG1203	868	187,792
03/30/2022	9,891	2,141,203	8	MG1205	1,579	341,511
03/30/2022	9,891	2,141,203	8	MK1206	35	7,580
03/30/2022	9,891	2,141,203	8	QF1201	1,274	275,991
03/30/2022	9,891	2,141,203	8	QF1205	1,678	363,203
03/30/2022	9,891	2,141,203	8	MK1202	1,215	262,926
03/30/2022	9,891	2,141,203	8	MK1204	1,726	373,708
03/30/2022	9,891	2,141,203	8	QF1202	1,516	328,492
03/31/2022	2,147	160,718	2	HW1202	1,198	89,590
03/31/2022	2,147	160,718	2	HW1204	949	71,128

**AES Ohio**  
**Rule 10 Report for 2022**

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

<b>Outage Start Date</b>	<b>CI per Outage</b>	<b>CMI per Outage</b>	<b># of Impacted Circuits</b>	<b>IDs for Impacted Circuits</b>	<b>CI per Circuit</b>	<b>CMI per Circuit</b>
03/31/2022	1,198	221,470	1	HW1202	1,198	221,470
05/18/2022	93	32,234	1	ED1202	93	32,234
05/30/2022	1	103	1	MS0401	1	103
06/06/2022	1,459	544,596	1	MB1201	1,459	544,596
06/11/2022	1,458	407,037	2	MB1201	366	37,759
06/11/2022	1,458	407,037	2	MB1201	1,092	369,278
06/14/2022	666	885,913	2	EF1206	573	762,539
06/14/2022	666	885,913	2	EF1202	93	123,374
06/22/2022	3,836	233,165	6	HP1201	350	21,274
06/22/2022	3,836	233,165	6	HP1205	37	2,249
06/22/2022	3,836	233,165	6	HC1204	1,412	85,826
06/22/2022	3,836	233,165	6	HP1203	250	15,196
06/22/2022	3,836	233,165	6	HC1202	1,250	75,979
06/22/2022	3,836	233,165	6	HP1209	537	32,641
06/22/2022	3,836	147,414	6	HC1202	1,250	50,000
06/22/2022	3,836	147,414	6	HC1204	1,412	56,480
06/22/2022	3,836	147,414	6	HP1201	350	12,203
06/22/2022	3,836	147,414	6	HP1203	250	8,717
06/22/2022	3,836	147,414	6	HP1205	37	1,290
06/22/2022	3,836	147,414	6	HP1209	537	18,723

**AES Ohio**  
**Rule 10 Report for 2022**

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

<b>Outage Start Date</b>	<b>CI per Outage</b>	<b>CMI per Outage</b>	<b># of Impacted Circuits</b>	<b>IDs for Impacted Circuits</b>	<b>CI per Circuit</b>	<b>CMI per Circuit</b>
07/16/2022	93	31,030	1	ED1202	93	31,029
07/17/2022	54	6,521	1	GC1203	54	6,521
07/23/2022	1,697	231,499	1	BI1202	1,697	231,499
07/23/2022	3,273	166,432	2	LG1206	1,917	97,479
07/23/2022	3,273	166,432	2	LG1202	1,356	68,953
07/27/2022	1,458	9,161	1	MB1201	1,458	9,161
09/03/2022	3,363	279,871	5	BR1201	292	21,082
09/03/2022	3,363	279,871	5	BG1202	204	42,123
09/03/2022	3,363	279,871	5	BR1205	1,224	88,373
09/03/2022	3,363	279,871	5	BG1201	72	14,867
09/03/2022	3,363	279,871	5	BR1203	1,571	113,426
09/11/2022	93	38,903	1	ED1202	93	38,903
12/03/2022	2,097	306,818	3	LC1201	928	153,367
12/03/2022	2,097	306,818	3	KG1201	908	119,190
12/03/2022	2,097	306,818	3	KG1203	261	34,261

**Notes:**



**AES Ohio**  
**Rule 10 Report for 2022**

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

<b>Outage start date</b>	<b>CAIDI during outage</b>	<b>SAIFI during outage</b>
02/11/2022	37	0.0012
02/17/2022	181	0.0014
02/18/2022	138	0.0025
02/18/2022	18	0.0025
02/18/2022	25	0.0025
03/30/2022	216	0.0169
03/31/2022	75	0.0037
03/31/2022	185	0.0021
05/18/2022	347	0.0002
05/30/2022	103	0.0000
06/06/2022	373	0.0025
06/11/2022	279	0.0025
06/14/2022	1,330	0.0011
06/22/2022	38	0.0066
06/22/2022	61	0.0066
07/16/2022	334	0.0002
07/17/2022	121	0.0001
07/23/2022	51	0.0056
07/23/2022	136	0.0029
07/27/2022	6	0.0025
09/03/2022	83	0.0058
09/11/2022	418	0.0002
12/03/2022	146	0.0036

**Notes:**

**AES Ohio**  
**Rule 10 Report for 2022**

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

<b>Outage Cause</b>	<b>Events</b>	<b>Customers Interrupted</b>	<b>Customers Minutes Interrupted</b>
Animal/Bird	2,892	40,233	4,132,157
Blast/Explosion/Fire	1	1	160
Cold Load Pickup	1	145	7,016
Equipment/Hardware Failure	1,908	131,755	18,016,855
Forced Outage	472	54,523	3,910,408
Galloping Conductors	3	3	578
High Winds	425	22,390	5,925,598
Ice/Sleet/Snow	73	7,754	1,681,157
Lightning	742	18,042	2,591,492
Other	44	11,558	671,209
Other Electric Utility	0	0	0
Overload	24	2,471	312,599
Personnel Error	21	15,184	510,220
Scheduled/Planned Outage	1,978	28,030	2,174,158
Transmission Trouble	0	0	0
Tree Trimmers, Company	2	12	1,270
Tree Trimmers, Customer	51	699	102,541
Trees Inside ROW	130	7,263	1,833,666
Trees Out of ROW	875	45,749	7,976,439
UG Const./Dig-Ins	156	6,761	1,013,202
Undesired Relay Operation	4	13,374	695,613
Unknown	1,277	41,129	3,958,563
Vandalism	32	90	19,570

**AES Ohio**  
**Rule 10 Report for 2022**

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

<b>Outage Cause</b>	<b>Events</b>	<b>Customers Interrupted</b>	<b>Customers Minutes Interrupted</b>
Vehicle Accident	256	26,978	3,971,772
	<b>Totals:</b>	<b>474,144</b>	<b>59,506,242</b>

**Notes:**

**AES Ohio**  
**Rule 10 Report for 2022**

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

<b>Outage Cause</b>	<b>Events</b>	<b>Customers Interrupted</b>	<b>Customers Minutes Interrupted</b>
Animal/Bird	27	92	72,053
Blast/Explosion/Fire	0	0	0
Cold Load Pickup	2	1,430	149,561
Equipment/Hardware Failure	126	12,187	5,905,494
Forced Outage	15	2,947	293,033
Galloping Conductors	0	0	0
High Winds	589	39,653	19,661,019
Ice/Sleet/Snow	15	821	337,539
Lightning	148	11,248	4,508,766
Other	3	1,512	166,885
Other Electric Utility	0	0	0
Overload	6	528	638,923
Personnel Error	0	0	0
Scheduled/Planned Outage	5	24	7,568
Transmission Trouble	0	0	0
Tree Trimmers, Company	0	0	0
Tree Trimmers, Customer	0	0	0
Trees Inside ROW	39	4,628	1,417,142
Trees Out of ROW	201	32,725	9,514,998
UG Const./Dig-Ins	1	1	976
Undesired Relay Operation	0	0	0
Unknown	44	7,457	1,561,963
Vandalism	0	0	0

**AES Ohio**  
**Rule 10 Report for 2022**

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

<b>Outage Cause</b>	<b>Events</b>	<b>Customers Interrupted</b>	<b>Customers Minutes Interrupted</b>
Vehicle Accident	3	15	11,918
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<b>Totals:</b>	<b>1,224</b>	<b>115,268</b>	<b>44,247,837</b>

**Notes:**

**AES Ohio**  
**Rule 10 Report for 2022**

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

<b>Outage Cause</b>	<b>Events</b>	<b>Customers Interrupted</b>	<b>Customers Minutes Interrupted</b>
Animal/Bird	0	0	0
Blast/Explosion/Fire	0	0	0
Cold Load Pickup	0	0	0
Equipment/Hardware Failure	6	3,862	1,939,712
Forced Outage	1	3,363	279,871
Galloping Conductors	1	1,455	201,421
High Winds	3	13,236	2,523,392
Ice/Sleet/Snow	0	0	0
Lightning	0	0	0
Other	0	0	0
Other Electric Utility	1	2,097	306,818
Overload	0	0	0
Personnel Error	0	0	0
Scheduled/Planned Outage	0	0	0
Transmission Trouble	6	4,795	273,712
Tree Trimmers, Company	0	0	0
Tree Trimmers, Customer	0	0	0
Trees Inside ROW	0	0	0
Trees Out of ROW	5	12,696	785,030
UG Const./Dig-Ins	0	0	0
Undesired Relay Operation	1	1	103
Unknown	1	1,458	9,161
Vandalism	0	0	0

**AES Ohio**  
**Rule 10 Report for 2022**

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

<b>Outage Cause</b>	<b>Events</b>	<b>Customers Interrupted</b>	<b>Customers Minutes Interrupted</b>
Vehicle Accident	0	0	0
	<b>Totals:</b>	<b>25</b>	<b>42,963</b>
			<b>6,319,220</b>

**Notes:**

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March 30, 2023

Mr. Rob Fadley  
The Public Utilities Commission of Ohio  
Director, Service Monitoring and Enforcement Department  
180 East Broad Street  
Columbus, OH 43215

Re: Ohio Admin. Code 4901:1-10-10(D) Action Plan

Dear Mr. Fadley,

Section 4901:1-10-10(D) of the Ohio Administrative Code requires an electric utility to submit an action plan if its annual performance does not meet its performance standard for any index. Accordingly, The Dayton Power and Light Company d/b/a AES Ohio (“AES Ohio” or the “Company”) submits the following Action Plan to address its performance under the Customer Average Interruption Duration Index (CAIDI) in 2022. The Company’s CAIDI performance in 2022 was 125.50 minutes versus the standard of 125.04 minutes set in Case No. 12-1832-EL-ESS. This Action Plan includes the following items:

1. Reliability Standards
  - a. File application to establish new reliability standards.
2. Vegetation Management
  - a. Program focused on out of right-of-way trees with annual financial commitment.
3. System Hardening
  - a. Updated pole standard.
  - b. Continued pro-active cutout program.
  - c. Continued pro-active underground primary program.
4. Smart Grid
  - a. Reclosers
  - b. TripSaver II’s
5. Performance & Reliability Team

#### **Action Plan**

AES Ohio is committed to maintaining reliability. On 09/26/2022, the Company filed an application for a new Electric Security Plan (ESP) in case number 22-0900-EL-SSO. The ESP is a comprehensive plan to enhance and upgrade service reliability by increasing investment in distribution infrastructure.

#### Reliability Standards

On 10/21/2021, AES Ohio filed an application to establish new reliability standards in case number 21-0956-EL-ESS.



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### Vegetation Management

As part of AES Ohio's Revised Action Plan that was submitted in July of 2021, AES Ohio committed to allocating \$500,000 annually from the current vegetation management budget to address trees out of right-of-way. Beginning in the late summer of 2021, AES Ohio implemented this action item, which resulted in a spend of \$183,000 in 2021 and \$497,601.35 in 2022. AES Ohio is committed to the continuation of this action item for years 2023 through 2026.

### System Hardening

As part of this Action Plan, AES Ohio continues its commitment to installing stronger poles to reduce the severity of storm outages. Specifically, the Company no longer installs Class 4 poles and instead installs Class 1 and 2 poles. Additionally, AES Ohio commits to continuing its proactive approach to replacing cutouts as well as underground primary cable.

### Smart Grid

AES Ohio is continuing the deployment of reclosers across its entire service territory. This is expected to improve customer experience by sectionalizing circuits automatically, reducing the number of customers who experience a sustained outage. Adding reclosers will reduce the frequency of customers experiencing an outage.

Beginning in the third quarter of 2023, AES Ohio will begin installing TripSaver II's throughout its service territory. The TripSaver II is a cutout mounted recloser device that will effectively eliminate a sustained outage due to a momentary fault. As a result, the customer(s) will experience a momentary outage but will not experience a sustained outage. Currently, the Company plans to install 1071 TripSaver II's on 16 circuits serving 12,477 customers.

### Performance & Reliability Team

In 2022, the Company formed a team of employees whose sole purpose is to identify and drive improvements to operational performance and customer reliability.

If you have any questions or need additional information, please contact me at (937) 331-4114.

Sincerely,

*Kathryn N Storm*

Kathryn Storm

Vice President, US Utilities

cc: Tyler Teuscher, Director, Rates & Regulatory Affairs

**This foregoing document was electronically filed with the Public Utilities  
Commission of Ohio Docketing Information System on**

**3/31/2023 3:15:31 PM**

**in**

**Case No(s). 23-0995-EL-ESS**

Summary: Annual Report of The Dayton Power and Light Company d/b/a AES Ohio submitted for the year 2022 electronically filed by Mr. Robert J. Adams on behalf of The Dayton Power and Light Company d/b/a AES Ohio.