

KENTUCKY PUBLIC SERVICE COMMISSION

Electric Distribution Utility Annual Reliability Report

SECTION 1: CONTACT INFORMATION

UTILITY NAME	Owen Electric Cooperative
REPORT PREPARED BY	Drew Long
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SECTION 2: REPORT YEAR

CALENDAR YEAR OF REPORT	2025
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SECTION 3: MAJOR EVENT DAYS

T_{MED}	8.128
FIRST DATE USED TO DETERMINE T_{MED}	1-Jan-2020
LAST DATE USED TO DETERMINE T_{MED}	31-Dec-2024
NUMBER OF MED IN REPORT YEAR	3

NOTE: Per IEEE 1366 T_{MED} should be calculated using the daily SAIDI values for the five prior years. If five years of data are not available, then utilities should use what is available until five years are accumulated.

SECTION 4: SYSTEM RELIABILITY INFORMATION AND RESULTS

System-wide Information			
TOTAL CUSTOMERS	<u>67,902</u>	TOTAL CIRCUITS	<u>127</u>
Excluding MED			
5 YEAR AVERAGE		REPORTING YEAR	
SAIDI	<u>110.86</u>	SAIDI	<u>103.34</u>
SAIFI	<u>1.16</u>	SAIFI	<u>1.06</u>
Including MED			
5 YEAR AVERAGE		REPORTING YEAR	
SAIDI	<u>178.01</u>	SAIDI	<u>135.37</u>
SAIFI	<u>1.48</u>	SAIFI	<u>1.20</u>

Notes:

- 1) All duration indices (SAIDI) are to be reported in units of minutes.
- 2) Reports are due on the first business day of May of each year
- 3) Reports cover the calendar year ending in the December before the reports are due.
- 4) IEEE 1366 (latest version) is used to define SAIDI, SAIFI, and T_{MED}

Electric Distribution Utility Annual Reliability Report

Circuit # 1

5.1.1	SUBSTATION NAME AND NUMBER	RICHARDSON II(55)
5.1.2	SUBSTATION LOCATION (COUNTY-ROAD-TOWN)	Kenton
5.1.3	CIRCUIT NAME AND NUMBER	RICHARDSON II(55), Circuit 5, 5505
5.1.4	CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)	Sugar Camp
5.1.5	TOTAL CIRCUIT LENGTH (MILES)	7.5
5.1.6	CUSTOMER COUNT FOR THIS CIRCUIT	459
5.1.7	DATE OF LAST CIRCUIT TRIM (VM)	2024

5.1.23 LIST OF OUTAGE CAUSES FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUMBERS REPRESENTED BY EACH CAUSE

Outage Cause	SAIFI Contribution	SAIDI Contribution
Power Supplier	0.00%	0.00%
Birds/Animals	0.65%	0.29%
Equipment/Installation	0.00%	0.00%
Member/Public	0.00%	0.00%
R.O.W. Unpreventable	0.00%	0.00%
Scheduled	0.00%	0.00%
Unknown	0.00%	0.00%
Weather	99.35%	99.71%
Age/Deterioration	0.00%	0.00%
R.O.W. Preventable	0.00%	0.00%

5.1.9	CIRCUIT 5 YEAR AVERAGE (SAIDI)	0.652
5.1.10	REPORTING YEAR (SAIDI)	2.136
5.1.11	CIRCUIT 5 YEAR AVERAGE (SAIFI)	0.010
5.1.12	REPORTING YEAR (SAIFI)	0.007

5.1.13 CORRECTIVE ACTION PLAN:

This feeder typically has few outages, for this period there were 3 outages, one of which caused the vast majority of the SAIDI and SAIFI for the year. Mainly a tree falling, well outside of the right of way and coming downhill to break a pole.

Action Plan
A new back feed is being planned in order to restore additional members in the event of a similar outage.

Circuit # 2

5.2.1	SUBSTATION NAME AND NUMBER	GRANTSLICK II(51)
5.2.2	SUBSTATION LOCATION (COUNTY-ROAD-TOWN)	Campbell
5.2.3	CIRCUIT NAME AND NUMBER	GRANTSLICK II(51), Circuit 7, 5107
5.2.4	CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)	Morningview
5.2.5	TOTAL CIRCUIT LENGTH (MILES)	77.2
5.2.6	CUSTOMER COUNT FOR THIS CIRCUIT	929
5.2.7	DATE OF LAST CIRCUIT TRIM (VM)	2025

5.2.23 LIST OF OUTAGE CAUSES FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUMBERS REPRESENTED BY EACH CAUSE

Outage Cause	SAIFI Contribution	SAIDI Contribution
Power Supplier	0.00%	0.00%
Birds/Animals	2.01%	1.16%
Equipment/Installation	5.54%	3.10%
Member/Public	7.05%	4.51%
R.O.W. Unpreventable	0.07%	0.08%
Scheduled	0.00%	0.00%
Unknown	2.66%	1.19%
Weather	77.41%	82.30%
Age/Deterioration	0.00%	0.00%
R.O.W. Preventable	5.25%	7.65%

5.2.9	CIRCUIT 5 YEAR AVERAGE (SAIDI)	1.681
5.2.10	REPORTING YEAR (SAIDI)	2.439
5.2.11	CIRCUIT 5 YEAR AVERAGE (SAIFI)	0.021
5.2.12	REPORTING YEAR (SAIFI)	0.020

5.2.13 CORRECTIVE ACTION PLAN:

There were numerous outages on this feeder, only one of which was a 3 phase outage. The most common were single phase transformer outages.

Action Plan

Continuing to implement animal guards where appropriate as well as utilizing arresters to minimize lightning potential. Circuit was trimmed in 2025, which should lead to lower outages overall.

Circuit # 3

5.3.1	SUBSTATION NAME AND NUMBER	LONG LICK(29)
5.3.2	SUBSTATION LOCATION (COUNTY-ROAD-TOWN)	Scott
5.3.3	CIRCUIT NAME AND NUMBER	LONG LICK(29), Circuit 4, 2904
5.3.4	CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)	Colony
5.3.5	TOTAL CIRCUIT LENGTH (MILES)	15.2
5.3.6	CUSTOMER COUNT FOR THIS CIRCUIT	745
5.3.7	DATE OF LAST CIRCUIT TRIM (VM)	2021

5.3.23 LIST OF OUTAGE CAUSES FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUMBERS REPRESENTED BY EACH CAUSE

Outage Cause	SAIFI Contribution	SAIDI Contribution
Power Supplier	0.00%	0.00%
Birds/Animals	0.00%	0.00%
Equipment/Installation	0.00%	0.00%
Member/Public	0.00%	0.00%
R.O.W. Unpreventable	50.50%	86.59%
Scheduled	0.00%	0.00%
Unknown	0.00%	0.00%
Weather	49.50%	13.41%
Age/Deterioration	0.00%	0.00%
R.O.W. Preventable	0.00%	0.00%

5.3.9	CIRCUIT 5 YEAR AVERAGE (SAIDI)	1.734
5.3.10	REPORTING YEAR (SAIDI)	5.767
5.3.11	CIRCUIT 5 YEAR AVERAGE (SAIFI)	0.012
5.3.12	REPORTING YEAR (SAIFI)	0.022

5.3.13 CORRECTIVE ACTION PLAN:

There were four outages on this feeder, two however were feeder outages, which led to the higher than normal SAIDI and SAIFI values. One of the outages was lightning causing a failed crossarm, while the other was a tree falling on the lines from outside of right of way.

Action Plan:
Continue to ensure the use of arresters at appropriate distances and locations. Continue with right of way cycle to minimize potential tree outages.

Circuit # 4

5.4.1	SUBSTATION NAME AND NUMBER	LONG LICK(29)
5.4.2	SUBSTATION LOCATION (COUNTY-ROAD-TOWN)	Scott
5.4.3	CIRCUIT NAME AND NUMBER	LONG LICK(29), Circuit 3, 2903
5.4.4	CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)	Glass Pike
5.4.5	TOTAL CIRCUIT LENGTH (MILES)	75.9
5.4.6	CUSTOMER COUNT FOR THIS CIRCUIT	725
5.4.7	DATE OF LAST CIRCUIT TRIM (VM)	2021

5.4.23 LIST OF OUTAGE CAUSES FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUMBERS REPRESENTED BY EACH CAUSE

Outage Cause	SAIFI Contribution	SAIDI Contribution
Power Supplier	0.00%	0.00%
Birds/Animals	17.68%	8.98%
Equipment/Installation	14.13%	32.38%
Member/Public	0.00%	0.00%
R.O.W. Unpreventable	15.34%	25.51%
Scheduled	0.00%	0.00%
Unknown	15.72%	5.63%
Weather	30.31%	26.69%
Age/Deterioration	6.55%	0.61%
R.O.W. Preventable	0.28%	0.19%

5.4.9	CIRCUIT 5 YEAR AVERAGE (SAIDI)	1.503
5.4.10	REPORTING YEAR (SAIDI)	2.598
5.4.11	CIRCUIT 5 YEAR AVERAGE (SAIFI)	0.019
5.4.12	REPORTING YEAR (SAIFI)	0.016

5.4.13 CORRECTIVE ACTION PLAN:

This feeder experienced several outages, most were contained to small areas and member counts. This is a longer feeder, some through rural right of way. No one individual outage really drove up the overall numbers.

Action Plan

Review sectionalizing plan to ensure outages are contained to appropriate sections.

Circuit # 5

5.5.1	SUBSTATION NAME AND NUMBER	BELLEVIEW(27)
5.5.2	SUBSTATION LOCATION (COUNTY-ROAD-TOWN)	Boone
5.5.3	CIRCUIT NAME AND NUMBER	BELLEVIEW(27), Circuit 4, 2704
5.5.4	CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)	Bellevue Rd
5.5.5	TOTAL CIRCUIT LENGTH (MILES)	17.2
5.5.6	CUSTOMER COUNT FOR THIS CIRCUIT	176
5.5.7	DATE OF LAST CIRCUIT TRIM (VM)	2019

5.5.23 LIST OF OUTAGE CAUSES FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUMBERS REPRESENTED BY EACH CAUSE

Outage Cause	SAIFI Contribution	SAIDI Contribution
Power Supplier	0.00%	0.00%
Birds/Animals	57.04%	16.78%
Equipment/Installation	0.00%	0.00%
Member/Public	8.15%	28.02%
R.O.W. Unpreventable	0.00%	0.00%
Scheduled	0.00%	0.00%
Unknown	0.74%	0.22%
Weather	34.07%	54.98%
Age/Deterioration	0.00%	0.00%
R.O.W. Preventable	0.00%	0.00%

5.5.9	CIRCUIT 5 YEAR AVERAGE (SAIDI)	0.334
5.5.10	REPORTING YEAR (SAIDI)	0.394
5.5.11	CIRCUIT 5 YEAR AVERAGE (SAIFI)	0.003
5.5.12	REPORTING YEAR (SAIFI)	0.002

5.5.13 CORRECTIVE ACTION PLAN:

There were fifteen outages on this feeder for the 2025 year. All but one were single phase outages, contained to a couple members. Overall, SAIDI was slightly higher than the average while SAIFI was below the five year reporting average.

Action Plan:

Continue to install bird and animal guards on new transformers and review multiple outage lists to add guards if needed.

Circuit # 6

5.6.1	SUBSTATION NAME AND NUMBER	BELLEVIEW(27)
5.6.2	SUBSTATION LOCATION (COUNTY-ROAD-TOWN)	Boone
5.6.3	CIRCUIT NAME AND NUMBER	BELLEVIEW(27), Circuit 3, 2703
5.6.4	CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)	Botts Ln
5.6.5	TOTAL CIRCUIT LENGTH (MILES)	19.2
5.6.6	CUSTOMER COUNT FOR THIS CIRCUIT	156
5.6.7	DATE OF LAST CIRCUIT TRIM (VM)	2019

5.6.23 LIST OF OUTAGE CAUSES FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUMBERS REPRESENTED BY EACH CAUSE

Outage Cause	SAIFI Contribution	SAIDI Contribution
Power Supplier	49.83%	1.70%
Birds/Animals	1.32%	1.15%
Equipment/Installation	0.33%	0.29%
Member/Public	0.00%	0.00%
R.O.W. Unpreventable	0.00%	0.00%
Scheduled	0.00%	0.00%
Unknown	0.66%	0.57%
Weather	45.54%	92.60%
Age/Deterioration	0.00%	0.00%
R.O.W. Preventable	2.31%	3.69%

5.6.9	CIRCUIT 5 YEAR AVERAGE (SAIDI)	0.312
5.6.10	REPORTING YEAR (SAIDI)	0.391
5.6.11	CIRCUIT 5 YEAR AVERAGE (SAIFI)	0.003
5.6.12	REPORTING YEAR (SAIFI)	0.004

5.6.13 CORRECTIVE ACTION PLAN:

There were thirteen outages for this reporting year, which lead the SAIDI and SAIFI to be close to the five year history. A power supplier outage caused the SAIDI and SAIFI to exceed the typical five year average.

Action Plan:

The circuit performed nearly as expected and the sectionalizing scheme was effective, no new plans at this time.

Circuit # 7

5.7.1	SUBSTATION NAME AND NUMBER	RICHWOOD(26)
5.7.2	SUBSTATION LOCATION (COUNTY-ROAD-TOWN)	Boone
5.7.3	CIRCUIT NAME AND NUMBER	RICHWOOD(26), Circuit 4, 2604
5.7.4	CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)	Hicks Pike
5.7.5	TOTAL CIRCUIT LENGTH (MILES)	16.9
5.7.6	CUSTOMER COUNT FOR THIS CIRCUIT	460
5.7.7	DATE OF LAST CIRCUIT TRIM (VM)	2021

5.7.23 LIST OF OUTAGE CAUSES FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUMBERS REPRESENTED BY EACH CAUSE

Outage Cause	SAIFI Contribution	SAIDI Contribution
Power Supplier	0.00%	0.00%
Birds/Animals	12.81%	12.19%
Equipment/Installation	0.00%	0.00%
Member/Public	0.00%	0.00%
R.O.W. Unpreventable	0.00%	0.00%
Scheduled	0.82%	0.33%
Unknown	6.24%	4.20%
Weather	79.80%	82.67%
Age/Deterioration	0.00%	0.00%
R.O.W. Preventable	0.00%	0.00%

5.7.9	CIRCUIT 5 YEAR AVERAGE (SAIDI)	0.481
5.7.10	REPORTING YEAR (SAIDI)	0.666
5.7.11	CIRCUIT 5 YEAR AVERAGE (SAIFI)	0.004
5.7.12	REPORTING YEAR (SAIFI)	0.009

5.7.13 CORRECTIVE ACTION PLAN:

This feeder mainly serves a residential subdivision, but does have portions of overhead that serves it. There were fourteen outages in 2025, the major driver being a weather related outage during a storm that caused a feeder outage for 36 minutes.

Action Plan:

Overall, this feeder is well sectionalized and sees few larger outages. No planned action at this time.

Circuit # 8

5.8.1	SUBSTATION NAME AND NUMBER	BAVARIAN(23)
5.8.2	SUBSTATION LOCATION (COUNTY-ROAD-TOWN)	Boone
5.8.3	CIRCUIT NAME AND NUMBER	BAVARIAN(23), Circuit 2, 2302
5.8.4	CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)	Poole Rd
5.8.5	TOTAL CIRCUIT LENGTH (MILES)	38.5
5.8.6	CUSTOMER COUNT FOR THIS CIRCUIT	475
5.8.7	DATE OF LAST CIRCUIT TRIM (VM)	2018

5.8.23 LIST OF OUTAGE CAUSES FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUMBERS REPRESENTED BY EACH CAUSE

Outage Cause	SAIFI Contribution	SAIDI Contribution
Power Supplier	0.00%	0.00%
Birds/Animals	0.87%	0.96%
Equipment/Installation	45.04%	20.47%
Member/Public	0.00%	0.00%
R.O.W. Unpreventable	0.58%	2.24%
Scheduled	3.85%	4.79%
Unknown	0.19%	0.28%
Weather	49.18%	70.94%
Age/Deterioration	0.00%	0.00%
R.O.W. Preventable	0.29%	0.32%

5.8.9	CIRCUIT 5 YEAR AVERAGE (SAIDI)	0.425
5.8.10	REPORTING YEAR (SAIDI)	0.884
5.8.11	CIRCUIT 5 YEAR AVERAGE (SAIFI)	0.003
5.8.12	REPORTING YEAR (SAIFI)	0.015

5.8.13 CORRECTIVE ACTION PLAN:

There were multiple outages on this feeder with two of those outages being feeder level events. Those two events were the driver for the SAIDI and SAIFI for the year.

Action Plan:

Review sectionalizing plan to ensure outages are minimized in scope.

Circuit # 9

5.9.1	SUBSTATION NAME AND NUMBER	HEBRON(22)
5.9.2	SUBSTATION LOCATION (COUNTY-ROAD-TOWN)	Boone
5.9.3	CIRCUIT NAME AND NUMBER	HEBRON(22), Circuit 5, 2205
5.9.4	CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)	Treetops
5.9.5	TOTAL CIRCUIT LENGTH (MILES)	6.0
5.9.6	CUSTOMER COUNT FOR THIS CIRCUIT	605
5.9.7	DATE OF LAST CIRCUIT TRIM (VM)	2025

5.9.23 LIST OF OUTAGE CAUSES FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUMBERS REPRESENTED BY EACH CAUSE

Outage Cause	SAIFI Contribution	SAIDI Contribution
Power Supplier	0.00%	0.00%
Birds/Animals	0.00%	0.00%
Equipment/Installation	99.52%	99.59%
Member/Public	0.00%	0.00%
R.O.W. Unpreventable	0.00%	0.00%
Scheduled	0.00%	0.00%
Unknown	0.00%	0.00%
Weather	0.48%	0.41%
Age/Deterioration	0.00%	0.00%
R.O.W. Preventable	0.00%	0.00%

5.9.9	CIRCUIT 5 YEAR AVERAGE (SAIDI)	0.064
5.9.10	REPORTING YEAR (SAIDI)	0.301
5.9.11	CIRCUIT 5 YEAR AVERAGE (SAIFI)	0.001
5.9.12	REPORTING YEAR (SAIFI)	0.003

5.9.13 CORRECTIVE ACTION PLAN:

This feeder mainly serves residential subdivisions and is historically reliably. For this reporting cycle there were 2 outages, neither being 3 phase outages. The main contributor was a failed fuse.

Action Plan:

This feeder performed well overall, no planned action at this time.

Circuit # 10

5.10.1	SUBSTATION NAME AND NUMBER	HEBRON(22)
5.10.2	SUBSTATION LOCATION (COUNTY-ROAD-TOWN)	Boone
5.10.3	CIRCUIT NAME AND NUMBER	HEBRON(22), Circuit 4, 2204
5.10.4	CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)	Williams Rd
5.10.5	TOTAL CIRCUIT LENGTH (MILES)	32.3
5.10.6	CUSTOMER COUNT FOR THIS CIRCUIT	815
5.10.7	DATE OF LAST CIRCUIT TRIM (VM)	2023

5.10.23 LIST OF OUTAGE CAUSES FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUMBERS REPRESENTED BY EACH CAUSE

Outage Cause	SAIFI Contribution	SAIDI Contribution
Power Supplier	0.00%	0.00%
Birds/Animals	6.40%	6.39%
Equipment/Installation	0.32%	1.09%
Member/Public	0.11%	0.17%
R.O.W. Unpreventable	91.90%	88.41%
Scheduled	0.43%	1.24%
Unknown	0.32%	0.33%
Weather	0.32%	1.96%
Age/Deterioration	0.00%	0.00%
R.O.W. Preventable	0.21%	0.42%

5.10.9	CIRCUIT 5 YEAR AVERAGE (SAIDI)	1.105
5.10.10	REPORTING YEAR (SAIDI)	1.128
5.10.11	CIRCUIT 5 YEAR AVERAGE (SAIFI)	0.012
5.10.12	REPORTING YEAR (SAIFI)	0.014

5.10.13 CORRECTIVE ACTION PLAN:

This feeder serves a dense residential population and had seventeen outages. The main driver of the SAIDI and SAIFI for this period was two feeder level three phase outages.

Action Plan:
 This substation has been rebuilt with a new low bay added. New feeder exits will improve the overall reliability.

Circuit # 11

5.11.1	SUBSTATION NAME AND NUMBER	HEBRON(22)
5.11.2	SUBSTATION LOCATION (COUNTY-ROAD-TOWN)	Boone
5.11.3	CIRCUIT NAME AND NUMBER	HEBRON(22), Circuit 3, 2203
5.11.4	CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)	North Bend
5.11.5	TOTAL CIRCUIT LENGTH (MILES)	31.9
5.11.6	CUSTOMER COUNT FOR THIS CIRCUIT	1931
5.11.7	DATE OF LAST CIRCUIT TRIM (VM)	2025

5.11.23 LIST OF OUTAGE CAUSES FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUMBERS REPRESENTED BY EACH CAUSE

Outage Cause	SAIFI Contribution	SAIDI Contribution
Power Supplier	0.00%	0.00%
Birds/Animals	2.64%	0.99%
Equipment/Installation	17.16%	15.09%
Member/Public	0.00%	0.00%
R.O.W. Unpreventable	0.00%	0.00%
Scheduled	41.25%	60.41%
Unknown	22.11%	12.60%
Weather	14.52%	9.48%
Age/Deterioration	0.00%	0.00%
R.O.W. Preventable	2.31%	1.42%

5.11.9	CIRCUIT 5 YEAR AVERAGE (SAIDI)	0.222
5.11.10	REPORTING YEAR (SAIDI)	0.984
5.11.11	CIRCUIT 5 YEAR AVERAGE (SAIFI)	0.007
5.11.12	REPORTING YEAR (SAIFI)	0.004

5.11.13 CORRECTIVE ACTION PLAN:

This feeder experienced several outages, but no three phase outages over the last year. A large portion of the SAIDI and the SAIFI for this year was scheduled outages in order to tie in to a new substation bay built at the same location.

Action Plan:
 The trim cycle was just complete, ideally reducing overall outages. Planned substation work is also complete, so will have reduced planned outages in the next year.

Circuit # 12

5.12.1	SUBSTATION NAME AND NUMBER	DOWNING(20)
5.12.2	SUBSTATION LOCATION (COUNTY-ROAD-TOWN)	Boone
5.12.3	CIRCUIT NAME AND NUMBER	DOWNING(20), Circuit 1, 2001
5.12.4	CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)	Parlor Grove
5.12.5	TOTAL CIRCUIT LENGTH (MILES)	19.0
5.12.6	CUSTOMER COUNT FOR THIS CIRCUIT	1350
5.12.7	DATE OF LAST CIRCUIT TRIM (VM)	2020

5.12.23 LIST OF OUTAGE CAUSES FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUMBERS REPRESENTED BY EACH CAUSE

Outage Cause	SAIFI Contribution	SAIDI Contribution
Power Supplier	49.85%	4.11%
Birds/Animals	0.00%	0.00%
Equipment/Installation	0.00%	0.00%
Member/Public	0.45%	3.68%
R.O.W. Unpreventable	0.00%	0.00%
Scheduled	0.00%	0.00%
Unknown	0.07%	0.60%
Weather	49.63%	91.61%
Age/Deterioration	0.00%	0.00%
R.O.W. Preventable	0.00%	0.00%

5.12.9	CIRCUIT 5 YEAR AVERAGE (SAIDI)	1.946
5.12.10	REPORTING YEAR (SAIDI)	0.960
5.12.11	CIRCUIT 5 YEAR AVERAGE (SAIFI)	0.032
5.12.12	REPORTING YEAR (SAIFI)	0.040

5.12.13 CORRECTIVE ACTION PLAN:

The main contributor to SAIDI and SAIFI was power supplier outages.

Action Plan:
 This year the transmission feed to the substation was switched, in order to provide higher transmission level reliability.

Circuit # 13

5.13.1	SUBSTATION NAME AND NUMBER	RICHARDSON(19)
5.13.2	SUBSTATION LOCATION (COUNTY-ROAD-TOWN)	Kenton
5.13.3	CIRCUIT NAME AND NUMBER	RICHARDSON(19), Circuit 3, 1903
5.13.4	CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)	Sherbourne
5.13.5	TOTAL CIRCUIT LENGTH (MILES)	19.3
5.13.6	CUSTOMER COUNT FOR THIS CIRCUIT	1092
5.13.7	DATE OF LAST CIRCUIT TRIM (VM)	2024

5.13.23 LIST OF OUTAGE CAUSES FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUMBERS REPRESENTED BY EACH CAUSE

Outage Cause	SAIFI Contribution	SAIDI Contribution
Power Supplier	0.00%	0.00%
Birds/Animals	2.78%	3.54%
Equipment/Installation	0.00%	0.00%
Member/Public	0.05%	0.12%
R.O.W. Unpreventable	0.00%	0.00%
Scheduled	0.00%	0.00%
Unknown	36.47%	34.05%
Weather	59.72%	61.97%
Age/Deterioration	0.98%	0.31%
R.O.W. Preventable	0.00%	0.00%

5.13.9	CIRCUIT 5 YEAR AVERAGE (SAIDI)	1.499
5.13.10	REPORTING YEAR (SAIDI)	4.063
5.13.11	CIRCUIT 5 YEAR AVERAGE (SAIFI)	0.025
5.13.12	REPORTING YEAR (SAIFI)	0.054

5.13.13 CORRECTIVE ACTION PLAN:

There were four, three phase outages on this circuit for 2025, which increased the SAIDI and SAIFI beyond typical levels.

Action Plan:
Evaluate sectionalizing plan to analyze ways to reduce the amount of feeder level outages.

Circuit # 14

5.14.1	SUBSTATION NAME AND NUMBER	GALLATIN(18)
5.14.2	SUBSTATION LOCATION (COUNTY-ROAD-TOWN)	Gallatin
5.14.3	CIRCUIT NAME AND NUMBER	GALLATIN(18), Circuit 3, 1803
5.14.4	CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)	Johnson Rd
5.14.5	TOTAL CIRCUIT LENGTH (MILES)	67.9
5.14.6	CUSTOMER COUNT FOR THIS CIRCUIT	880
5.14.7	DATE OF LAST CIRCUIT TRIM (VM)	2021

5.14.23 LIST OF OUTAGE CAUSES FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUMBERS REPRESENTED BY EACH CAUSE

Outage Cause	SAIFI Contribution	SAIDI Contribution
Power Supplier	0.00%	0.00%
Birds/Animals	4.25%	2.34%
Equipment/Installation	0.00%	0.00%
Member/Public	0.00%	0.00%
R.O.W. Unpreventable	0.00%	0.00%
Scheduled	2.78%	3.89%
Unknown	3.21%	1.60%
Weather	84.15%	88.92%
Age/Deterioration	0.00%	0.00%
R.O.W. Preventable	5.61%	3.25%

5.14.9	CIRCUIT 5 YEAR AVERAGE (SAIDI)	3.546
5.14.10	REPORTING YEAR (SAIDI)	4.150
5.14.11	CIRCUIT 5 YEAR AVERAGE (SAIFI)	0.044
5.14.12	REPORTING YEAR (SAIFI)	0.031

5.14.13 CORRECTIVE ACTION PLAN:

This feeder is comparatively long, with long sections of right of way. It typically has higher SAIDI than the typical feeder. This years SAIDI was slightly higher than the 5 year average, with the SAIFI being slightly lower. There were three, 3phase outages for this duration

Action Plan:
Evaluate lightning arrester placement as there were numerous lighting outages.

Circuit # 15

5.15.1	SUBSTATION NAME AND NUMBER	SMOOT(16)
5.15.2	SUBSTATION LOCATION (COUNTY-ROAD-TOWN)	Boone
5.15.3	CIRCUIT NAME AND NUMBER	SMOOT(16), Circuit 3, 1603
5.15.4	CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)	Glen Arbor
5.15.5	TOTAL CIRCUIT LENGTH (MILES)	4.1
5.15.6	CUSTOMER COUNT FOR THIS CIRCUIT	304
5.15.7	DATE OF LAST CIRCUIT TRIM (VM)	2024

5.15.23 LIST OF OUTAGE CAUSES FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUMBERS REPRESENTED BY EACH CAUSE

Outage Cause	SAIFI Contribution	SAIDI Contribution
Power Supplier	0.00%	0.00%
Birds/Animals	0.00%	0.00%
Equipment/Installation	0.00%	0.00%
Member/Public	0.00%	0.00%
R.O.W. Unpreventable	0.00%	0.00%
Scheduled	0.00%	0.00%
Unknown	0.00%	0.00%
Weather	0.00%	0.00%
Age/Deterioration	100.00%	100.00%
R.O.W. Preventable	0.00%	0.00%

5.15.9	CIRCUIT 5 YEAR AVERAGE (SAIDI)	0.093
5.15.10	REPORTING YEAR (SAIDI)	0.099
5.15.11	CIRCUIT 5 YEAR AVERAGE (SAIFI)	0.002
5.15.12	REPORTING YEAR (SAIFI)	0.001

5.15.13 CORRECTIVE ACTION PLAN:

This is typically a reliable circuit and has large underground portions. There was only one outage for this reporting period and the SAIDI is slightly above the five year average, while the SAIFI is slightly below.

Action Plan:

Overall this circuit continues to be reliable, no further plans at this time.

Circuit # 16

5.16.1	SUBSTATION NAME AND NUMBER	SMITH(15)
5.16.2	SUBSTATION LOCATION (COUNTY-ROAD-TOWN)	Boone
5.16.3	CIRCUIT NAME AND NUMBER	SMITH(15), Circuit 6, 1506
5.16.4	CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)	Point Pleasant
5.16.5	TOTAL CIRCUIT LENGTH (MILES)	9.0
5.16.6	CUSTOMER COUNT FOR THIS CIRCUIT	117
5.16.7	DATE OF LAST CIRCUIT TRIM (VM)	2020

5.16.23 LIST OF OUTAGE CAUSES FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUMBERS REPRESENTED BY EACH CAUSE

Outage Cause	SAIFI Contribution	SAIDI Contribution
Power Supplier	0.00%	0.00%
Birds/Animals	10.26%	24.34%
Equipment/Installation	75.00%	17.80%
Member/Public	0.00%	0.00%
R.O.W. Unpreventable	0.00%	0.00%
Scheduled	0.00%	0.00%
Unknown	14.74%	57.86%
Weather	0.00%	0.00%
Age/Deterioration	0.00%	0.00%
R.O.W. Preventable	0.00%	0.00%

5.16.9	CIRCUIT 5 YEAR AVERAGE (SAIDI)	0.133
5.16.10	REPORTING YEAR (SAIDI)	0.058
5.16.11	CIRCUIT 5 YEAR AVERAGE (SAIFI)	0.002
5.16.12	REPORTING YEAR (SAIFI)	0.002

5.16.13 CORRECTIVE ACTION PLAN:

There were 6 outages for this reporting period, leading to a slightly higher SAIDI and a similar SAIFI compared to the five year average. The main driver for the increased SAIDI was due to a circuit tripping out while in Hot Line Tag, which increases the safety of the line workers.

Action Plan:

Overall this circuit stays reliable, with few member outages, typically for short durations. No planned actions at this time.

Circuit # 17

5.17.1	SUBSTATION NAME AND NUMBER	CARSON(11)
5.17.2	SUBSTATION LOCATION (COUNTY-ROAD-TOWN)	Gallatin
5.17.3	CIRCUIT NAME AND NUMBER	CARSON(11), Circuit 3, 1103
5.17.4	CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)	Oakview
5.17.5	TOTAL CIRCUIT LENGTH (MILES)	77.3
5.17.6	CUSTOMER COUNT FOR THIS CIRCUIT	950
5.17.7	DATE OF LAST CIRCUIT TRIM (VM)	2025

5.17.23 LIST OF OUTAGE CAUSES FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUMBERS REPRESENTED BY EACH CAUSE

Outage Cause	SAIFI Contribution	SAIDI Contribution
Power Supplier	0.03%	0.02%
Birds/Animals	2.53%	3.84%
Equipment/Installation	0.03%	0.03%
Member/Public	25.09%	40.51%
R.O.W. Unpreventable	1.58%	1.15%
Scheduled	11.71%	14.38%
Unknown	6.05%	3.83%
Weather	46.55%	32.73%
Age/Deterioration	1.39%	0.57%
R.O.W. Preventable	5.04%	2.94%

5.17.9	CIRCUIT 5 YEAR AVERAGE (SAIDI)	3.106
5.17.10	REPORTING YEAR (SAIDI)	8.103
5.17.11	CIRCUIT 5 YEAR AVERAGE (SAIFI)	0.021
5.17.12	REPORTING YEAR (SAIFI)	0.054

5.17.13 CORRECTIVE ACTION PLAN:

This feeder has nearly 80 miles of circuit right of way, which leads to higher than average outages for a given feeder.

Action Plan:

The circuit was trimmed in 2025, which will help reduce multiple outage types in the coming year.

Circuit # 18

5.18.1	SUBSTATION NAME AND NUMBER	CARSON(11)
5.18.2	SUBSTATION LOCATION (COUNTY-ROAD-TOWN)	Gallatin
5.18.3	CIRCUIT NAME AND NUMBER	CARSON(11), Circuit 2, 1102
5.18.4	CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)	Eagle Station
5.18.5	TOTAL CIRCUIT LENGTH (MILES)	58.9
5.18.6	CUSTOMER COUNT FOR THIS CIRCUIT	706
5.18.7	DATE OF LAST CIRCUIT TRIM (VM)	2019

5.18.23 LIST OF OUTAGE CAUSES FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUMBERS REPRESENTED BY EACH CAUSE

Outage Cause	SAIFI Contribution	SAIDI Contribution
Power Supplier	0.00%	0.00%
Birds/Animals	2.45%	0.77%
Equipment/Installation	19.37%	3.59%
Member/Public	1.67%	0.90%
R.O.W. Unpreventable	0.09%	0.06%
Scheduled	0.09%	0.09%
Unknown	0.00%	0.00%
Weather	76.34%	94.60%
Age/Deterioration	0.00%	0.00%
R.O.W. Preventable	0.00%	0.00%

5.18.9	CIRCUIT 5 YEAR AVERAGE (SAIDI)	2.936
5.18.10	REPORTING YEAR (SAIDI)	6.045
5.18.11	CIRCUIT 5 YEAR AVERAGE (SAIFI)	0.019
5.18.12	REPORTING YEAR (SAIFI)	0.017

5.18.13 CORRECTIVE ACTION PLAN:

There were numerous outages on this feeder, mainly being smaller individual single phase outages. However, there was one feeder level event that was the main contributor to SAIDI and SAIFI

Action Plan:

The right of way is planned to be trimmed in 2026.

Circuit # 19

5.28.5	SUBSTATION NAME AND NUMBER	CARSON(11)
5.19.2	SUBSTATION LOCATION (COUNTY-ROAD-TOWN)	Gallatin
5.19.3	CIRCUIT NAME AND NUMBER	CARSON(11), Circuit 1, 1101
5.19.4	CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)	Walnut Valley
5.19.5	TOTAL CIRCUIT LENGTH (MILES)	35.7
5.19.6	CUSTOMER COUNT FOR THIS CIRCUIT	309
5.19.7	DATE OF LAST CIRCUIT TRIM (VM)	2019

5.19.23 LIST OF OUTAGE CAUSES FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUMBERS REPRESENTED BY EACH CAUSE

Outage Cause	SAIFI Contribution	SAIDI Contribution
Power Supplier	2.30%	2.21%
Birds/Animals	3.07%	3.88%
Equipment/Installation	0.00%	0.00%
Member/Public	24.58%	23.16%
R.O.W. Unpreventable	1.08%	3.30%
Scheduled	0.08%	0.06%
Unknown	7.45%	10.82%
Weather	57.22%	44.73%
Age/Deterioration	2.38%	8.00%
R.O.W. Preventable	1.84%	3.83%

5.19.9	CIRCUIT 5 YEAR AVERAGE (SAIDI)	0.715
5.19.10	REPORTING YEAR (SAIDI)	1.199
5.19.11	CIRCUIT 5 YEAR AVERAGE (SAIFI)	0.006
5.19.12	REPORTING YEAR (SAIFI)	0.019

5.19.13 CORRECTIVE ACTION PLAN:

There were four 3 phase outages which caused this years SAIDI and SAIFI to be higher than the typical average.

Action Plan:
 The circuit trim for this feeder is planned for 2026. Evaluate sectionalizing to reduce number of three phase outages.

Circuit # 20

5.20.1	SUBSTATION NAME AND NUMBER	TURKEYFOOT(10)
5.20.2	SUBSTATION LOCATION (COUNTY-ROAD-TOWN)	Kenton
5.20.3	CIRCUIT NAME AND NUMBER	TURKEYFOOT(10), Circuit 6, 1006
5.20.4	CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)	Richardson Rd
5.20.5	TOTAL CIRCUIT LENGTH (MILES)	4.7
5.20.6	CUSTOMER COUNT FOR THIS CIRCUIT	401
5.20.7	DATE OF LAST CIRCUIT TRIM (VM)	2023

5.20.23 LIST OF OUTAGE CAUSES FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUMBERS REPRESENTED BY EACH CAUSE

Outage Cause	SAIFI Contribution	SAIDI Contribution
Power Supplier	0.00%	0.00%
Birds/Animals	100.00%	100.00%
Equipment/Installation	0.00%	0.00%
Member/Public	0.00%	0.00%
R.O.W. Unpreventable	0.00%	0.00%
Scheduled	0.00%	0.00%
Unknown	0.00%	0.00%
Weather	0.00%	0.00%
Age/Deterioration	0.00%	0.00%
R.O.W. Preventable	0.00%	0.00%

5.20.9	CIRCUIT 5 YEAR AVERAGE (SAIDI)	0.219
5.20.10	REPORTING YEAR (SAIDI)	0.060
5.20.11	CIRCUIT 5 YEAR AVERAGE (SAIFI)	0.002
5.20.12	REPORTING YEAR (SAIFI)	0.004

5.20.13 CORRECTIVE ACTION PLAN:

This is typically a reliable circuit and was so for this duration as well. There was a single outage that occurred in 2025.

Action Plan:

This circuit overall performed well, there are no action plans as of this time.

Circuit # 21

5.21.1 SUBSTATION NAME AND NUMBER	TURKEYFOOT(10)
5.21.2 SUBSTATION LOCATION (COUNTY-ROAD-TOWN)	Kenton
5.21.3 CIRCUIT NAME AND NUMBER	TURKEYFOOT(10), Circuit 2, 1002
5.21.4 CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)	Hunters Green
5.21.5 TOTAL CIRCUIT LENGTH (MILES)	3.1
5.21.6 CUSTOMER COUNT FOR THIS CIRCUIT	177
5.21.7 DATE OF LAST CIRCUIT TRIM (VM)	2023

5.21.23 LIST OF OUTAGE CAUSES FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUMBERS REPRESENTED BY EACH CAUSE

Outage Cause	SAIFI Contribution	SAIDI Contribution
Power Supplier	0.00%	0.00%
Birds/Animals	0.00%	0.00%
Equipment/Installation	100.00%	100.00%
Member/Public	0.00%	0.00%
R.O.W. Unpreventable	0.00%	0.00%
Scheduled	0.00%	0.00%
Unknown	0.00%	0.00%
Weather	0.00%	0.00%
Age/Deterioration	0.00%	0.00%
R.O.W. Preventable	0.00%	0.00%

5.21.9 CIRCUIT 5 YEAR AVERAGE (SAIDI)	0.005
5.21.10 REPORTING YEAR (SAIDI)	0.059
5.21.11 CIRCUIT 5 YEAR AVERAGE (SAIFI)	0.000
5.21.12 REPORTING YEAR (SAIFI)	0.003

5.21.13 CORRECTIVE ACTION PLAN:

This feeder is typically reliable with large portions of the circuit in high density subdivisions. There was a single outage on this feeder for the reporting duration, lasting a total of 23 minutes.

Action Plan:

This feeder continued to perform well, and there are no plans at this time.

Circuit # 22

5.22.1	SUBSTATION NAME AND NUMBER	BROMLEY(6)
5.22.2	SUBSTATION LOCATION (COUNTY-ROAD-TOWN)	Owen
5.22.3	CIRCUIT NAME AND NUMBER	BROMLEY(6), Circuit 3, 0603
5.22.4	CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)	Cull Rd
5.22.5	TOTAL CIRCUIT LENGTH (MILES)	119.1
5.22.6	CUSTOMER COUNT FOR THIS CIRCUIT	648
5.22.7	DATE OF LAST CIRCUIT TRIM (VM)	2020

5.22.23 LIST OF OUTAGE CAUSES FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUMBERS REPRESENTED BY EACH CAUSE

Outage Cause	SAIFI Contribution	SAIDI Contribution
Power Supplier	38.13%	24.27%
Birds/Animals	0.83%	0.72%
Equipment/Installation	1.01%	1.38%
Member/Public	45.29%	35.96%
R.O.W. Unpreventable	0.00%	0.00%
Scheduled	0.00%	0.00%
Unknown	0.83%	0.91%
Weather	11.37%	31.31%
Age/Deterioration	0.00%	0.00%
R.O.W. Preventable	2.55%	5.45%

5.22.9	CIRCUIT 5 YEAR AVERAGE (SAIDI)	1.051
5.22.10	REPORTING YEAR (SAIDI)	1.797
5.22.11	CIRCUIT 5 YEAR AVERAGE (SAIFI)	0.009
5.22.12	REPORTING YEAR (SAIFI)	0.025

5.22.13 CORRECTIVE ACTION PLAN:

This feeder is a long feeder in a more rural portion of the service territory, which is exposed to more outages. There were numerous outages all along the feeder, two of those were three phase outages, one of which was the single largest contributor to the SAIDI and SAIFI for this duration, mainly a car hitting a pole.

Action Plan:

Overall the feeder was sectionalized well, and most problems were contained to a small section of membership. No additional actions on this feeder at this time.

Circuit # 23

5.23.1	SUBSTATION NAME AND NUMBER	WILLIAMSTOWN(5)
5.23.2	SUBSTATION LOCATION (COUNTY-ROAD-TOWN)	Grant
5.23.3	CIRCUIT NAME AND NUMBER	WILLIAMSTOWN(5), Circuit 5, 0505
5.23.4	CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)	Ruthman Dr
5.23.5	TOTAL CIRCUIT LENGTH (MILES)	14.5
5.23.6	CUSTOMER COUNT FOR THIS CIRCUIT	314
5.23.7	DATE OF LAST CIRCUIT TRIM (VM)	2025

5.23.23 LIST OF OUTAGE CAUSES FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUMBERS REPRESENTED BY EACH CAUSE

Outage Cause	SAIFI Contribution	SAIDI Contribution
Power Supplier	0.00%	0.00%
Birds/Animals	27.60%	40.46%
Equipment/Installation	1.30%	2.14%
Member/Public	1.95%	3.26%
R.O.W. Unpreventable	0.00%	0.00%
Scheduled	0.00%	0.00%
Unknown	40.26%	33.10%
Weather	28.90%	21.05%
Age/Deterioration	0.00%	0.00%
R.O.W. Preventable	0.00%	0.00%

5.23.9	CIRCUIT 5 YEAR AVERAGE (SAIDI)	0.461
5.23.10	REPORTING YEAR (SAIDI)	0.369
5.23.11	CIRCUIT 5 YEAR AVERAGE (SAIFI)	0.003
5.23.12	REPORTING YEAR (SAIFI)	0.005

5.23.13 CORRECTIVE ACTION PLAN:

The SAIDI and SAIFI for this period were slightly higher than the average five years. There were fifteen outages, one of which was a three phase outage, though only affecting 3 members.

Action Plan:
 The feeder was recently trimmed in 2025 helping to reduce several outage types.

Circuit # 24

5.24.1	SUBSTATION NAME AND NUMBER	WILLIAMSTOWN(5)
5.24.2	SUBSTATION LOCATION (COUNTY-ROAD-TOWN)	Grant
5.24.3	CIRCUIT NAME AND NUMBER	WILLIAMSTOWN(5), Circuit 4, 0504
5.24.4	CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)	Barnes Rd
5.24.5	TOTAL CIRCUIT LENGTH (MILES)	35.3
5.24.6	CUSTOMER COUNT FOR THIS CIRCUIT	331
5.24.7	DATE OF LAST CIRCUIT TRIM (VM)	2025

5.24.23 LIST OF OUTAGE CAUSES FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUMBERS REPRESENTED BY EACH CAUSE

Outage Cause	SAIFI Contribution	SAIDI Contribution
Power Supplier	0.00%	0.00%
Birds/Animals	10.78%	10.08%
Equipment/Installation	0.00%	0.00%
Member/Public	0.85%	1.18%
R.O.W. Unpreventable	0.00%	0.00%
Scheduled	0.00%	0.00%
Unknown	0.00%	0.00%
Weather	88.37%	88.73%
Age/Deterioration	0.00%	0.00%
R.O.W. Preventable	0.00%	0.00%

5.24.9	CIRCUIT 5 YEAR AVERAGE (SAIDI)	0.330
5.24.10	REPORTING YEAR (SAIDI)	0.492
5.24.11	CIRCUIT 5 YEAR AVERAGE (SAIFI)	0.005
5.24.12	REPORTING YEAR (SAIFI)	0.007

5.24.13 CORRECTIVE ACTION PLAN:

There were fourteen outages on this feeder, with one of those outages being a three phase outage. The three phase outage was the main driver of the increased SAIDI and SAIFI for this duration.

Action Plan:
 This feeder was recently trimmed, which will help with its overall outage profile. Additionally, a spray will occur in 2026 to help reduce nuisance growth.

Circuit # 25

5.25.1	SUBSTATION NAME AND NUMBER	WILLIAMSTOWN(5)
5.25.2	SUBSTATION LOCATION (COUNTY-ROAD-TOWN)	Grant
5.25.3	CIRCUIT NAME AND NUMBER	WILLIAMSTOWN(5), Circuit 3, 0503
5.25.4	CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)	Keefer Rd
5.25.5	TOTAL CIRCUIT LENGTH (MILES)	75.9
5.25.6	CUSTOMER COUNT FOR THIS CIRCUIT	734
5.25.7	DATE OF LAST CIRCUIT TRIM (VM)	2018

5.25.23 LIST OF OUTAGE CAUSES FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUMBERS REPRESENTED BY EACH CAUSE

Outage Cause	SAIFI Contribution	SAIDI Contribution
Power Supplier	0.00%	0.00%
Birds/Animals	4.24%	2.23%
Equipment/Installation	0.19%	0.25%
Member/Public	0.39%	0.09%
R.O.W. Unpreventable	0.00%	0.00%
Scheduled	0.00%	0.00%
Unknown	42.20%	50.50%
Weather	52.99%	46.93%
Age/Deterioration	0.00%	0.00%
R.O.W. Preventable	0.00%	0.00%

5.25.9	CIRCUIT 5 YEAR AVERAGE (SAIDI)	0.992
5.25.10	REPORTING YEAR (SAIDI)	1.185
5.25.11	CIRCUIT 5 YEAR AVERAGE (SAIFI)	0.011
5.25.12	REPORTING YEAR (SAIFI)	0.008

5.25.13 CORRECTIVE ACTION PLAN:

There were numerous outages on this feeder, though almost all were single member outages and no three phase outages.

Action Plan:

A circuit trim was completed in 2025.

Circuit # 26

5.26.1	SUBSTATION NAME AND NUMBER	WILLIAMSTOWN(5)
5.26.2	SUBSTATION LOCATION (COUNTY-ROAD-TOWN)	Grant
5.26.3	CIRCUIT NAME AND NUMBER	WILLIAMSTOWN(5), Circuit 2, 0502
5.26.4	CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)	Mason Cordova
5.26.5	TOTAL CIRCUIT LENGTH (MILES)	68.4
5.26.6	CUSTOMER COUNT FOR THIS CIRCUIT	670
5.26.7	DATE OF LAST CIRCUIT TRIM (VM)	2025

5.26.23 LIST OF OUTAGE CAUSES FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUMBERS REPRESENTED BY EACH CAUSE

Outage Cause	SAIFI Contribution	SAIDI Contribution
Power Supplier	0.00%	0.00%
Birds/Animals	2.36%	2.38%
Equipment/Installation	0.14%	0.11%
Member/Public	0.00%	0.00%
R.O.W. Unpreventable	0.00%	0.00%
Scheduled	0.00%	0.00%
Unknown	0.05%	0.07%
Weather	97.45%	97.44%
Age/Deterioration	0.00%	0.00%
R.O.W. Preventable	0.00%	0.00%

5.26.9	CIRCUIT 5 YEAR AVERAGE (SAIDI)	1.297
5.26.10	REPORTING YEAR (SAIDI)	2.084
5.26.11	CIRCUIT 5 YEAR AVERAGE (SAIFI)	0.012
5.26.12	REPORTING YEAR (SAIFI)	0.031

5.26.13 CORRECTIVE ACTION PLAN:

This feeder had 21 outages, mainly small single transformer outages, there was however one set of large three phase outages on a single day that drove the SAIDI and SAIFI for the year over the typical five year average.

Action Plan:
A circuit trim occurred in 2025, to help reduce various outage causes.

Circuit # 27

5.27.1	SUBSTATION NAME AND NUMBER	MUNK(4)
5.27.2	SUBSTATION LOCATION (COUNTY-ROAD-TOWN)	Gallatin
5.27.3	CIRCUIT NAME AND NUMBER	MUNK(4), Circuit 7, 0407
5.27.4	CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)	Brown Rd
5.27.5	TOTAL CIRCUIT LENGTH (MILES)	7.1
5.27.6	CUSTOMER COUNT FOR THIS CIRCUIT	78
5.27.7	DATE OF LAST CIRCUIT TRIM (VM)	2020

5.27.23 LIST OF OUTAGE CAUSES FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUMBERS REPRESENTED BY EACH CAUSE

Outage Cause	SAIFI Contribution	SAIDI Contribution
Power Supplier	90.24%	92.43%
Birds/Animals	1.22%	0.92%
Equipment/Installation	0.00%	0.00%
Member/Public	0.00%	0.00%
R.O.W. Unpreventable	0.00%	0.00%
Scheduled	0.00%	0.00%
Unknown	0.00%	0.00%
Weather	8.54%	6.65%
Age/Deterioration	0.00%	0.00%
R.O.W. Preventable	0.00%	0.00%

5.27.9	CIRCUIT 5 YEAR AVERAGE (SAIDI)	0.092
5.27.10	REPORTING YEAR (SAIDI)	0.113
5.27.11	CIRCUIT 5 YEAR AVERAGE (SAIFI)	0.001
5.27.12	REPORTING YEAR (SAIFI)	0.001

5.27.13 CORRECTIVE ACTION PLAN:

This feeder is relatively short and serves relatively few residential members, it traditionally is reliable and this outage period had three outages. A power supplier caused outage was the largest contributor to the SAIDI and SAIFI for this period.

Action Plan:

None at this time.

Circuit # 28

5.28.1	SUBSTATION NAME AND NUMBER	MUNK(4)
5.28.2	SUBSTATION LOCATION (COUNTY-ROAD-TOWN)	Gallatin
5.28.3	CIRCUIT NAME AND NUMBER	MUNK(4), Circuit 1, 0401
5.28.4	CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)	Porter Rd
5.28.5	TOTAL CIRCUIT LENGTH (MILES)	24.6
5.28.6	CUSTOMER COUNT FOR THIS CIRCUIT	443
5.28.7	DATE OF LAST CIRCUIT TRIM (VM)	2022

5.28.23 LIST OF OUTAGE CAUSES FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUMBERS REPRESENTED BY EACH CAUSE

Outage Cause	SAIFI Contribution	SAIDI Contribution
Power Supplier	0.00%	0.00%
Birds/Animals	15.69%	11.73%
Equipment/Installation	0.86%	1.45%
Member/Public	3.79%	6.26%
R.O.W. Unpreventable	0.00%	0.00%
Scheduled	0.00%	0.00%
Unknown	0.00%	0.00%
Weather	79.66%	80.56%
Age/Deterioration	0.00%	0.00%
R.O.W. Preventable	0.00%	0.00%

5.28.9	CIRCUIT 5 YEAR AVERAGE (SAIDI)	0.640
5.28.10	REPORTING YEAR (SAIDI)	0.787
5.28.11	CIRCUIT 5 YEAR AVERAGE (SAIFI)	0.006
5.28.12	REPORTING YEAR (SAIFI)	0.009

5.28.13 CORRECTIVE ACTION PLAN:

There were fourteen outages on this circuit of the year, one of which was a three phase feeder outage, causing the majority of the SAIDI and SAIFI for this reporting period.

Action Plan:
Review locations of arresters to see if there can be a reduction in lightning caused outages.

Circuit # 29

5.29.1	SUBSTATION NAME AND NUMBER	BANKLICK(2)
5.29.2	SUBSTATION LOCATION (COUNTY-ROAD-TOWN)	Kenton
5.29.3	CIRCUIT NAME AND NUMBER	BANKLICK(2), Circuit 6, 0206
5.29.4	CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)	Cody Rd.
5.29.5	TOTAL CIRCUIT LENGTH (MILES)	19.5
5.29.6	CUSTOMER COUNT FOR THIS CIRCUIT	1257
5.29.7	DATE OF LAST CIRCUIT TRIM (VM)	2020

5.29.23 LIST OF OUTAGE CAUSES FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUMBERS REPRESENTED BY EACH CAUSE

Outage Cause	SAIFI Contribution	SAIDI Contribution
Power Supplier	0.00%	0.00%
Birds/Animals	0.49%	0.47%
Equipment/Installation	0.00%	0.00%
Member/Public	0.04%	0.02%
R.O.W. Unpreventable	0.00%	0.00%
Scheduled	0.00%	0.00%
Unknown	48.30%	35.97%
Weather	3.30%	11.59%
Age/Deterioration	47.88%	51.95%
R.O.W. Preventable	0.00%	0.00%

5.29.9	CIRCUIT 5 YEAR AVERAGE (SAIDI)	0.127
5.29.10	REPORTING YEAR (SAIDI)	2.736
5.29.11	CIRCUIT 5 YEAR AVERAGE (SAIFI)	0.005
5.29.12	REPORTING YEAR (SAIFI)	0.039

5.29.13 CORRECTIVE ACTION PLAN:

The SAIDI for this circuit was noticeably higher than the running five year average. This is mainly due to two separate feeder level outages, one of those being a failed transformer.

Action Plan:

The damaged equipment was replaced, and the expectation is this will once again be a reliable circuit.

Circuit # 30

5.30.1	SUBSTATION NAME AND NUMBER	BANKLICK(2)
5.30.2	SUBSTATION LOCATION (COUNTY-ROAD-TOWN)	Kenton
5.30.3	CIRCUIT NAME AND NUMBER	BANKLICK(2), Circuit 5, 0205
5.30.4	CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)	Maher Rd
5.30.5	TOTAL CIRCUIT LENGTH (MILES)	13.0
5.30.6	CUSTOMER COUNT FOR THIS CIRCUIT	247
5.30.7	DATE OF LAST CIRCUIT TRIM (VM)	2020

5.30.23 LIST OF OUTAGE CAUSES FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUMBERS REPRESENTED BY EACH CAUSE

Outage Cause	SAIFI Contribution	SAIDI Contribution
Power Supplier	0.00%	0.00%
Birds/Animals	8.68%	6.45%
Equipment/Installation	0.00%	0.00%
Member/Public	0.00%	0.00%
R.O.W. Unpreventable	42.53%	23.48%
Scheduled	0.00%	0.00%
Unknown	0.52%	0.23%
Weather	48.26%	69.84%
Age/Deterioration	0.00%	0.00%
R.O.W. Preventable	0.00%	0.00%

5.30.9	CIRCUIT 5 YEAR AVERAGE (SAIDI)	0.267
5.30.10	REPORTING YEAR (SAIDI)	0.815
5.30.11	CIRCUIT 5 YEAR AVERAGE (SAIFI)	0.003
5.30.12	REPORTING YEAR (SAIFI)	0.008

5.30.13 CORRECTIVE ACTION PLAN:

There were 15 outages for this reporting period, two of those were feeder level outages. Those two outages drove the majority of the SAIDI and SAIFI for the reporting period.

Action Plan:

Review sectionalizing to help reduce scale of larger outages.

Circuit # 31

5.31.1	SUBSTATION NAME AND NUMBER	BANKLICK(2)
5.31.2	SUBSTATION LOCATION (COUNTY-ROAD-TOWN)	Kenton
5.31.3	CIRCUIT NAME AND NUMBER	BANKLICK(2), Circuit 3, 0203
5.31.4	CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)	Rich Rd
5.31.5	TOTAL CIRCUIT LENGTH (MILES)	38.5
5.31.6	CUSTOMER COUNT FOR THIS CIRCUIT	453
5.31.7	DATE OF LAST CIRCUIT TRIM (VM)	2021

5.31.23 LIST OF OUTAGE CAUSES FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUMBERS REPRESENTED BY EACH CAUSE

Outage Cause	SAIFI Contribution	SAIDI Contribution
Power Supplier	0.00%	0.00%
Birds/Animals	0.07%	0.05%
Equipment/Installation	0.07%	0.09%
Member/Public	0.00%	0.00%
R.O.W. Unpreventable	26.38%	58.84%
Scheduled	26.53%	14.20%
Unknown	0.07%	0.02%
Weather	36.99%	22.25%
Age/Deterioration	0.00%	0.00%
R.O.W. Preventable	9.88%	4.55%

5.31.9	CIRCUIT 5 YEAR AVERAGE (SAIDI)	1.183
5.31.10	REPORTING YEAR (SAIDI)	2.858
5.31.11	CIRCUIT 5 YEAR AVERAGE (SAIFI)	0.015
5.31.12	REPORTING YEAR (SAIFI)	0.020

5.31.13 CORRECTIVE ACTION PLAN:

There were twenty two outages on this feeder for the reporting period, three of which were three phase outages, which were the main driver of SAIDI and SAIFI.

Action Plan:

Review sectionalizing to minimize impact of three phase outages.

Circuit # 32

5.32.1	SUBSTATION NAME AND NUMBER	BANKLICK(2)
5.32.2	SUBSTATION LOCATION (COUNTY-ROAD-TOWN)	Kenton
5.32.3	CIRCUIT NAME AND NUMBER	BANKLICK(2), Circuit 2, 0202
5.32.4	CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)	Kenton Station
5.32.5	TOTAL CIRCUIT LENGTH (MILES)	67.7
5.32.6	CUSTOMER COUNT FOR THIS CIRCUIT	1031
5.32.7	DATE OF LAST CIRCUIT TRIM (VM)	2021

5.32.23 LIST OF OUTAGE CAUSES FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUMBERS REPRESENTED BY EACH CAUSE

Outage Cause	SAIFI Contribution	SAIDI Contribution
Power Supplier	0.00%	0.00%
Birds/Animals	7.76%	2.73%
Equipment/Installation	1.57%	1.05%
Member/Public	0.00%	0.00%
R.O.W. Unpreventable	1.66%	0.63%
Scheduled	1.22%	1.83%
Unknown	5.75%	2.54%
Weather	74.02%	88.84%
Age/Deterioration	2.70%	0.38%
R.O.W. Preventable	4.53%	1.60%

5.32.9	CIRCUIT 5 YEAR AVERAGE (SAIDI)	2.613
5.32.10	REPORTING YEAR (SAIDI)	3.942
5.32.11	CIRCUIT 5 YEAR AVERAGE (SAIFI)	0.026
5.32.12	REPORTING YEAR (SAIFI)	0.017

5.32.13 CORRECTIVE ACTION PLAN:

This is a long feeder where there were numerous outages, the majority of which were single member outages. Two three phase outages occurred on a day of high winds.

Action Plan:
 The circuit was well sectionalized and the majority of outages were contained to a small group of members. There is no planned additional action at this time.

Circuit # 33

5.33.1	SUBSTATION NAME AND NUMBER	BANKLICK(2)
5.33.2	SUBSTATION LOCATION (COUNTY-ROAD-TOWN)	Kenton
5.33.3	CIRCUIT NAME AND NUMBER	BANKLICK(2), Circuit 1, 0201
5.33.4	CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)	Fowler Creek
5.33.5	TOTAL CIRCUIT LENGTH (MILES)	18.8
5.33.6	CUSTOMER COUNT FOR THIS CIRCUIT	1018
5.33.7	DATE OF LAST CIRCUIT TRIM (VM)	2022

5.33.23 LIST OF OUTAGE CAUSES FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUMBERS REPRESENTED BY EACH CAUSE

Outage Cause	SAIFI Contribution	SAIDI Contribution
Power Supplier	0.00%	0.00%
Birds/Animals	5.70%	4.32%
Equipment/Installation	0.08%	0.22%
Member/Public	0.00%	0.00%
R.O.W. Unpreventable	0.00%	0.00%
Scheduled	6.84%	1.37%
Unknown	0.33%	0.70%
Weather	84.12%	91.45%
Age/Deterioration	0.00%	0.00%
R.O.W. Preventable	2.93%	1.95%

5.33.9	CIRCUIT 5 YEAR AVERAGE (SAIDI)	1.228
5.33.10	REPORTING YEAR (SAIDI)	1.512
5.33.11	CIRCUIT 5 YEAR AVERAGE (SAIFI)	0.021
5.33.12	REPORTING YEAR (SAIFI)	0.018

5.33.13 CORRECTIVE ACTION PLAN:

There were sixteen outages on this feeder for 2025, but one large feeder level event caused the SAIDI and SAIFI to be higher than the five year average for this reporting period. A weather event caused a tree well outside the right of way to fall outside the sub leading to a large outage.

Action Plan:
Overall, outside of the single outage this feeder would have performed much better than the historical five year outage, there is no further planned action at this time.

Circuit # 34

5.34.1	SUBSTATION NAME AND NUMBER	BOONE(1)
5.34.2	SUBSTATION LOCATION (COUNTY-ROAD-TOWN)	Boone
5.34.3	CIRCUIT NAME AND NUMBER	BOONE(1), Circuit 2, 0102
5.34.4	CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)	Howe Rd
5.34.5	TOTAL CIRCUIT LENGTH (MILES)	63.0
5.34.6	CUSTOMER COUNT FOR THIS CIRCUIT	817
5.34.7	DATE OF LAST CIRCUIT TRIM (VM)	2023

5.34.23 LIST OF OUTAGE CAUSES FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUMBERS REPRESENTED BY EACH CAUSE

Outage Cause	SAIFI Contribution	SAIDI Contribution
Power Supplier	0.00%	0.00%
Birds/Animals	1.71%	0.76%
Equipment/Installation	0.24%	0.35%
Member/Public	38.11%	17.74%
R.O.W. Unpreventable	1.47%	1.05%
Scheduled	0.10%	0.26%
Unknown	3.62%	1.98%
Weather	53.57%	76.75%
Age/Deterioration	0.57%	0.43%
R.O.W. Preventable	0.62%	0.69%

5.34.9	CIRCUIT 5 YEAR AVERAGE (SAIDI)	2.309
5.34.10	REPORTING YEAR (SAIDI)	4.455
5.34.11	CIRCUIT 5 YEAR AVERAGE (SAIFI)	0.016
5.34.12	REPORTING YEAR (SAIFI)	0.031

5.34.13 CORRECTIVE ACTION PLAN:

This feeder experienced several more outages than typical as indicated by the higher than normal SAIDI and SAIFI for the reporting period. During this period, however, there were only two three phase outages.

Action Plan:
 This feeder was sectionalized well and reduced the amount of exposure to large outages, review arrester plan as many outages occurred on a small scale due to lightning.

Circuit # 35

5.35.1	SUBSTATION NAME AND NUMBER	BOONE(1)
5.35.2	SUBSTATION LOCATION (COUNTY-ROAD-TOWN)	Boone
5.35.3	CIRCUIT NAME AND NUMBER	BOONE(1), Circuit 1, 0101
5.35.4	CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA)	Sewell Rd
5.35.5	TOTAL CIRCUIT LENGTH (MILES)	29.1
5.35.6	CUSTOMER COUNT FOR THIS CIRCUIT	738
5.35.7	DATE OF LAST CIRCUIT TRIM (VM)	2023

5.35.23 LIST OF OUTAGE CAUSES FOR CIRCUIT ALONG WITH PERCENTAGE OF TOTAL OUTAGE NUMBERS REPRESENTED BY EACH CAUSE

Outage Cause	SAIFI Contribution	SAIDI Contribution
Power Supplier	0.00%	0.00%
Birds/Animals	67.20%	33.76%
Equipment/Installation	0.09%	0.06%
Member/Public	0.00%	0.00%
R.O.W. Unpreventable	3.99%	3.18%
Scheduled	0.00%	0.00%
Unknown	1.15%	1.07%
Weather	25.80%	59.00%
Age/Deterioration	0.00%	0.00%
R.O.W. Preventable	1.77%	2.92%

5.35.9	CIRCUIT 5 YEAR AVERAGE (SAIDI)	0.573
5.35.10	REPORTING YEAR (SAIDI)	1.625
5.35.11	CIRCUIT 5 YEAR AVERAGE (SAIFI)	0.008
5.35.12	REPORTING YEAR (SAIFI)	0.017

5.35.13 CORRECTIVE ACTION PLAN:

The SAIDI and SAIFI for 2025 was higher than the five year average due to numerous animal issues. The vast majority of the outages were contained to relatively few members, but the overall frequency of outages drove the numbers up.

Action Plan:
Keep practice of installing animal guards to help reduce overall animal outages as well as review this circuit to ensure equipment has necessary protection.

KENTUCKY PUBLIC SERVICE COMMISSION

Electric Distribution Utility Annual Reliability Report

Additional pages may be attached as necessary

SECTION 6: VEGETATION MANAGEMENT PLAN REVIEW

INCLUDE CURRENT VEGETATION MANAGEMENT PLAN

Additional pages may be attached as necessary

Owen Electric's trim cycle prioritizes feeders that have the oldest trim date, have the most work requests for tree work and also are the worst performing in terms of reliability. Two years following the trimming and mowing cycle a low volume herbicide treatment is performed to control undesirable brush in the right of ways. This overall cycle occurs on a 7 year basis, with necessary touchup as required.

KENTUCKY PUBLIC SERVICE COMMISSION

SECTION 7: UTILITY COMMENTS

Through 2025 work ramped up on a new substation and associated feeder ties in the area of northern Boone and Kenton County. Ultimately three subs were rebuilt, modified, or added. This will help overall reliability in the area by giving an additional delivery point and increasing the number of backfeed opportunities.

During the course of 2022 OEC continued to support several initiatives designed to minimize the extent of outages and speed in the restoration of outages caused by weather. OEC has implemented an ongoing over-current protection review of each feeder. A five year plan was in place in 2018 to review all feeders sectionalizing plans.

A three year plan was put in place in 2018 to replace all hydraulic reclosers on the feeder to electronic, this has been fully realized in 2021.

We continue to operate two self healing sites to provide backup power to critical Sanitation District plants.

OEC continues working on future plans to address other feeders with plans for a new substation that will shorten the feeder lengths and provide improvements in reliability. Until these substations can be implemented, initiatives such as feeder hardening, focused ROW clearing, and increased sectionalizing will continue to be considered.

OEC is working to ensure the abundance of joint use attachments do not degrade the overall quality and reliability of the distribution electric system.