



A Touchstone Energy® Cooperative 

April 29, 2024

Ms. Linda Bridwell
Public Service Commission
P.O. Box 615
211 Sower Boulevard
Frankfort, Kentucky 40602-0615

RE: Administrative Case No. 2011-00450: Annual Distribution Reliability Report

Dear Ms Bridwell,

Please find enclosed a copy of the 2023 electric distribution utility annual reliability report for Nolin RECC, as well as a copy of Nolin RECC's vegetation management program.

If you have any questions regarding the enclosed information, please contact me at (270) 765-6153 ext 2702 or dwoosley@nolinrecc.com.

Regards,



Devon C. Woosley
Manager - Engineering
Nolin Rural Electric Cooperative Corporation

Enclosures

Kentucky Public Service Commission
Electric Distribution Utility Annual Reliability Report

SECTION 1: CONTACT INFORMATION

UTILITY NAME:	Nolin RECC
REPORT PREPARED BY:	Jordan Horsley, Devon Woosley
E-MAIL ADDRESS OF PREPARER:	jhorsley@nolinrecc.com , dwoosley@nolinrecc.com
PHONE NUMBER OF PREPARER:	(270) 765-6153 ext 2716, (270) 765-6153 ext 2702

SECTION 2: REPORTING YEAR

CALENDAR YEAR OF REPORT:	2023
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SECTION 3: MAJOR EVENT DAYS (MED)

TMED:	3.97
FIRST DATE USED TO DETERMINE TMED:	1/1/2018
LAST DATE USED TO DETERMINE TMED:	12/31/2022
NUMBER OF MED IN REPORT YEAR:	7

NOTE: Per IEEE TMED 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 accumulated.

SECTION 4: SYSTEM RELIABILITY INFORMATION AND RESULTS

System-wide Information

TOTAL CUSTOMERS: 37,203 TOTAL CIRCUITS: 88

Excluding MED

5-YEAR AVERAGE (2018 - 2022)	REPORTING YEAR
SAIDI: <u>47.969</u>	SAIDI: <u>60.440</u>
SAIFI: <u>0.691</u>	SAIFI: <u>0.829</u>

Including MED

5-YEAR AVERAGE (2018 - 2022)	REPORTING YEAR
SAIDI: <u>203.809</u>	SAIDI: <u>730.020</u>
SAIFI: <u>1.055</u>	SAIFI: <u>1.908</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 TMED.

SECTION 5: CIRCUIT REPORTING
(CIRCUITS WITH SAIDI AND/OR SAIFI EXCEEDING 5 YEAR AVERAGE)
(CIRCUIT NUMBERS SHOULD BE REPORTED EXCLUDING MED)

CIRCUIT # 1	GLENDALE - 2
1. SUBSTATION NAME AND NUMBER:	GLENDALE (3)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN):	HARDIN - E. GLENDALE HODGENVILLE RD - GLENDALE
3. CIRCUIT NAME AND NUMBER:	GLENDALE - 2
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA):	GLENDALE, KY - SPORTSMAN LAKE RD, OVERALL PHILLIPS RD
5. TOTAL CIRCUIT LENGTH (MILES):	62.66
6. CUSTOMER COUNT FOR THIS CIRCUIT:	856
7. DATE OF LAST CIRCUIT TRIM (MM/YY):	10/20

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):	
	CONTRACTOR <u>0.08%</u>	PUBLIC ACCIDENTS, OTHER <u>0.00%</u>
	EQUIPMENT / MATERIAL FAILURE <u>0.39%</u>	SMALL ANIMALS OR BIRDS <u>0.06%</u>
	LIGHTNING <u>0.00%</u>	TREES <u>22.12%</u>
	NO CAUSE CODE <u>73.19%</u>	WIND, HIGH WIND <u>0.01%</u>
	PLANNED OUTAGE <u>4.16%</u>	WEATHER <u>0.00%</u>
	POWER SUPPLIER <u>0.00%</u>	

9. CIRCUIT 5 YEAR AVERAGE (SAIDI):	124.02
10. REPORTING YEAR (SAIDI):	173.38
11. CIRCUIT 5 YEAR AVERAGE (SAIFI):	2.08
12. REPORTING YEAR (SAIFI):	2.44

13. LIST OF CORRECTIVE ACTION, IF ANY, TAKEN OR TO BE TAKEN

None needed. Circuit had two circuit level outages in the year with no cause found.

TREE CAUSE CODE BREAKDOWN

DEAD TREE (IN-ROW) 0.0%, VEGETATION (I.E. VINES) 0.0%, GROW IN 91.8%, OVERHANG 0.0%, GREEN TREE FAILURE (OUT-OF-ROW) 6.6%, DEAD TREE (OUT-OF-ROW) 0.0%, NO EQUIP CODE 0.0%

EQUIPMENT CAUSE CODE BREAKDOWN

NO EQUIP CODE 0.0%, ARRESTER 0.0%, POLE/CROSSARM 0.0%, ANCHOR/GUY 0.0%, CONDUCTOR 0.0%, CONNECTOR/CLAMP/SPLICE/DEADEND 71.6%, INSULATOR 0.0%, PORCELAIN CUTOUT 0.0%, TRANSFORMER 19.3%, PROTECTIVE DEVICE 9.1%, OVERLOAD 0.0%

SECTION 5: CIRCUIT REPORTING
(CIRCUITS WITH SAIDI AND/OR SAIFI EXCEEDING 5 YEAR AVERAGE)
(CIRCUIT NUMBERS SHOULD BE REPORTED EXCLUDING MED)

CIRCUIT # 2	GLENDALE - 5
1. SUBSTATION NAME AND NUMBER:	GLENDALE (3)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN):	HARDIN - E. GLENDALE HODGENVILLE RD - GLENDALE
3. CIRCUIT NAME AND NUMBER:	GLENDALE - 5
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA):	SONORA, KY - HWY 31 W (SOUTH), NOLIN RD, SONORA NOLIN RD
5. TOTAL CIRCUIT LENGTH (MILES):	32.69
6. CUSTOMER COUNT FOR THIS CIRCUIT:	204
7. DATE OF LAST CIRCUIT TRIM (MM/YY):	10/20

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):	
	CONTRACTOR <u>0.00%</u>	PUBLIC ACCIDENTS, OTHER <u>0.00%</u>
	EQUIPMENT / MATERIAL FAILURE <u>28.95%</u>	SMALL ANIMALS OR BIRDS <u>0.00%</u>
	LIGHTNING <u>14.16%</u>	TREES <u>38.00%</u>
	NO CAUSE CODE <u>17.85%</u>	WIND, HIGH WIND <u>0.00%</u>
	PLANNED OUTAGE <u>1.04%</u>	WEATHER <u>0.00%</u>
	POWER SUPPLIER <u>0.00%</u>	

9. CIRCUIT 5 YEAR AVERAGE (SAIDI):	124.94
10. REPORTING YEAR (SAIDI):	215.65
11. CIRCUIT 5 YEAR AVERAGE (SAIFI):	1.60
12. REPORTING YEAR (SAIFI):	3.69

13. LIST OF CORRECTIVE ACTION, IF ANY, TAKEN OR TO BE TAKEN

None needed. Only had one circuit level outage due to a tree.

TREE CAUSE CODE BREAKDOWN

DEAD TREE (IN-ROW) 0.0%, VEGETATION (I.E. VINES) 0.0%, GROW IN 0.0%, OVERHANG 0.0%, GREEN TREE FAILURE (OUT-OF-ROW) 100.0%, DEAD TREE (OUT-OF-ROW) 0.0%, NO EQUIP CODE 0.0%

EQUIPMENT CAUSE CODE BREAKDOWN

NO EQUIP CODE 0.0%, ARRESTER 0.0%, POLE/CROSSARM 0.0%, ANCHOR/GUY 0.0%, CONDUCTOR 100.0%, CONNECTOR/CLAMP/SPLICE/DEADEND 0.0%, INSULATOR 0.0%, PORCELAIN CUTOUT 0.0%, TRANSFORMER 0.0%, PROTECTIVE DEVICE 0.0%, OVERLOAD 0.0%

SECTION 5: CIRCUIT REPORTING
(CIRCUITS WITH SAIDI AND/OR SAIFI EXCEEDING 5 YEAR AVERAGE)
(CIRCUIT NUMBERS SHOULD BE REPORTED EXCLUDING MED)

CIRCUIT # 3	HODGENVILLE-DONNIE PROPES - 1
1. SUBSTATION NAME AND NUMBER:	HODGENVILLE-DONNIE PROPES (4)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN):	LARUE - HWY 31E (NEAR WADDELL RD)- HODGENVILLE
3. CIRCUIT NAME AND NUMBER:	HODGENVILLE-DONNIE PROPES - 1
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA):	HODGENVILLE, KY - LEAFDALE RD, HWY 470 N L&N
5. TOTAL CIRCUIT LENGTH (MILES):	76.20
6. CUSTOMER COUNT FOR THIS CIRCUIT:	674
7. DATE OF LAST CIRCUIT TRIM (MM/YY):	01/21

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):	
	CONTRACTOR <u>0.00%</u>	PUBLIC ACCIDENTS, OTHER <u>1.29%</u>
	EQUIPMENT / MATERIAL FAILURE <u>18.08%</u>	SMALL ANIMALS OR BIRDS <u>0.79%</u>
	LIGHTNING <u>8.58%</u>	TREES <u>48.32%</u>
	NO CAUSE CODE <u>0.00%</u>	WIND, HIGH WIND <u>21.65%</u>
	PLANNED OUTAGE <u>1.29%</u>	WEATHER <u>0.00%</u>
	POWER SUPPLIER <u>0.00%</u>	

9. CIRCUIT 5 YEAR AVERAGE (SAIDI):	29.16
10. REPORTING YEAR (SAIDI):	15.57
11. CIRCUIT 5 YEAR AVERAGE (SAIFI):	0.31
12. REPORTING YEAR (SAIFI):	0.41

13. LIST OF CORRECTIVE ACTION, IF ANY, TAKEN OR TO BE TAKEN	None needed. Only a few tree/vegetation related outage on this circuit in the year, the largest of which affected 129 members.
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TREE CAUSE CODE BREAKDOWN

DEAD TREE (IN-ROW) 70.1%, VEGETATION (I.E. VINES) 2.7%, GROW IN 25.1%, OVERHANG 0.0%, GREEN TREE FAILURE (OUT-OF-ROW) 0.0%, DEAD TREE (OUT-OF-ROW) 2.1%, NO EQUIP CODE 0.0%

EQUIPMENT CAUSE CODE BREAKDOWN

NO EQUIP CODE 12.8%, ARRESTER 0.0%, POLE/CROSSARM 0.0%, ANCHOR/GUY 0.0%, CONDUCTOR 0.0%, CONNECTOR/CLAMP/SPLICE/DEADEND 29.4%, INSULATOR 0.0%, PORCELAIN CUTOUT 3.4%, TRANSFORMER 49.0%, PROTECTIVE DEVICE 5.5%, OVERLOAD 0.0%

SECTION 5: CIRCUIT REPORTING
(CIRCUITS WITH SAIDI AND/OR SAIFI EXCEEDING 5 YEAR AVERAGE)
(CIRCUIT NUMBERS SHOULD BE REPORTED EXCLUDING MED)

CIRCUIT # 4	HODGENVILLE-DONNIE PROPES - 3
1. SUBSTATION NAME AND NUMBER:	HODGENVILLE-DONNIE PROPES (4)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN):	LARUE - HWY 31E (NEAR WADDELL RD)- HODGENVILLE
3. CIRCUIT NAME AND NUMBER:	HODGENVILLE-DONNIE PROPES - 3
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA):	TANNER, KY - LANDMARK DR, S LINCOLN BLVD, TANNER RD
5. TOTAL CIRCUIT LENGTH (MILES):	46.95
6. CUSTOMER COUNT FOR THIS CIRCUIT:	453
7. DATE OF LAST CIRCUIT TRIM (MM/YY):	01/21

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):	
	CONTRACTOR <u>0.00%</u>	PUBLIC ACCIDENTS, OTHER <u>0.00%</u>
	EQUIPMENT / MATERIAL FAILURE <u>53.18%</u>	SMALL ANIMALS OR BIRDS <u>0.00%</u>
	LIGHTNING <u>22.70%</u>	TREES <u>0.00%</u>
	NO CAUSE CODE <u>6.06%</u>	WIND, HIGH WIND <u>16.80%</u>
	PLANNED OUTAGE <u>1.25%</u>	WEATHER <u>0.00%</u>
	POWER SUPPLIER <u>0.00%</u>	

9. CIRCUIT 5 YEAR AVERAGE (SAIDI):	34.15
10. REPORTING YEAR (SAIDI):	23.56
11. CIRCUIT 5 YEAR AVERAGE (SAIFI):	0.24
12. REPORTING YEAR (SAIFI):	0.36

13. LIST OF CORRECTIVE ACTION, IF ANY, TAKEN OR TO BE TAKEN

None needed. Reviewed all six unrelated equipment failure outages for the year.

TREE CAUSE CODE BREAKDOWN

EQUIPMENT CAUSE CODE BREAKDOWN

NO EQUIP CODE 0.0%, ARRESTER 0.0%, POLE/CROSSARM 0.0%,
ANCHOR/GUY 0.0%, CONDUCTOR 6.0%,
CONNECTOR/CLAMP/SPLICE/DEADEND 81.4%,
INSULATOR 0.0%,PORCELAIN CUTOUT 6.5%, TRANSFORMER 0.0%,
PROTECTIVE DEVICE 6.1%,OVERLOAD 0.0%

SECTION 5: CIRCUIT REPORTING
(CIRCUITS WITH SAIDI AND/OR SAIFI EXCEEDING 5 YEAR AVERAGE)
(CIRCUIT NUMBERS SHOULD BE REPORTED EXCLUDING MED)

CIRCUIT # 5	HODGENVILLE-DONNIE PROPES - 4
1. SUBSTATION NAME AND NUMBER:	HODGENVILLE-DONNIE PROPES (4)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN):	LARUE - HWY 31E (NEAR WADDELL RD)- HODGENVILLE
3. CIRCUIT NAME AND NUMBER:	HODGENVILLE-DONNIE PROPES - 4
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA):	HODGENVILLE, KY - OLD ELIZABETHTOWN RD, RED MILL RD
5. TOTAL CIRCUIT LENGTH (MILES):	43.81
6. CUSTOMER COUNT FOR THIS CIRCUIT:	490
7. DATE OF LAST CIRCUIT TRIM (MM/YY):	10/20

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):	
	CONTRACTOR	0.00%
	PUBLIC ACCIDENTS, OTHER	0.00%
	EQUIPMENT / MATERIAL FAILURE	1.17%
	SMALL ANIMALS OR BIRDS	0.00%
	LIGHTNING	0.14%
	TREES	0.16%
	NO CAUSE CODE	94.10%
	WIND, HIGH WIND	0.00%
	PLANNED OUTAGE	4.42%
	WEATHER	0.00%
	POWER SUPPLIER	0.00%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI):	28.10
10. REPORTING YEAR (SAIDI):	76.66
11. CIRCUIT 5 YEAR AVERAGE (SAIFI):	0.60
12. REPORTING YEAR (SAIFI):	1.07

13. LIST OF CORRECTIVE ACTION, IF ANY, TAKEN OR TO BE TAKEN

None needed. Only had one circuit level outage in the year, and it had an unknown cause.

TREE CAUSE CODE BREAKDOWN

DEAD TREE (IN-ROW) 0.0%, VEGETATION (I.E. VINES) 0.0%, GROW IN 100.0%, OVERHANG 0.0%, GREEN TREE FAILURE (OUT-OF-ROW) 0.0%, DEAD TREE (OUT-OF-ROW) 0.0%, NO EQUIP CODE 0.0%

EQUIPMENT CAUSE CODE BREAKDOWN

NO EQUIP CODE 0.0%, ARRESTER 0.0%, POLE/CROSSARM 0.0%, ANCHOR/GUY 0.0%, CONDUCTOR 0.0%, CONNECTOR/CLAMP/SPLICE/DEADEND 38.6%, INSULATOR 0.0%, PORCELAIN CUTOUT 25.5%, TRANSFORMER 15.3%, PROTECTIVE DEVICE 20.7%, OVERLOAD 0.0%

SECTION 5: CIRCUIT REPORTING
(CIRCUITS WITH SAIDI AND/OR SAIFI EXCEEDING 5 YEAR AVERAGE)
(CIRCUIT NUMBERS SHOULD BE REPORTED EXCLUDING MED)

CIRCUIT # 6	HODGENVILLE-DONNIE PROPES - 5
1. SUBSTATION NAME AND NUMBER:	HODGENVILLE-DONNIE PROPES (4)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN):	LARUE - HWY 31E (NEAR WADDELL RD)- HODGENVILLE
3. CIRCUIT NAME AND NUMBER:	HODGENVILLE-DONNIE PROPES - 5
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA):	HODGENVILLE, KY - SHEPHERDSVILLE RD, GOODIN WILLIAMS RD
5. TOTAL CIRCUIT LENGTH (MILES):	23.33
6. CUSTOMER COUNT FOR THIS CIRCUIT:	113
7. DATE OF LAST CIRCUIT TRIM (MM/YY):	01/21

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):	
	CONTRACTOR <u>0.00%</u>	PUBLIC ACCIDENTS, OTHER <u>0.00%</u>
	EQUIPMENT / MATERIAL FAILURE <u>86.30%</u>	SMALL ANIMALS OR BIRDS <u>0.00%</u>
	LIGHTNING <u>1.65%</u>	TREES <u>6.13%</u>
	NO CAUSE CODE <u>0.71%</u>	WIND, HIGH WIND <u>0.00%</u>
	PLANNED OUTAGE <u>5.21%</u>	WEATHER <u>0.00%</u>
	POWER SUPPLIER <u>0.00%</u>	

9. CIRCUIT 5 YEAR AVERAGE (SAIDI):	108.18
10. REPORTING YEAR (SAIDI):	179.00
11. CIRCUIT 5 YEAR AVERAGE (SAIFI):	0.99
12. REPORTING YEAR (SAIFI):	1.75

13. LIST OF CORRECTIVE ACTION, IF ANY, TAKEN OR TO BE TAKEN

None needed. Had one circuit level outage in the year.

TREE CAUSE CODE BREAKDOWN

DEAD TREE (IN-ROW) 0.0%, VEGETATION (I.E. VINES) 0.0%, GROW IN 0.0%, OVERHANG 0.0%, GREEN TREE FAILURE (OUT-OF-ROW) 0.0%, DEAD TREE (OUT-OF-ROW) 0.0%, NO EQUIP CODE 0.0%

EQUIPMENT CAUSE CODE BREAKDOWN

NO EQUIP CODE 0.0%, ARRESTER 0.0%, POLE/CROSSARM 0.0%, ANCHOR/GUY 0.0%, CONDUCTOR 73.0%, CONNECTOR/CLAMP/SPLICE/DEADEND 21.2%, INSULATOR 0.0%, PORCELAIN CUTOUT 0.0%, TRANSFORMER 0.0%, PROTECTIVE DEVICE 5.8%, OVERLOAD 0.0%

SECTION 5: CIRCUIT REPORTING
(CIRCUITS WITH SAIDI AND/OR SAIFI EXCEEDING 5 YEAR AVERAGE)
(CIRCUIT NUMBERS SHOULD BE REPORTED EXCLUDING MED)

CIRCUIT # 7	MAGNOLIA - 4
1. SUBSTATION NAME AND NUMBER:	MAGNOLIA (5)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN):	LARUE - NEW JACKSON HWY - MAGNOLIA
3. CIRCUIT NAME AND NUMBER:	MAGNOLIA - 4
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA):	TANNER, KY - OAK HILL RD, NEW JACKSON HWY, HAWKINS RD, SONORA RD, SIBERIA RD, MURRIELTOWN RD
5. TOTAL CIRCUIT LENGTH (MILES):	90.40
6. CUSTOMER COUNT FOR THIS CIRCUIT:	526
7. DATE OF LAST CIRCUIT TRIM (MM/YY):	10/21

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):		
CONTRACTOR	<u>0.00%</u>	PUBLIC ACCIDENTS, OTHER	<u>0.00%</u>
EQUIPMENT / MATERIAL FAILURE	<u>73.12%</u>	SMALL ANIMALS OR BIRDS	<u>10.21%</u>
LIGHTNING	<u>1.88%</u>	TREES	<u>0.00%</u>
NO CAUSE CODE	<u>0.00%</u>	WIND, HIGH WIND	<u>12.68%</u>
PLANNED OUTAGE	<u>2.10%</u>	WEATHER	<u>0.00%</u>
POWER SUPPLIER	<u>0.00%</u>		

9. CIRCUIT 5 YEAR AVERAGE (SAIDI):	75.78
10. REPORTING YEAR (SAIDI):	106.30
11. CIRCUIT 5 YEAR AVERAGE (SAIFI):	1.28
12. REPORTING YEAR (SAIFI):	1.48

13. LIST OF CORRECTIVE ACTION, IF ANY, TAKEN OR TO BE TAKEN	None needed. Only had three equipment failure outage tickets on this circuit for the year, one of which was a circuit level outage with long duration.
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TREE CAUSE CODE BREAKDOWN

EQUIPMENT CAUSE CODE BREAKDOWN

NO EQUIP CODE 0.0%, ARRESTER 0.0%, POLE/CROSSARM 0.0%,
ANCHOR/GUY 0.0%, CONDUCTOR 0.0%,
CONNECTOR/CLAMP/SPLICE/DEADEND 94.0%,
INSULATOR 0.0%,PORCELAIN CUTOUT 0.0%, TRANSFORMER 5.1%,
PROTECTIVE DEVICE 0.9%,OVERLOAD 0.0%

SECTION 5: CIRCUIT REPORTING
(CIRCUITS WITH SAIDI AND/OR SAIFI EXCEEDING 5 YEAR AVERAGE)
(CIRCUIT NUMBERS SHOULD BE REPORTED EXCLUDING MED)

CIRCUIT # 8	STEPHENSBURG - 2
1. SUBSTATION NAME AND NUMBER:	STEPHENSBURG (6)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN):	HARDIN-LEITCHFIELD RD-STEPHENSBURG
3. CIRCUIT NAME AND NUMBER:	STEPHENSBURG - 2
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA):	WHITE HILLS, KY - W WHITE MILLS GLENDALE RD, S LONG GROVE RD, MELROSE RD, SONORA HARDIN SPRINGS RD
5. TOTAL CIRCUIT LENGTH (MILES):	52.22
6. CUSTOMER COUNT FOR THIS CIRCUIT:	257
7. DATE OF LAST CIRCUIT TRIM (MM/YY):	04/19

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):	
	CONTRACTOR <u>0.00%</u>	PUBLIC ACCIDENTS, OTHER <u>37.10%</u>
	EQUIPMENT / MATERIAL FAILURE <u>4.08%</u>	SMALL ANIMALS OR BIRDS <u>4.83%</u>
	LIGHTNING <u>2.47%</u>	TREES <u>3.50%</u>
	NO CAUSE CODE <u>1.23%</u>	WIND, HIGH WIND <u>38.22%</u>
	PLANNED OUTAGE <u>8.58%</u>	WEATHER <u>0.00%</u>
	POWER SUPPLIER <u>0.00%</u>	

9. CIRCUIT 5 YEAR AVERAGE (SAIDI):	29.56
10. REPORTING YEAR (SAIDI):	30.68
11. CIRCUIT 5 YEAR AVERAGE (SAIFI):	0.55
12. REPORTING YEAR (SAIFI):	1.12

13. LIST OF CORRECTIVE ACTION, IF ANY, TAKEN OR TO BE TAKEN	None needed. One circuit level outage in the year and one small but extended outage resulted in most of the total outage time.
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TREE CAUSE CODE BREAKDOWN DEAD TREE (IN-ROW) 61.3%, VEGETATION (I.E. VINES) 0.0%, GROW IN 38.7%, OVERHANG 0.0%, GREEN TREE FAILURE (OUT-OF-ROW) 0.0%, DEAD TREE (OUT-OF-ROW) 0.0%, NO EQUIP CODE 0.0%

EQUIPMENT CAUSE CODE BREAKDOWN NO EQUIP CODE 0.0%, ARRESTER 0.0%, POLE/CROSSARM 0.0%, ANCHOR/GUY 0.0%, CONDUCTOR 0.0%, CONNECTOR/CLAMP/SPLICE/DEADEND 100.0%, INSULATOR 0.0%, PORCELAIN CUTOUT 0.0%, TRANSFORMER 0.0%, PROTECTIVE DEVICE 0.0%, OVERLOAD 0.0%

SECTION 5: CIRCUIT REPORTING
(CIRCUITS WITH SAIDI AND/OR SAIFI EXCEEDING 5 YEAR AVERAGE)
(CIRCUIT NUMBERS SHOULD BE REPORTED EXCLUDING MED)

CIRCUIT # 9	STEPHENSBURG - 3
1. SUBSTATION NAME AND NUMBER:	STEPHENSBURG (6)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN):	HARDIN-LEITCHFIELD RD-STEPHENSBURG
3. CIRCUIT NAME AND NUMBER:	STEPHENSBURG - 3
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA):	STEPHENSBERG, KY - LEITCHFIELD RD, SONORA HARDIN SPRINGS RD, WEBB MILLS RD
5. TOTAL CIRCUIT LENGTH (MILES):	84.43
6. CUSTOMER COUNT FOR THIS CIRCUIT:	565
7. DATE OF LAST CIRCUIT TRIM (MM/YY):	03/19

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):	
	CONTRACTOR <u>0.00%</u>	PUBLIC ACCIDENTS, OTHER <u>9.80%</u>
	EQUIPMENT / MATERIAL FAILURE <u>52.80%</u>	SMALL ANIMALS OR BIRDS <u>0.00%</u>
	LIGHTNING <u>0.29%</u>	TREES <u>0.44%</u>
	NO CAUSE CODE <u>5.57%</u>	WIND, HIGH WIND <u>0.00%</u>
	PLANNED OUTAGE <u>30.09%</u>	WEATHER <u>1.01%</u>
	POWER SUPPLIER <u>0.00%</u>	

9. CIRCUIT 5 YEAR AVERAGE (SAIDI):	113.38
10. REPORTING YEAR (SAIDI):	128.77
11. CIRCUIT 5 YEAR AVERAGE (SAIFI):	1.34
12. REPORTING YEAR (SAIFI):	1.98

13. LIST OF CORRECTIVE ACTION, IF ANY, TAKEN OR TO BE TAKEN	None needed. Had two unrelated equipment failure outages that affected more than 100 members during the year. Planned outages due to work plan system improvement projects on this circuit.
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TREE CAUSE CODE BREAKDOWN DEAD TREE (IN-ROW) 0.0%, VEGETATION (I.E. VINES) 77.1%, GROW IN 0.0%, OVERHANG 0.0%, GREEN TREE FAILURE (OUT-OF-ROW) 0.0%, DEAD TREE (OUT-OF-ROW) 0.0%, NO EQUIP CODE 0.0%

EQUIPMENT CAUSE CODE BREAKDOWN NO EQUIP CODE 0.0%, ARRESTER 0.0%, POLE/CROSSARM 0.0%, ANCHOR/GUY 0.0%, CONDUCTOR 41.2%, CONNECTOR/CLAMP/SPLICE/DEADEND 4.6%, INSULATOR 50.7%,PORCELAIN CUTOUT 0.2%, TRANSFORMER 3.3%, PROTECTIVE DEVICE 0.0%,OVERLOAD 0.0%

SECTION 5: CIRCUIT REPORTING
(CIRCUITS WITH SAIDI AND/OR SAIFI EXCEEDING 5 YEAR AVERAGE)
(CIRCUIT NUMBERS SHOULD BE REPORTED EXCLUDING MED)

CIRCUIT # 10	UPTON - 1
1. SUBSTATION NAME AND NUMBER:	UPTON (7)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN):	HARDIN - MILERSTOWN RD. - UPTON
3. CIRCUIT NAME AND NUMBER:	UPTON - 1
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA):	UPTON, KY - MILLERSTOWN RD, PLEASANT HILL RD, GEORGE TABB RD, UPTON RD, FLINT HILL RD, HORSESHOE BEND RD
5. TOTAL CIRCUIT LENGTH (MILES):	75.92
6. CUSTOMER COUNT FOR THIS CIRCUIT:	470
7. DATE OF LAST CIRCUIT TRIM (MM/YY):	08/15

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):	
	CONTRACTOR <u>0.07%</u>	PUBLIC ACCIDENTS, OTHER <u>0.00%</u>
	EQUIPMENT / MATERIAL FAILURE <u>30.81%</u>	SMALL ANIMALS OR BIRDS <u>0.00%</u>
	LIGHTNING <u>1.03%</u>	TREES <u>1.11%</u>
	NO CAUSE CODE <u>8.10%</u>	WIND, HIGH WIND <u>0.11%</u>
	PLANNED OUTAGE <u>0.87%</u>	WEATHER <u>0.00%</u>
	POWER SUPPLIER <u>57.91%</u>	

9. CIRCUIT 5 YEAR AVERAGE (SAIDI):	106.84
10. REPORTING YEAR (SAIDI):	194.09
11. CIRCUIT 5 YEAR AVERAGE (SAIFI):	2.09
12. REPORTING YEAR (SAIFI):	4.26

13. LIST OF CORRECTIVE ACTION, IF ANY, TAKEN OR TO BE TAKEN	None needed. Had one circuit level in the year involving a crossarm. EKPC had one equipment failure that caused a substation level outage.
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TREE CAUSE CODE BREAKDOWN	DEAD TREE (IN-ROW) 0.0%, VEGETATION (I.E. VINES) 0.0%, GROW IN 0.0%, OVERHANG 0.0%, GREEN TREE FAILURE (OUT-OF-ROW) 0.0%, DEAD TREE (OUT-OF-ROW) 0.0%, NO EQUIP CODE 0.0%
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EQUIPMENT CAUSE CODE BREAKDOWN	NO EQUIP CODE 0.0%, ARRESTER 0.0%, POLE/CROSSARM 99.2%, ANCHOR/GUY 0.8%, CONDUCTOR 0.0%, CONNECTOR/CLAMP/SPLICE/DEADEND 0.0%, INSULATOR 0.0%, PORCELAIN CUTOUT 0.0%, TRANSFORMER 0.0%, PROTECTIVE DEVICE 0.0%, OVERLOAD 0.0%
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SECTION 5: CIRCUIT REPORTING
(CIRCUITS WITH SAIDI AND/OR SAIFI EXCEEDING 5 YEAR AVERAGE)
(CIRCUIT NUMBERS SHOULD BE REPORTED EXCLUDING MED)

CIRCUIT # 11	UPTON - 2
1. SUBSTATION NAME AND NUMBER:	UPTON (7)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN):	HARDIN - MILERSTOWN RD. - UPTON
3. CIRCUIT NAME AND NUMBER:	UPTON - 2
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA):	UPTON, KY - MILLERSTOWN RD, AKERS SCHOOL RD, CASH RD, FLINT HILL RD, RAIDER HOLLOW RD, WAX RD
5. TOTAL CIRCUIT LENGTH (MILES):	57.25
6. CUSTOMER COUNT FOR THIS CIRCUIT:	366
7. DATE OF LAST CIRCUIT TRIM (MM/YY):	08/15

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):	
	CONTRACTOR <u>0.00%</u>	PUBLIC ACCIDENTS, OTHER <u>0.00%</u>
	EQUIPMENT / MATERIAL FAILURE <u>5.38%</u>	SMALL ANIMALS OR BIRDS <u>0.00%</u>
	LIGHTNING <u>20.85%</u>	TREES <u>4.73%</u>
	NO CAUSE CODE <u>0.00%</u>	WIND, HIGH WIND <u>0.00%</u>
	PLANNED OUTAGE <u>3.89%</u>	WEATHER <u>9.66%</u>
	POWER SUPPLIER <u>55.49%</u>	

9. CIRCUIT 5 YEAR AVERAGE (SAIDI):	80.95
10. REPORTING YEAR (SAIDI):	148.77
11. CIRCUIT 5 YEAR AVERAGE (SAIFI):	1.24
12. REPORTING YEAR (SAIFI):	2.67

13. LIST OF CORRECTIVE ACTION, IF ANY, TAKEN OR TO BE TAKEN

None needed. EKPC had one equipment failure that caused a substation level outage.

TREE CAUSE CODE BREAKDOWN

DEAD TREE (IN-ROW) 7.2%, VEGETATION (I.E. VINES) 2.3%, GROW IN 0.0%, OVERHANG 0.0%, GREEN TREE FAILURE (OUT-OF-ROW) 90.5%, DEAD TREE (OUT-OF-ROW) 0.0%, NO EQUIP CODE 0.0%

EQUIPMENT CAUSE CODE BREAKDOWN

NO EQUIP CODE 0.0%, ARRESTER 0.0%, POLE/CROSSARM 0.0%, ANCHOR/GUY 0.0%, CONDUCTOR 0.0%, CONNECTOR/CLAMP/SPLICE/DEADEND 6.6%, INSULATOR 0.0%, PORCELAIN CUTOFF 0.3%, TRANSFORMER 93.1%, PROTECTIVE DEVICE 0.0%, OVERLOAD 0.0%

SECTION 5: CIRCUIT REPORTING
(CIRCUITS WITH SAIDI AND/OR SAIFI EXCEEDING 5 YEAR AVERAGE)
(CIRCUIT NUMBERS SHOULD BE REPORTED EXCLUDING MED)

CIRCUIT # 12	UPTON - 5
1. SUBSTATION NAME AND NUMBER:	UPTON (7)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN):	HARDIN - MILERSTOWN RD. - UPTON
3. CIRCUIT NAME AND NUMBER:	UPTON - 5
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA):	UPTON, KY - LUCAS GROVE RD, FLINT HILL RD, HOGAN RD, LEE SCHOOL RD
5. TOTAL CIRCUIT LENGTH (MILES):	51.15
6. CUSTOMER COUNT FOR THIS CIRCUIT:	284
7. DATE OF LAST CIRCUIT TRIM (MM/YY):	09/15

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):	
	CONTRACTOR <u>0.00%</u>	PUBLIC ACCIDENTS, OTHER <u>0.00%</u>
	EQUIPMENT / MATERIAL FAILURE <u>7.90%</u>	SMALL ANIMALS OR BIRDS <u>0.37%</u>
	LIGHTNING <u>0.00%</u>	TREES <u>0.00%</u>
	NO CAUSE CODE <u>2.42%</u>	WIND, HIGH WIND <u>0.00%</u>
	PLANNED OUTAGE <u>4.68%</u>	WEATHER <u>10.32%</u>
	POWER SUPPLIER <u>74.30%</u>	

9. CIRCUIT 5 YEAR AVERAGE (SAIDI):	83.08
10. REPORTING YEAR (SAIDI):	110.95
11. CIRCUIT 5 YEAR AVERAGE (SAIFI):	1.37
12. REPORTING YEAR (SAIFI):	2.22

13. LIST OF CORRECTIVE ACTION, IF ANY, TAKEN OR TO BE TAKEN

None needed. EKPC had one equipment failure that caused a substation level outage.

TREE CAUSE CODE BREAKDOWN

EQUIPMENT CAUSE CODE BREAKDOWN

NO EQUIP CODE 0.0%, ARRESTER 0.0%, POLE/CROSSARM 0.0%,
ANCHOR/GUY 0.0%, CONDUCTOR 0.0%,
CONNECTOR/CLAMP/SPLICE/DEADEND 0.0%,
INSULATOR 0.0%,PORCELAIN CUTOUT 6.8%, TRANSFORMER 37.6%,
PROTECTIVE DEVICE 55.6%,OVERLOAD 0.0%

SECTION 5: CIRCUIT REPORTING
(CIRCUITS WITH SAIDI AND/OR SAIFI EXCEEDING 5 YEAR AVERAGE)
(CIRCUIT NUMBERS SHOULD BE REPORTED EXCLUDING MED)

CIRCUIT # 13	VERTREES - 1
1. SUBSTATION NAME AND NUMBER:	VERTREES (8)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN):	HARDIN - SALT RIVER RD. - VERTREES
3. CIRCUIT NAME AND NUMBER:	VERTREES - 1
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA):	VERTREES, KY - HARDINBURG RD, CONSTANTINE RD
5. TOTAL CIRCUIT LENGTH (MILES):	50.04
6. CUSTOMER COUNT FOR THIS CIRCUIT:	310
7. DATE OF LAST CIRCUIT TRIM (MM/YY):	06/23

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):	
	CONTRACTOR <u>0.00%</u>	PUBLIC ACCIDENTS, OTHER <u>89.93%</u>
	EQUIPMENT / MATERIAL FAILURE <u>0.73%</u>	SMALL ANIMALS OR BIRDS <u>0.00%</u>
	LIGHTNING <u>0.00%</u>	TREES <u>2.24%</u>
	NO CAUSE CODE <u>0.55%</u>	WIND, HIGH WIND <u>0.00%</u>
	PLANNED OUTAGE <u>6.56%</u>	WEATHER <u>0.00%</u>
	POWER SUPPLIER <u>0.00%</u>	

9. CIRCUIT 5 YEAR AVERAGE (SAIDI):	30.55
10. REPORTING YEAR (SAIDI):	37.64
11. CIRCUIT 5 YEAR AVERAGE (SAIFI):	0.35
12. REPORTING YEAR (SAIFI):	0.46

13. LIST OF CORRECTIVE ACTION, IF ANY, TAKEN OR TO BE TAKEN

None needed. One public accident in the year caused majority of the outage time.

TREE CAUSE CODE BREAKDOWN

DEAD TREE (IN-ROW) 0.0%, VEGETATION (I.E. VINES) 0.0%, GROW IN 0.0%, OVERHANG 0.0%, GREEN TREE FAILURE (OUT-OF-ROW) 0.0%, DEAD TREE (OUT-OF-ROW) 0.0%, NO EQUIP CODE 100.0%

EQUIPMENT CAUSE CODE BREAKDOWN

NO EQUIP CODE 0.0%, ARRESTER 0.0%, POLE/CROSSARM 0.0%, ANCHOR/GUY 0.0%, CONDUCTOR 0.0%, CONNECTOR/CLAMP/SPLICE/DEADEND 0.0%, INSULATOR 0.0%, PORCELAIN CUTOUT 10.6%, TRANSFORMER 0.0%, PROTECTIVE DEVICE 89.4%, OVERLOAD 0.0%

SECTION 5: CIRCUIT REPORTING
(CIRCUITS WITH SAIDI AND/OR SAIFI EXCEEDING 5 YEAR AVERAGE)
(CIRCUIT NUMBERS SHOULD BE REPORTED EXCLUDING MED)

CIRCUIT # 14	VERTREES - 2
1. SUBSTATION NAME AND NUMBER:	VERTREES (8)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN):	HARDIN - SALT RIVER RD. - VERTREES
3. CIRCUIT NAME AND NUMBER:	VERTREES - 2
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA):	VERTREES, KY - SALT RIVER RD, SAINT JOHN RD
5. TOTAL CIRCUIT LENGTH (MILES):	82.09
6. CUSTOMER COUNT FOR THIS CIRCUIT:	538
7. DATE OF LAST CIRCUIT TRIM (MM/YY):	05/16

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):	
	CONTRACTOR <u>0.00%</u>	PUBLIC ACCIDENTS, OTHER <u>0.08%</u>
	EQUIPMENT / MATERIAL FAILURE <u>6.76%</u>	SMALL ANIMALS OR BIRDS <u>81.84%</u>
	LIGHTNING <u>0.23%</u>	TREES <u>10.09%</u>
	NO CAUSE CODE <u>0.00%</u>	WIND, HIGH WIND <u>0.00%</u>
	PLANNED OUTAGE <u>1.00%</u>	WEATHER <u>0.00%</u>
	POWER SUPPLIER <u>0.00%</u>	

9. CIRCUIT 5 YEAR AVERAGE (SAIDI):	88.56
10. REPORTING YEAR (SAIDI):	129.15
11. CIRCUIT 5 YEAR AVERAGE (SAIFI):	0.77
12. REPORTING YEAR (SAIFI):	1.35

13. LIST OF CORRECTIVE ACTION, IF ANY, TAKEN OR TO BE TAKEN

None needed. One circuit level outage due to small animals or birds.

TREE CAUSE CODE BREAKDOWN

DEAD TREE (IN-ROW) 0.0%, VEGETATION (I.E. VINES) 0.0%, GROW IN 98.3%, OVERHANG 0.0%, GREEN TREE FAILURE (OUT-OF-ROW) 0.0%, DEAD TREE (OUT-OF-ROW) 0.0%, NO EQUIP CODE 0.0%

EQUIPMENT CAUSE CODE BREAKDOWN

NO EQUIP CODE 2.1%, ARRESTER 0.0%, POLE/CROSSARM 0.0%, ANCHOR/GUY 0.0%, CONDUCTOR 3.6%, CONNECTOR/CLAMP/SPLICE/DEADEND 0.0%, INSULATOR 0.0%, PORCELAIN CUTOUT 91.4%, TRANSFORMER 2.9%, PROTECTIVE DEVICE 0.0%, OVERLOAD 0.0%

SECTION 5: CIRCUIT REPORTING
(CIRCUITS WITH SAIDI AND/OR SAIFI EXCEEDING 5 YEAR AVERAGE)
(CIRCUIT NUMBERS SHOULD BE REPORTED EXCLUDING MED)

CIRCUIT # 15	VERTREES - 4
1. SUBSTATION NAME AND NUMBER:	VERTREES (8)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN):	HARDIN - SALT RIVER RD. - VERTREES
3. CIRCUIT NAME AND NUMBER:	VERTREES - 4
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA):	VERTREES, KY - HARDINBURG RD, LONG GROVE RD
5. TOTAL CIRCUIT LENGTH (MILES):	56.36
6. CUSTOMER COUNT FOR THIS CIRCUIT:	509
7. DATE OF LAST CIRCUIT TRIM (MM/YY):	04/16

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):	
	CONTRACTOR <u>0.00%</u>	PUBLIC ACCIDENTS, OTHER <u>1.82%</u>
	EQUIPMENT / MATERIAL FAILURE <u>37.10%</u>	SMALL ANIMALS OR BIRDS <u>1.15%</u>
	LIGHTNING <u>0.00%</u>	TREES <u>57.26%</u>
	NO CAUSE CODE <u>1.04%</u>	WIND, HIGH WIND <u>0.03%</u>
	PLANNED OUTAGE <u>1.25%</u>	WEATHER <u>0.34%</u>
	POWER SUPPLIER <u>0.00%</u>	

9. CIRCUIT 5 YEAR AVERAGE (SAIDI):	86.79
10. REPORTING YEAR (SAIDI):	332.74
11. CIRCUIT 5 YEAR AVERAGE (SAIFI):	0.65
12. REPORTING YEAR (SAIFI):	2.32

13. LIST OF CORRECTIVE ACTION, IF ANY, TAKEN OR TO BE TAKEN

None needed. One circuit outage due to tree and one due to equipment failure.

TREE CAUSE CODE BREAKDOWN

DEAD TREE (IN-ROW) 0.0%, VEGETATION (I.E. VINES) 0.0%, GROW IN 100.0%, OVERHANG 0.0%, GREEN TREE FAILURE (OUT-OF-ROW) 0.0%, DEAD TREE (OUT-OF-ROW) 0.0%, NO EQUIP CODE 0.0%

EQUIPMENT CAUSE CODE BREAKDOWN

NO EQUIP CODE 0.0%, ARRESTER 0.0%, POLE/CROSSARM 0.0%, ANCHOR/GUY 0.0%, CONDUCTOR 100.0%, CONNECTOR/CLAMP/SPLICE/DEADEND 0.0%, INSULATOR 0.0%, PORCELAIN CUTOUT 0.0%, TRANSFORMER 0.0%, PROTECTIVE DEVICE 0.0%, OVERLOAD 0.0%

SECTION 5: CIRCUIT REPORTING
(CIRCUITS WITH SAIDI AND/OR SAIFI EXCEEDING 5 YEAR AVERAGE)
(CIRCUIT NUMBERS SHOULD BE REPORTED EXCLUDING MED)

CIRCUIT # 16	VINE GROVE - 1
1. SUBSTATION NAME AND NUMBER:	VINE GROVE (9)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN):	HARDIN - ROGERSVILLE RD. - VINE GROVE
3. CIRCUIT NAME AND NUMBER:	VINE GROVE - 1
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA):	VINE GROVE, KY - ROGERSVILLE RD, CRUME RD, DUGGINS SWITCH RD, SAINT ANDREWS DR, FORT AVE
5. TOTAL CIRCUIT LENGTH (MILES):	38.43
6. CUSTOMER COUNT FOR THIS CIRCUIT:	679
7. DATE OF LAST CIRCUIT TRIM (MM/YY):	07/17

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):	
	CONTRACTOR <u>0.00%</u>	PUBLIC ACCIDENTS, OTHER <u>87.71%</u>
	EQUIPMENT / MATERIAL FAILURE <u>1.60%</u>	SMALL ANIMALS OR BIRDS <u>0.00%</u>
	LIGHTNING <u>0.00%</u>	TREES <u>3.55%</u>
	NO CAUSE CODE <u>0.00%</u>	WIND, HIGH WIND <u>1.04%</u>
	PLANNED OUTAGE <u>6.10%</u>	WEATHER <u>0.00%</u>
	POWER SUPPLIER <u>0.00%</u>	

9. CIRCUIT 5 YEAR AVERAGE (SAIDI):	29.39
10. REPORTING YEAR (SAIDI):	67.58
11. CIRCUIT 5 YEAR AVERAGE (SAIFI):	0.38
12. REPORTING YEAR (SAIFI):	1.09

13. LIST OF CORRECTIVE ACTION, IF ANY, TAKEN OR TO BE TAKEN

None needed. One circuit level outage due to public accident.

TREE CAUSE CODE BREAKDOWN

DEAD TREE (IN-ROW) 3.6%, VEGETATION (I.E. VINES) 0.0%, GROW IN 87.8%, OVERHANG 0.0%, GREEN TREE FAILURE (OUT-OF-ROW) 0.0%, DEAD TREE (OUT-OF-ROW) 0.0%, NO EQUIP CODE 0.0%

EQUIPMENT CAUSE CODE BREAKDOWN

NO EQUIP CODE 0.0%, ARRESTER 0.0%, POLE/CROSSARM 0.0%, ANCHOR/GUY 0.0%, CONDUCTOR 0.0%, CONNECTOR/CLAMP/SPLICE/DEADEND 23.9%, INSULATOR 0.0%, PORCELAIN CUTOUT 0.0%, TRANSFORMER 69.7%, PROTECTIVE DEVICE 6.4%, OVERLOAD 0.0%

SECTION 5: CIRCUIT REPORTING
(CIRCUITS WITH SAIDI AND/OR SAIFI EXCEEDING 5 YEAR AVERAGE)
(CIRCUIT NUMBERS SHOULD BE REPORTED EXCLUDING MED)

CIRCUIT # 17	VINE GROVE - 3
1. SUBSTATION NAME AND NUMBER:	VINE GROVE (9)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN):	HARDIN - ROGERSVILLE RD. - RADCLIFF
3. CIRCUIT NAME AND NUMBER:	VINE GROVE - 3
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA):	VINE GROVE, KY - ROGERSVILLE RD,S LOGSDON PKWY, PEARMAN AVE, S & N WOODLAND DR
5. TOTAL CIRCUIT LENGTH (MILES):	23.67
6. CUSTOMER COUNT FOR THIS CIRCUIT:	737
7. DATE OF LAST CIRCUIT TRIM (MM/YY):	08/17

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):	
	CONTRACTOR <u>0.00%</u>	PUBLIC ACCIDENTS, OTHER <u>5.22%</u>
	EQUIPMENT / MATERIAL FAILURE <u>0.11%</u>	SMALL ANIMALS OR BIRDS <u>0.41%</u>
	LIGHTNING <u>0.00%</u>	TREES <u>83.52%</u>
	NO CAUSE CODE <u>0.00%</u>	WIND, HIGH WIND <u>0.00%</u>
	PLANNED OUTAGE <u>10.74%</u>	WEATHER <u>0.00%</u>
	POWER SUPPLIER <u>0.00%</u>	

9. CIRCUIT 5 YEAR AVERAGE (SAIDI):	22.95
10. REPORTING YEAR (SAIDI):	75.70
11. CIRCUIT 5 YEAR AVERAGE (SAIFI):	0.24
12. REPORTING YEAR (SAIFI):	0.58

13. LIST OF CORRECTIVE ACTION, IF ANY, TAKEN OR TO BE TAKEN

None needed. Two tree related outages on this circuit for the year, both of which affected only parts of the circuit.

TREE CAUSE CODE BREAKDOWN

DEAD TREE (IN-ROW) 0.0%, VEGETATION (I.E. VINES) 0.0%, GROW IN 0.0%, OVERHANG 0.0%, GREEN TREE FAILURE (OUT-OF-ROW) 99.1%, DEAD TREE (OUT-OF-ROW) 0.9%, NO EQUIP CODE 0.0%

EQUIPMENT CAUSE CODE BREAKDOWN

NO EQUIP CODE 0.0%, ARRESTER 0.0%, POLE/CROSSARM 0.0%, ANCHOR/GUY 0.0%, CONDUCTOR 0.0%, CONNECTOR/CLAMP/SPLICE/DEADEND 0.0%, INSULATOR 0.0%,PORCELAIN CUTOUT 76.0%, TRANSFORMER 24.0%, PROTECTIVE DEVICE 0.0%,OVERLOAD 0.0%

SECTION 5: CIRCUIT REPORTING
(CIRCUITS WITH SAIDI AND/OR SAIFI EXCEEDING 5 YEAR AVERAGE)
(CIRCUIT NUMBERS SHOULD BE REPORTED EXCLUDING MED)

CIRCUIT # 18	VINE GROVE - 7
1. SUBSTATION NAME AND NUMBER:	VINE GROVE (9)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN):	HARDIN - ROGERSVILLE RD. - VINE GROVE
3. CIRCUIT NAME AND NUMBER:	VINE GROVE - 7
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA):	VINE GROVE, KY - DECKARD SCHOOL RD TO COUNTRY LN, BURNS RD, DUGGIN SWITCH RD, VILLA RAY DR
5. TOTAL CIRCUIT LENGTH (MILES):	24.95
6. CUSTOMER COUNT FOR THIS CIRCUIT:	311
7. DATE OF LAST CIRCUIT TRIM (MM/YY):	07/17

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):	
	CONTRACTOR <u>0.00%</u>	PUBLIC ACCIDENTS, OTHER <u>13.86%</u>
	EQUIPMENT / MATERIAL FAILURE <u>13.50%</u>	SMALL ANIMALS OR BIRDS <u>0.00%</u>
	LIGHTNING <u>0.00%</u>	TREES <u>21.63%</u>
	NO CAUSE CODE <u>49.91%</u>	WIND, HIGH WIND <u>0.00%</u>
	PLANNED OUTAGE <u>1.10%</u>	WEATHER <u>0.00%</u>
	POWER SUPPLIER <u>0.00%</u>	

9. CIRCUIT 5 YEAR AVERAGE (SAIDI):	15.70
10. REPORTING YEAR (SAIDI):	56.67
11. CIRCUIT 5 YEAR AVERAGE (SAIFI):	0.20
12. REPORTING YEAR (SAIFI):	0.64

13. LIST OF CORRECTIVE ACTION, IF ANY, TAKEN OR TO BE TAKEN

None needed. Three unrelated line section outages with different cause codes contributed majority of outage time.

TREE CAUSE CODE BREAKDOWN

DEAD TREE (IN-ROW) 87.0%, VEGETATION (I.E. VINES) 11.8%, GROW IN 1.2%, OVERHANG 0.0%, GREEN TREE FAILURE (OUT-OF-ROW) 0.0%, DEAD TREE (OUT-OF-ROW) 0.0%, NO EQUIP CODE 0.0%

EQUIPMENT CAUSE CODE BREAKDOWN

NO EQUIP CODE 0.0%, ARRESTER 0.0%, POLE/CROSSARM 0.0%, ANCHOR/GUY 0.0%, CONDUCTOR 0.0%, CONNECTOR/CLAMP/SPLICE/DEADEND 96.6%, INSULATOR 0.0%, PORCELAIN CUTOUT 0.0%, TRANSFORMER 0.0%, PROTECTIVE DEVICE 3.4%, OVERLOAD 0.0%

SECTION 5: CIRCUIT REPORTING
(CIRCUITS WITH SAIDI AND/OR SAIFI EXCEEDING 5 YEAR AVERAGE)
(CIRCUIT NUMBERS SHOULD BE REPORTED EXCLUDING MED)

CIRCUIT # 19	RADCLIFF - 3
1. SUBSTATION NAME AND NUMBER:	RADCLIFF (10)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN):	HARDIN - HILL ST (NEAR W. LINCOLN TRAIL BLVD) - RADCLIFF
3. CIRCUIT NAME AND NUMBER:	RADCLIFF - 3
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA):	RADCLIFF, KY - RED HILL RD NORTH OF GERONIMO CIR, HILL ST NORTH OF SUBSTATION, EAST SIDE OF SAFARI TRL
5. TOTAL CIRCUIT LENGTH (MILES):	36.43
6. CUSTOMER COUNT FOR THIS CIRCUIT:	1185
7. DATE OF LAST CIRCUIT TRIM (MM/YY):	01/18

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):	
	CONTRACTOR <u>0.00%</u>	PUBLIC ACCIDENTS, OTHER <u>1.85%</u>
	EQUIPMENT / MATERIAL FAILURE <u>0.16%</u>	SMALL ANIMALS OR BIRDS <u>0.25%</u>
	LIGHTNING <u>0.00%</u>	TREES <u>23.19%</u>
	NO CAUSE CODE <u>56.48%</u>	WIND, HIGH WIND <u>0.03%</u>
	PLANNED OUTAGE <u>18.04%</u>	WEATHER <u>0.00%</u>
	POWER SUPPLIER <u>0.00%</u>	

9. CIRCUIT 5 YEAR AVERAGE (SAIDI):	79.89
10. REPORTING YEAR (SAIDI):	171.79
11. CIRCUIT 5 YEAR AVERAGE (SAIFI):	1.47
12. REPORTING YEAR (SAIFI):	3.09

13. LIST OF CORRECTIVE ACTION, IF ANY, TAKEN OR TO BE TAKEN

One circuit level outage with no known cause, one due to a tree, and one planned. This circuit serves a high number of members, and upcoming work plan improvement project will provide additional reliability.

TREE CAUSE CODE BREAKDOWN

DEAD TREE (IN-ROW) 0.0%, VEGETATION (I.E. VINES) 1.1%, GROW IN 0.2%, OVERHANG 98.5%, GREEN TREE FAILURE (OUT-OF-ROW) 0.0%, DEAD TREE (OUT-OF-ROW) 0.3%, NO EQUIP CODE 0.0%

EQUIPMENT CAUSE CODE BREAKDOWN

NO EQUIP CODE 0.0%, ARRESTER 0.0%, POLE/CROSSARM 0.0%, ANCHOR/GUY 0.0%, CONDUCTOR 0.0%, CONNECTOR/CLAMP/SPLICE/DEADEND 9.2%, INSULATOR 0.0%, PORCELAIN CUTOUT 0.0%, TRANSFORMER 0.0%, PROTECTIVE DEVICE 90.8%, OVERLOAD 0.0%

SECTION 5: CIRCUIT REPORTING
(CIRCUITS WITH SAIDI AND/OR SAIFI EXCEEDING 5 YEAR AVERAGE)
(CIRCUIT NUMBERS SHOULD BE REPORTED EXCLUDING MED)

CIRCUIT # 20	TUNNEL HILL 1 - 2
1. SUBSTATION NAME AND NUMBER:	TUNNEL HILL 1 (11)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN):	HARDIN - TUNNEL HILL RD. - E-TOWN
3. CIRCUIT NAME AND NUMBER:	TUNNEL HILL 1 - 2
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA):	ELIZABETHTOWN, KY - TUNNEL HILL RD, RING RD, BON AIRE DR
5. TOTAL CIRCUIT LENGTH (MILES):	7.20
6. CUSTOMER COUNT FOR THIS CIRCUIT:	215
7. DATE OF LAST CIRCUIT TRIM (MM/YY):	12/18

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):	
	CONTRACTOR <u>0.00%</u>	PUBLIC ACCIDENTS, OTHER <u>0.00%</u>
	EQUIPMENT / MATERIAL FAILURE <u>9.53%</u>	SMALL ANIMALS OR BIRDS <u>0.00%</u>
	LIGHTNING <u>18.75%</u>	TREES <u>0.00%</u>
	NO CAUSE CODE <u>0.00%</u>	WIND, HIGH WIND <u>0.00%</u>
	PLANNED OUTAGE <u>71.72%</u>	WEATHER <u>0.00%</u>
	POWER SUPPLIER <u>0.00%</u>	

9. CIRCUIT 5 YEAR AVERAGE (SAIDI):	47.44
10. REPORTING YEAR (SAIDI):	53.57
11. CIRCUIT 5 YEAR AVERAGE (SAIFI):	0.57
12. REPORTING YEAR (SAIFI):	0.60

13. LIST OF CORRECTIVE ACTION, IF ANY, TAKEN OR TO BE TAKEN

None needed.

TREE CAUSE CODE BREAKDOWN

EQUIPMENT CAUSE CODE BREAKDOWN

NO EQUIP CODE 0.0%, ARRESTER 0.0%, POLE/CROSSARM 0.0%,
ANCHOR/GUY 0.0%, CONDUCTOR 0.0%,
CONNECTOR/CLAMP/SPLICE/DEADEND 0.0%,
INSULATOR 0.0%,PORCELAIN CUTOUT 100.0%, TRANSFORMER 0.0%,
PROTECTIVE DEVICE 0.0%,OVERLOAD 0.0%

SECTION 5: CIRCUIT REPORTING
(CIRCUITS WITH SAIDI AND/OR SAIFI EXCEEDING 5 YEAR AVERAGE)
(CIRCUIT NUMBERS SHOULD BE REPORTED EXCLUDING MED)

CIRCUIT # 21	THARP 1 - 4
1. SUBSTATION NAME AND NUMBER:	THARP 1 (12)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN):	HARDIN - ST. JOHN RD. - ETOWN
3. CIRCUIT NAME AND NUMBER:	THARP 1 - 4
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA):	ELIZABETHTOWN, KY - SAINT JOHN RD, THOMAS RD
5. TOTAL CIRCUIT LENGTH (MILES):	85.57
6. CUSTOMER COUNT FOR THIS CIRCUIT:	965
7. DATE OF LAST CIRCUIT TRIM (MM/YY):	12/15

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):	
	CONTRACTOR <u>0.00%</u>	PUBLIC ACCIDENTS, OTHER <u>50.86%</u>
	EQUIPMENT / MATERIAL FAILURE <u>0.82%</u>	SMALL ANIMALS OR BIRDS <u>5.95%</u>
	LIGHTNING <u>0.15%</u>	TREES <u>39.04%</u>
	NO CAUSE CODE <u>0.57%</u>	WIND, HIGH WIND <u>0.00%</u>
	PLANNED OUTAGE <u>2.61%</u>	WEATHER <u>0.00%</u>
	POWER SUPPLIER <u>0.00%</u>	

9. CIRCUIT 5 YEAR AVERAGE (SAIDI):	64.59
10. REPORTING YEAR (SAIDI):	92.35
11. CIRCUIT 5 YEAR AVERAGE (SAIFI):	1.27
12. REPORTING YEAR (SAIFI):	2.30

13. LIST OF CORRECTIVE ACTION, IF ANY, TAKEN OR TO BE TAKEN

We have moved some of this circuit to adjacent circuits due to load, but it will improve reliability on this circuit by reducing exposure and number of members affected when outages occur.

TREE CAUSE CODE BREAKDOWN

DEAD TREE (IN-ROW) 0.4%, VEGETATION (I.E. VINES) 0.0%, GROW IN 97.5%, OVERHANG 0.0%, GREEN TREE FAILURE (OUT-OF-ROW) 2.1%, DEAD TREE (OUT-OF-ROW) 0.0%, NO EQUIP CODE 0.0%

EQUIPMENT CAUSE CODE BREAKDOWN

NO EQUIP CODE 0.0%, ARRESTER 0.0%, POLE/CROSSARM 0.0%, ANCHOR/GUY 0.0%, CONDUCTOR 43.9%, CONNECTOR/CLAMP/SPLICE/DEADEND 0.0%, INSULATOR 0.0%, PORCELAIN CUTOUT 5.5%, TRANSFORMER 3.1%, PROTECTIVE DEVICE 47.5%, OVERLOAD 0.0%

SECTION 5: CIRCUIT REPORTING
(CIRCUITS WITH SAIDI AND/OR SAIFI EXCEEDING 5 YEAR AVERAGE)
(CIRCUIT NUMBERS SHOULD BE REPORTED EXCLUDING MED)

CIRCUIT # 22	SMITHERSVILLE 1 - 2
1. SUBSTATION NAME AND NUMBER:	SMITHERSVILLE 1 (13)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN):	HARDIN -S. WILSON & W.A. JENKINS RD. - E-TOWN
3. CIRCUIT NAME AND NUMBER:	SMITHERSVILLE 1 - 2
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA):	RINEYVILLE, KY - PEAR ORCHARD RD NW, REDBUD DR
5. TOTAL CIRCUIT LENGTH (MILES):	32.49
6. CUSTOMER COUNT FOR THIS CIRCUIT:	744
7. DATE OF LAST CIRCUIT TRIM (MM/YY):	05/20

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):	
	CONTRACTOR	0.00%
	PUBLIC ACCIDENTS, OTHER	49.46%
	EQUIPMENT / MATERIAL FAILURE	15.95%
	SMALL ANIMALS OR BIRDS	0.00%
	LIGHTNING	0.00%
	TREES	0.00%
	NO CAUSE CODE	0.00%
	WIND, HIGH WIND	24.69%
	PLANNED OUTAGE	9.52%
	WEATHER	0.39%
	POWER SUPPLIER	0.00%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI):	8.43
10. REPORTING YEAR (SAIDI):	11.86
11. CIRCUIT 5 YEAR AVERAGE (SAIFI):	0.16
12. REPORTING YEAR (SAIFI):	0.10

13. LIST OF CORRECTIVE ACTION, IF ANY, TAKEN OR TO BE TAKEN

None needed. One line section outage due to public accident and one long duration outage due to storm.

TREE CAUSE CODE BREAKDOWN

EQUIPMENT CAUSE CODE BREAKDOWN

NO EQUIP CODE 0.0%, ARRESTER 0.0%, POLE/CROSSARM 0.0%,
ANCHOR/GUY 0.0%, CONDUCTOR 69.7%,
CONNECTOR/CLAMP/SPLICE/DEADEND 0.0%,
INSULATOR 0.0%,PORCELAIN CUTOUT 30.3%, TRANSFORMER 0.0%,
PROTECTIVE DEVICE 0.0%,OVERLOAD 0.0%

SECTION 5: CIRCUIT REPORTING
(CIRCUITS WITH SAIDI AND/OR SAIFI EXCEEDING 5 YEAR AVERAGE)
(CIRCUIT NUMBERS SHOULD BE REPORTED EXCLUDING MED)

CIRCUIT # 23	SMITHERSVILLE 1 - 4
1. SUBSTATION NAME AND NUMBER:	SMITHERSVILLE 1 (13)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN):	HARDIN -S. WILSON & W.A. JENKINS RD. - E-TOWN
3. CIRCUIT NAME AND NUMBER:	SMITHERSVILLE 1 - 4
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA):	RINEYVILLE, KY - WILSON RD, BOONE RD, HUTCHERSON RD
5. TOTAL CIRCUIT LENGTH (MILES):	25.30
6. CUSTOMER COUNT FOR THIS CIRCUIT:	977
7. DATE OF LAST CIRCUIT TRIM (MM/YY):	05/20

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):	
	CONTRACTOR <u>0.00%</u>	PUBLIC ACCIDENTS, OTHER <u>0.03%</u>
	EQUIPMENT / MATERIAL FAILURE <u>0.50%</u>	SMALL ANIMALS OR BIRDS <u>0.00%</u>
	LIGHTNING <u>0.24%</u>	TREES <u>97.91%</u>
	NO CAUSE CODE <u>0.55%</u>	WIND, HIGH WIND <u>0.00%</u>
	PLANNED OUTAGE <u>0.78%</u>	WEATHER <u>0.00%</u>
	POWER SUPPLIER <u>0.00%</u>	

9. CIRCUIT 5 YEAR AVERAGE (SAIDI):	24.83
10. REPORTING YEAR (SAIDI):	92.87
11. CIRCUIT 5 YEAR AVERAGE (SAIFI):	0.25
12. REPORTING YEAR (SAIFI):	0.95

13. LIST OF CORRECTIVE ACTION, IF ANY, TAKEN OR TO BE TAKEN

None needed. We had one circuit level tree outage that caused the majority of the outage time for the year.

TREE CAUSE CODE BREAKDOWN

DEAD TREE (IN-ROW) 0.0%, VEGETATION (I.E. VINES) 0.0%, GROW IN 99.7%, OVERHANG 0.0%, GREEN TREE FAILURE (OUT-OF-ROW) 0.1%, DEAD TREE (OUT-OF-ROW) 0.0%, NO EQUIP CODE 0.0%

EQUIPMENT CAUSE CODE BREAKDOWN

NO EQUIP CODE 0.0%, ARRESTER 0.0%, POLE/CROSSARM 0.0%, ANCHOR/GUY 0.0%, CONDUCTOR 0.0%, CONNECTOR/CLAMP/SPLICE/DEADEND 0.0%, INSULATOR 0.0%,PORCELAIN CUTOUT 0.0%, TRANSFORMER 0.0%, PROTECTIVE DEVICE 100.0%,OVERLOAD 0.0%

SECTION 5: CIRCUIT REPORTING
(CIRCUITS WITH SAIDI AND/OR SAIFI EXCEEDING 5 YEAR AVERAGE)
(CIRCUIT NUMBERS SHOULD BE REPORTED EXCLUDING MED)

CIRCUIT # 24	SOUTH BOUNDARY - 3
1. SUBSTATION NAME AND NUMBER:	SOUTH BOUNDARY (14)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN):	HARDIN - HWY 313 - RADCLIFF
3. CIRCUIT NAME AND NUMBER:	SOUTH BOUNDARY - 3
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA):	RADCLIFF, KY - SOUTH BOUNDARY RD (N OF SUB) , AUSTIN DR , SHELBY AVE
5. TOTAL CIRCUIT LENGTH (MILES):	29.65
6. CUSTOMER COUNT FOR THIS CIRCUIT:	708
7. DATE OF LAST CIRCUIT TRIM (MM/YY):	03/18

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):	
	CONTRACTOR <u>0.00%</u>	PUBLIC ACCIDENTS, OTHER <u>0.00%</u>
	EQUIPMENT / MATERIAL FAILURE <u>1.57%</u>	SMALL ANIMALS OR BIRDS <u>20.01%</u>
	LIGHTNING <u>32.30%</u>	TREES <u>6.92%</u>
	NO CAUSE CODE <u>29.12%</u>	WIND, HIGH WIND <u>0.00%</u>
	PLANNED OUTAGE <u>10.08%</u>	WEATHER <u>0.00%</u>
	POWER SUPPLIER <u>0.00%</u>	

9. CIRCUIT 5 YEAR AVERAGE (SAIDI):	15.89
10. REPORTING YEAR (SAIDI):	23.10
11. CIRCUIT 5 YEAR AVERAGE (SAIFI):	0.47
12. REPORTING YEAR (SAIFI):	0.34

13. LIST OF CORRECTIVE ACTION, IF ANY, TAKEN OR TO BE TAKEN

None needed. We had three outages in the year that affected between 10-100 members that resulted in majority of the outage time.

TREE CAUSE CODE BREAKDOWN

DEAD TREE (IN-ROW) 0.0%, VEGETATION (I.E. VINES) 0.0%, GROW IN 81.6%, OVERHANG 0.0%, GREEN TREE FAILURE (OUT-OF-ROW) 18.4%, DEAD TREE (OUT-OF-ROW) 0.0%, NO EQUIP CODE 0.0%

EQUIPMENT CAUSE CODE BREAKDOWN

NO EQUIP CODE 0.0%, ARRESTER 0.0%, POLE/CROSSARM 0.0%, ANCHOR/GUY 0.0%, CONDUCTOR 0.0%, CONNECTOR/CLAMP/SPLICE/DEADEND 0.0%, INSULATOR 0.0%,PORCELAIN CUTOUT 0.0%, TRANSFORMER 0.0%, PROTECTIVE DEVICE 100.0%,OVERLOAD 0.0%

SECTION 5: CIRCUIT REPORTING
(CIRCUITS WITH SAIDI AND/OR SAIFI EXCEEDING 5 YEAR AVERAGE)
(CIRCUIT NUMBERS SHOULD BE REPORTED EXCLUDING MED)

CIRCUIT # 25

SOUTH BOUNDARY - 5

1. SUBSTATION NAME AND NUMBER:	SOUTH BOUNDARY (14)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN):	HARDIN - HWY 313 - RADCLIFF
3. CIRCUIT NAME AND NUMBER:	SOUTH BOUNDARY - 5
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA):	ELIZABETHTOWN, KY - BATTLE TRAINING RD, BEWLEY HOLLOW RD
5. TOTAL CIRCUIT LENGTH (MILES):	28.99
6. CUSTOMER COUNT FOR THIS CIRCUIT:	354
7. DATE OF LAST CIRCUIT TRIM (MM/YY):	03/18

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):	
CONTRACTOR	<u>0.00%</u>	PUBLIC ACCIDENTS, OTHER <u>92.25%</u>
EQUIPMENT / MATERIAL FAILURE	<u>2.04%</u>	SMALL ANIMALS OR BIRDS <u>0.89%</u>
LIGHTNING	<u>0.55%</u>	TREES <u>1.22%</u>
NO CAUSE CODE	<u>0.04%</u>	WIND, HIGH WIND <u>0.00%</u>
PLANNED OUTAGE	<u>2.92%</u>	WEATHER <u>0.09%</u>
POWER SUPPLIER	<u>0.00%</u>	

9. CIRCUIT 5 YEAR AVERAGE (SAIDI):	102.50
10. REPORTING YEAR (SAIDI):	335.97
11. CIRCUIT 5 YEAR AVERAGE (SAIFI):	0.73
12. REPORTING YEAR (SAIFI):	1.31

13. LIST OF CORRECTIVE ACTION, IF ANY, TAKEN OR TO BE TAKEN

None needed. We had one circuit level outage due to a public accident that caused the majority of the outage time for the year.

TREE CAUSE CODE BREAKDOWN

DEAD TREE (IN-ROW) 23.6%, VEGETATION (I.E. VINES) 0.0%, GROW IN 5.5%, OVERHANG 68.4%, GREEN TREE FAILURE (OUT-OF-ROW) 2.4%, DEAD TREE (OUT-OF-ROW) 0.0%, NO EQUIP CODE 0.0%

EQUIPMENT CAUSE CODE BREAKDOWN

NO EQUIP CODE 0.0%, ARRESTER 0.0%, POLE/CROSSARM 0.0%, ANCHOR/GUY 0.0%, CONDUCTOR 0.0%, CONNECTOR/CLAMP/SPLICE/DEADEND 0.0%, INSULATOR 0.0%, PORCELAIN CUTOUT 92.8%, TRANSFORMER 0.0%, PROTECTIVE DEVICE 7.2%, OVERLOAD 0.0%

SECTION 5: CIRCUIT REPORTING
(CIRCUITS WITH SAIDI AND/OR SAIFI EXCEEDING 5 YEAR AVERAGE)
(CIRCUIT NUMBERS SHOULD BE REPORTED EXCLUDING MED)

CIRCUIT # 26	KARGLE 2 - 5
1. SUBSTATION NAME AND NUMBER:	KARGLE 2 (15)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN):	HARDIN - AUTO GLASS DR - ELIZABETHTOWN
3. CIRCUIT NAME AND NUMBER:	KARGLE 2 - 5
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA):	ELIZABETHTOWN, KY - AUTO GLASS DR
5. TOTAL CIRCUIT LENGTH (MILES):	0.00
6. CUSTOMER COUNT FOR THIS CIRCUIT:	1
7. DATE OF LAST CIRCUIT TRIM (MM/YY):	N/A

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):		
CONTRACTOR	<u>0.00%</u>	PUBLIC ACCIDENTS, OTHER	<u>0.00%</u>
EQUIPMENT / MATERIAL FAILURE	<u>0.00%</u>	SMALL ANIMALS OR BIRDS	<u>0.00%</u>
LIGHTNING	<u>0.00%</u>	TREES	<u>0.00%</u>
NO CAUSE CODE	<u>0.00%</u>	WIND, HIGH WIND	<u>0.00%</u>
PLANNED OUTAGE	<u>0.00%</u>	WEATHER	<u>0.00%</u>
POWER SUPPLIER	<u>100.00%</u>		

9. CIRCUIT 5 YEAR AVERAGE (SAIDI):	7.32
10. REPORTING YEAR (SAIDI):	36.60
11. CIRCUIT 5 YEAR AVERAGE (SAIFI):	0.20
12. REPORTING YEAR (SAIFI):	1.00

13. LIST OF CORRECTIVE ACTION, IF ANY, TAKEN OR TO BE TAKEN

None needed. EKPC had one equipment failure that caused a substation level outage.

TREE CAUSE CODE BREAKDOWN

EQUIPMENT CAUSE CODE BREAKDOWN

SECTION 5: CIRCUIT REPORTING
(CIRCUITS WITH SAIDI AND/OR SAIFI EXCEEDING 5 YEAR AVERAGE)
(CIRCUIT NUMBERS SHOULD BE REPORTED EXCLUDING MED)

CIRCUIT # 27

KARGLE 2 - 6

1. SUBSTATION NAME AND NUMBER:

KARGLE 2 (15)

2. SUBSTATION LOCATION

(COUNTY-ROAD-TOWN):

HARDIN - AUTO GLASS DR - ELIZABETHTOWN

3. CIRCUIT NAME AND NUMBER:

KARGLE 2 - 6

4. CIRCUIT LOCATION

(TOWN-ROAD-GENERAL AREA):

ELIZABETHTOWN, KY - AUTO GLASS DR

5. TOTAL CIRCUIT LENGTH (MILES):

0.00

6. CUSTOMER COUNT FOR THIS CIRCUIT:

3

7. DATE OF LAST CIRCUIT TRIM (MM/YY):

N/A

8. LIST OF OUTAGE(S):

OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):

CONTRACTOR	<u>0.00%</u>	PUBLIC ACCIDENTS, OTHER	<u>0.00%</u>
EQUIPMENT / MATERIAL FAILURE	<u>0.00%</u>	SMALL ANIMALS OR BIRDS	<u>0.00%</u>
LIGHTNING	<u>0.00%</u>	TREES	<u>0.00%</u>
NO CAUSE CODE	<u>0.00%</u>	WIND, HIGH WIND	<u>0.00%</u>
PLANNED OUTAGE	<u>0.00%</u>	WEATHER	<u>0.00%</u>
POWER SUPPLIER	<u>100.00%</u>		

9. CIRCUIT 5 YEAR AVERAGE (SAIDI):

7.84

10. REPORTING YEAR (SAIDI):

39.20

11. CIRCUIT 5 YEAR AVERAGE (SAIFI):

0.20

12. REPORTING YEAR (SAIFI):

1.00

13. LIST OF CORRECTIVE ACTION, IF ANY,
TAKEN OR TO BE TAKEN

None needed. EKPC had one equipment failure that caused a substation level outage.

TREE CAUSE CODE BREAKDOWN

EQUIPMENT CAUSE CODE BREAKDOWN

SECTION 5: CIRCUIT REPORTING
(CIRCUITS WITH SAIDI AND/OR SAIFI EXCEEDING 5 YEAR AVERAGE)
(CIRCUIT NUMBERS SHOULD BE REPORTED EXCLUDING MED)

CIRCUIT # 28	WILLIAMS - 3
1. SUBSTATION NAME AND NUMBER:	WILLIAMS (16)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN):	HARDIN - BARDSTOWN RD. - E-TOWN
3. CIRCUIT NAME AND NUMBER:	WILLIAMS - 3
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA):	ELIZABETHTOWN, KY - SPRINGFIELD RD, LOCUST GROVE RD, MIDDLE CREEK RD, FORD HWY, VALLEY CREEK RD, MILLER RD, HILLCREEK DR, BARDSTOWN RD
5. TOTAL CIRCUIT LENGTH (MILES):	64.70
6. CUSTOMER COUNT FOR THIS CIRCUIT:	768
7. DATE OF LAST CIRCUIT TRIM (MM/YY):	03/22

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):		
CONTRACTOR	<u>0.00%</u>	PUBLIC ACCIDENTS, OTHER	<u>1.81%</u>
EQUIPMENT / MATERIAL FAILURE	<u>0.00%</u>	SMALL ANIMALS OR BIRDS	<u>0.09%</u>
LIGHTNING	<u>95.93%</u>	TREES	<u>0.16%</u>
NO CAUSE CODE	<u>0.00%</u>	WIND, HIGH WIND	<u>0.03%</u>
PLANNED OUTAGE	<u>1.97%</u>	WEATHER	<u>0.00%</u>
POWER SUPPLIER	<u>0.00%</u>		

9. CIRCUIT 5 YEAR AVERAGE (SAIDI):	59.06
10. REPORTING YEAR (SAIDI):	88.64
11. CIRCUIT 5 YEAR AVERAGE (SAIFI):	0.94
12. REPORTING YEAR (SAIFI):	1.04

13. LIST OF CORRECTIVE ACTION, IF ANY, TAKEN OR TO BE TAKEN	None needed. We had one circuit level outage due to lightning that caused the majority of the outage time for the year.
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TREE CAUSE CODE BREAKDOWN	DEAD TREE (IN-ROW) 0.0%, VEGETATION (I.E. VINES) 0.0%, GROW IN 0.0%, OVERHANG 0.0%, GREEN TREE FAILURE (OUT-OF-ROW) 100.0%, DEAD TREE (OUT-OF-ROW) 0.0%, NO EQUIP CODE 0.0%
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EQUIPMENT CAUSE CODE BREAKDOWN

SECTION 5: CIRCUIT REPORTING
(CIRCUITS WITH SAIDI AND/OR SAIFI EXCEEDING 5 YEAR AVERAGE)
(CIRCUIT NUMBERS SHOULD BE REPORTED EXCLUDING MED)

CIRCUIT # 29	WILLIAMS - 4
1. SUBSTATION NAME AND NUMBER:	WILLIAMS (16)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN):	HARDIN - BARDSTOWN RD. - E-TOWN
3. CIRCUIT NAME AND NUMBER:	WILLIAMS - 4
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA):	ELIZABETHTOWN, KY - BARDSTOWN RD, N MULBERRY ST EAST OF I-65, BETH CT.
5. TOTAL CIRCUIT LENGTH (MILES):	23.75
6. CUSTOMER COUNT FOR THIS CIRCUIT:	456
7. DATE OF LAST CIRCUIT TRIM (MM/YY):	04/23

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):	
	CONTRACTOR <u>0.00%</u>	PUBLIC ACCIDENTS, OTHER <u>0.00%</u>
	EQUIPMENT / MATERIAL FAILURE <u>67.69%</u>	SMALL ANIMALS OR BIRDS <u>0.10%</u>
	LIGHTNING <u>0.00%</u>	TREES <u>9.82%</u>
	NO CAUSE CODE <u>19.74%</u>	WIND, HIGH WIND <u>1.13%</u>
	PLANNED OUTAGE <u>1.52%</u>	WEATHER <u>0.00%</u>
	POWER SUPPLIER <u>0.00%</u>	

9. CIRCUIT 5 YEAR AVERAGE (SAIDI):	30.42
10. REPORTING YEAR (SAIDI):	55.97
11. CIRCUIT 5 YEAR AVERAGE (SAIFI):	0.32
12. REPORTING YEAR (SAIFI):	0.42

13. LIST OF CORRECTIVE ACTION, IF ANY, TAKEN OR TO BE TAKEN

None needed. One underground conductor failure caused most of the outage time for the year.

TREE CAUSE CODE BREAKDOWN

DEAD TREE (IN-ROW) 0.0%, VEGETATION (I.E. VINES) 0.0%, GROW IN 3.8%, OVERHANG 0.0%, GREEN TREE FAILURE (OUT-OF-ROW) 96.2%, DEAD TREE (OUT-OF-ROW) 0.0%, NO EQUIP CODE 0.0%

EQUIPMENT CAUSE CODE BREAKDOWN

NO EQUIP CODE 2.7%, ARRESTER 0.0%, POLE/CROSSARM 0.0%, ANCHOR/GUY 0.0%, CONDUCTOR 97.0%, CONNECTOR/CLAMP/SPLICE/DEADEND 0.0%, INSULATOR 0.0%, PORCELAIN CUTOUT 0.3%, TRANSFORMER 0.0%, PROTECTIVE DEVICE 0.0%, OVERLOAD 0.0%

SECTION 5: CIRCUIT REPORTING
(CIRCUITS WITH SAIDI AND/OR SAIFI EXCEEDING 5 YEAR AVERAGE)
(CIRCUIT NUMBERS SHOULD BE REPORTED EXCLUDING MED)

CIRCUIT # 30

LOGSDON - 2

1. SUBSTATION NAME AND NUMBER:

LOGSDON (18)

2. SUBSTATION LOCATION

HARDIN - HILL ST (NEAR ETHAN CT) - VINE GROVE

(COUNTY-ROAD-TOWN):

3. CIRCUIT NAME AND NUMBER:

LOGSDON - 2

4. CIRCUIT LOCATION

(TOWN-ROAD-GENERAL AREA):

RADCLIFF, KY - ROBERT E CT , REBA CT

5. TOTAL CIRCUIT LENGTH (MILES):

0.99

6. CUSTOMER COUNT FOR THIS CIRCUIT:

38

7. DATE OF LAST CIRCUIT TRIM (MM/YY):

N/A

8. LIST OF OUTAGE(S):

OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):

CONTRACTOR	<u>0.00%</u>	PUBLIC ACCIDENTS, OTHER	<u>0.00%</u>
EQUIPMENT / MATERIAL FAILURE	<u>0.00%</u>	SMALL ANIMALS OR BIRDS	<u>0.00%</u>
LIGHTNING	<u>0.00%</u>	TREES	<u>0.00%</u>
NO CAUSE CODE	<u>0.00%</u>	WIND, HIGH WIND	<u>0.00%</u>
PLANNED OUTAGE	<u>100.00%</u>	WEATHER	<u>0.00%</u>
POWER SUPPLIER	<u>0.00%</u>		

9. CIRCUIT 5 YEAR AVERAGE (SAIDI):

0.16

10. REPORTING YEAR (SAIDI):

0.68

11. CIRCUIT 5 YEAR AVERAGE (SAIFI):

0.01

12. REPORTING YEAR (SAIFI):

0.03

13. LIST OF CORRECTIVE ACTION, IF ANY,
TAKEN OR TO BE TAKEN

TREE CAUSE CODE BREAKDOWN

EQUIPMENT CAUSE CODE BREAKDOWN

SECTION 5: CIRCUIT REPORTING
(CIRCUITS WITH SAIDI AND/OR SAIFI EXCEEDING 5 YEAR AVERAGE)
(CIRCUIT NUMBERS SHOULD BE REPORTED EXCLUDING MED)

CIRCUIT # 31	ETOWN 2 - 5
1. SUBSTATION NAME AND NUMBER:	ETOWN 2 (20)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN):	HARDIN - WOODLAND DR. - E-TOWN
3. CIRCUIT NAME AND NUMBER:	ETOWN 2 - 5
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA):	ELIZABETHTOWN, KY - RING RD, PEAR ORCHARD RD
5. TOTAL CIRCUIT LENGTH (MILES):	37.87
6. CUSTOMER COUNT FOR THIS CIRCUIT:	821
7. DATE OF LAST CIRCUIT TRIM (MM/YY):	09/16

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):	
	CONTRACTOR <u>0.00%</u>	PUBLIC ACCIDENTS, OTHER <u>0.00%</u>
	EQUIPMENT / MATERIAL FAILURE <u>0.00%</u>	SMALL ANIMALS OR BIRDS <u>0.00%</u>
	LIGHTNING <u>0.00%</u>	TREES <u>98.51%</u>
	NO CAUSE CODE <u>0.00%</u>	WIND, HIGH WIND <u>0.00%</u>
	PLANNED OUTAGE <u>1.49%</u>	WEATHER <u>0.00%</u>
	POWER SUPPLIER <u>0.00%</u>	

9. CIRCUIT 5 YEAR AVERAGE (SAIDI):	67.61
10. REPORTING YEAR (SAIDI):	88.51
11. CIRCUIT 5 YEAR AVERAGE (SAIFI):	1.67
12. REPORTING YEAR (SAIFI):	1.23

13. LIST OF CORRECTIVE ACTION, IF ANY, TAKEN OR TO BE TAKEN	None needed. We had three total tree related outage tickets on the circuit for the year, one of which was a circuit level outage.
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TREE CAUSE CODE BREAKDOWN	DEAD TREE (IN-RW) 87.0%, VEGETATION (I.E. VINES) 0.0%, GROW IN 0.0%, OVERHANG 0.0%, GREEN TREE FAILURE (OUT-OF-RW) 1.5%, DEAD TREE (OUT-OF-RW) 11.4%, NO EQUIP CODE 0.0%
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EQUIPMENT CAUSE CODE BREAKDOWN

SECTION 5: CIRCUIT REPORTING
(CIRCUITS WITH SAIDI AND/OR SAIFI EXCEEDING 5 YEAR AVERAGE)
(CIRCUIT NUMBERS SHOULD BE REPORTED EXCLUDING MED)

CIRCUIT # 32	RINEYVILLE - 3
1. SUBSTATION NAME AND NUMBER:	RINEYVILLE (21)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN):	HARDIN - OWSLEY RD - RINEYVILLE
3. CIRCUIT NAME AND NUMBER:	RINEYVILLE - 3
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA):	RINEYVILLE, KY - BERRYTOWN RD, RINEYVILLE BIG SPRINGS RD, RINEYVILLE SCHOOL RD
5. TOTAL CIRCUIT LENGTH (MILES):	36.45
6. CUSTOMER COUNT FOR THIS CIRCUIT:	517
7. DATE OF LAST CIRCUIT TRIM (MM/YY):	05/17

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):	
	CONTRACTOR <u>0.00%</u>	PUBLIC ACCIDENTS, OTHER <u>0.12%</u>
	EQUIPMENT / MATERIAL FAILURE <u>0.61%</u>	SMALL ANIMALS OR BIRDS <u>0.11%</u>
	LIGHTNING <u>0.00%</u>	TREES <u>0.00%</u>
	NO CAUSE CODE <u>3.21%</u>	WIND, HIGH WIND <u>83.47%</u>
	PLANNED OUTAGE <u>12.48%</u>	WEATHER <u>0.00%</u>
	POWER SUPPLIER <u>0.00%</u>	

9. CIRCUIT 5 YEAR AVERAGE (SAIDI):	22.83
10. REPORTING YEAR (SAIDI):	82.89
11. CIRCUIT 5 YEAR AVERAGE (SAIFI):	0.33
12. REPORTING YEAR (SAIFI):	1.18

13. LIST OF CORRECTIVE ACTION, IF ANY, TAKEN OR TO BE TAKEN

None needed. One circuit level due to wind outage caused majority of outage time.

TREE CAUSE CODE BREAKDOWN

EQUIPMENT CAUSE CODE BREAKDOWN

NO EQUIP CODE 0.0%, ARRESTER 100.0%, POLE/CROSSARM 0.0%,
ANCHOR/GUY 0.0%, CONDUCTOR 0.0%,
CONNECTOR/CLAMP/SPLICE/DEADEND 0.0%,
INSULATOR 0.0%,PORCELAIN CUTOUT 0.0%, TRANSFORMER 0.0%,
PROTECTIVE DEVICE 0.0%,OVERLOAD 0.0%

SECTION 5: CIRCUIT REPORTING
(CIRCUITS WITH SAIDI AND/OR SAIFI EXCEEDING 5 YEAR AVERAGE)
(CIRCUIT NUMBERS SHOULD BE REPORTED EXCLUDING MED)

CIRCUIT # 33	RINEYVILLE - 4
1. SUBSTATION NAME AND NUMBER:	RINEYVILLE (21)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN):	HARDIN - OWSLEY RD - RINEYVILLE
3. CIRCUIT NAME AND NUMBER:	RINEYVILLE - 4
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA):	RINEYVILLE, KY - BERRYTOWN RD, BLUE BALL RD, SALT RIVER RD
5. TOTAL CIRCUIT LENGTH (MILES):	61.89
6. CUSTOMER COUNT FOR THIS CIRCUIT:	431
7. DATE OF LAST CIRCUIT TRIM (MM/YY):	04/17

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):	
	CONTRACTOR	0.00%
	PUBLIC ACCIDENTS, OTHER	65.15%
	EQUIPMENT / MATERIAL FAILURE	0.44%
	SMALL ANIMALS OR BIRDS	4.07%
	LIGHTNING	15.74%
	TREES	12.80%
	NO CAUSE CODE	0.85%
	WIND, HIGH WIND	0.09%
	PLANNED OUTAGE	0.85%
	WEATHER	0.00%
	POWER SUPPLIER	0.00%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI):	53.21
10. REPORTING YEAR (SAIDI):	130.61
11. CIRCUIT 5 YEAR AVERAGE (SAIFI):	0.60
12. REPORTING YEAR (SAIFI):	1.64

13. LIST OF CORRECTIVE ACTION, IF ANY, TAKEN OR TO BE TAKEN

None needed. One circuit level outage due to public accident caused majority of outage time for the year.

TREE CAUSE CODE BREAKDOWN

DEAD TREE (IN-ROW) 0.0%, VEGETATION (I.E. VINES) 0.0%, GROW IN 33.3%, OVERHANG 0.0%, GREEN TREE FAILURE (OUT-OF-ROW) 0.0%, DEAD TREE (OUT-OF-ROW) 0.0%, NO EQUIP CODE 0.0%

EQUIPMENT CAUSE CODE BREAKDOWN

NO EQUIP CODE 0.0%, ARRESTER 0.0%, POLE/CROSSARM 0.0%, ANCHOR/GUY 0.0%, CONDUCTOR 0.0%, CONNECTOR/CLAMP/SPLICE/DEADEND 0.0%, INSULATOR 0.0%,PORCELAIN CUTOUT 80.9%, TRANSFORMER 19.1%, PROTECTIVE DEVICE 0.0%,OVERLOAD 0.0%

SECTION 5: CIRCUIT REPORTING
(CIRCUITS WITH SAIDI AND/OR SAIFI EXCEEDING 5 YEAR AVERAGE)
(CIRCUIT NUMBERS SHOULD BE REPORTED EXCLUDING MED)

CIRCUIT # 34	RINEYVILLE - 5
1. SUBSTATION NAME AND NUMBER:	RINEYVILLE (21)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN):	HARDIN - OWSLEY RD - RINEYVILLE
3. CIRCUIT NAME AND NUMBER:	RINEYVILLE - 5
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA):	RINEVILLE, KY - OWSLEY RD, RINEYVILLE RD, HARGAN RD, PICKERELL LN, BENNET RD, BLACKBURN RD
5. TOTAL CIRCUIT LENGTH (MILES):	41.45
6. CUSTOMER COUNT FOR THIS CIRCUIT:	522
7. DATE OF LAST CIRCUIT TRIM (MM/YY):	05/17

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):	
	CONTRACTOR <u>0.00%</u>	PUBLIC ACCIDENTS, OTHER <u>0.00%</u>
	EQUIPMENT / MATERIAL FAILURE <u>0.48%</u>	SMALL ANIMALS OR BIRDS <u>2.88%</u>
	LIGHTNING <u>0.45%</u>	TREES <u>90.30%</u>
	NO CAUSE CODE <u>4.57%</u>	WIND, HIGH WIND <u>0.65%</u>
	PLANNED OUTAGE <u>0.69%</u>	WEATHER <u>0.00%</u>
	POWER SUPPLIER <u>0.00%</u>	

9. CIRCUIT 5 YEAR AVERAGE (SAIDI):	42.19
10. REPORTING YEAR (SAIDI):	101.69
11. CIRCUIT 5 YEAR AVERAGE (SAIFI):	0.37
12. REPORTING YEAR (SAIFI):	0.41

13. LIST OF CORRECTIVE ACTION, IF ANY, TAKEN OR TO BE TAKEN

None needed. One tree related outage affecting a portion of the circuit had a long duration and caused majority of outage time for the year.

TREE CAUSE CODE BREAKDOWN

DEAD TREE (IN-ROW) 100.0%, VEGETATION (I.E. VINES) 0.0%, GROW IN 0.0%, OVERHANG 0.0%, GREEN TREE FAILURE (OUT-OF-ROW) 0.0%, DEAD TREE (OUT-OF-ROW) 0.0%, NO EQUIP CODE 0.0%

EQUIPMENT CAUSE CODE BREAKDOWN

NO EQUIP CODE 0.0%, ARRESTER 0.0%, POLE/CROSSARM 0.0%, ANCHOR/GUY 0.0%, CONDUCTOR 0.0%, CONNECTOR/CLAMP/SPLICE/DEADEND 12.8%, INSULATOR 0.0%, PORCELAIN CUTOUT 0.0%, TRANSFORMER 38.5%, PROTECTIVE DEVICE 48.7%, OVERLOAD 0.0%

SECTION 5: CIRCUIT REPORTING
(CIRCUITS WITH SAIDI AND/OR SAIFI EXCEEDING 5 YEAR AVERAGE)
(CIRCUIT NUMBERS SHOULD BE REPORTED EXCLUDING MED)

CIRCUIT # 35	ROANOKE - 1
1. SUBSTATION NAME AND NUMBER:	ROANOKE (23)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN):	LARUE - GRAY RD - ROANOKE
3. CIRCUIT NAME AND NUMBER:	ROANOKE - 1
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA):	HODGENVILLE, KY - RIVER RD, LAFOLLETTE RD
5. TOTAL CIRCUIT LENGTH (MILES):	11.22
6. CUSTOMER COUNT FOR THIS CIRCUIT:	97
7. DATE OF LAST CIRCUIT TRIM (MM/YY):	10/22

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):	
	CONTRACTOR <u>0.00%</u>	PUBLIC ACCIDENTS, OTHER <u>0.00%</u>
	EQUIPMENT / MATERIAL FAILURE <u>61.77%</u>	SMALL ANIMALS OR BIRDS <u>0.00%</u>
	LIGHTNING <u>0.00%</u>	TREES <u>0.00%</u>
	NO CAUSE CODE <u>0.00%</u>	WIND, HIGH WIND <u>0.00%</u>
	PLANNED OUTAGE <u>0.59%</u>	WEATHER <u>0.00%</u>
	POWER SUPPLIER <u>37.64%</u>	

9. CIRCUIT 5 YEAR AVERAGE (SAIDI):	111.07
10. REPORTING YEAR (SAIDI):	145.09
11. CIRCUIT 5 YEAR AVERAGE (SAIFI):	1.23
12. REPORTING YEAR (SAIFI):	2.01

13. LIST OF CORRECTIVE ACTION, IF ANY, TAKEN OR TO BE TAKEN

None needed. EKPC had one equipment failure that caused a substation level outage. We had one additional circuit level outage due to an insulator failure on the circuit.

TREE CAUSE CODE BREAKDOWN

EQUIPMENT CAUSE CODE BREAKDOWN

NO EQUIP CODE 0.0%, ARRESTER 0.0%, POLE/CROSSARM 0.0%,
ANCHOR/GUY 0.0%, CONDUCTOR 0.0%,
CONNECTOR/CLAMP/SPLICE/DEADEND 0.0%,
INSULATOR 100.0%, PORCELAIN CUTOUT 0.0%, TRANSFORMER 0.0%,
PROTECTIVE DEVICE 0.0%, OVERLOAD 0.0%

SECTION 5: CIRCUIT REPORTING
(CIRCUITS WITH SAIDI AND/OR SAIFI EXCEEDING 5 YEAR AVERAGE)
(CIRCUIT NUMBERS SHOULD BE REPORTED EXCLUDING MED)

CIRCUIT # 36	ROANOKE - 2
1. SUBSTATION NAME AND NUMBER:	ROANOKE (23)
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN):	LARUE - GRAY RD - ROANOKE
3. CIRCUIT NAME AND NUMBER:	ROANOKE - 2
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA):	HODGENVILLE, KY - DAN DUNN RD,SLACK RD,MARTIN RD,SPENCER SCHOOL RD,CISSAL HILL RD
5. TOTAL CIRCUIT LENGTH (MILES):	27.20
6. CUSTOMER COUNT FOR THIS CIRCUIT:	183
7. DATE OF LAST CIRCUIT TRIM (MM/YY):	09/22

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):	
	CONTRACTOR <u>0.00%</u>	PUBLIC ACCIDENTS, OTHER <u>0.00%</u>
	EQUIPMENT / MATERIAL FAILURE <u>1.97%</u>	SMALL ANIMALS OR BIRDS <u>0.00%</u>
	LIGHTNING <u>0.00%</u>	TREES <u>0.00%</u>
	NO CAUSE CODE <u>1.29%</u>	WIND, HIGH WIND <u>2.86%</u>
	PLANNED OUTAGE <u>0.88%</u>	WEATHER <u>0.00%</u>
	POWER SUPPLIER <u>92.99%</u>	

9. CIRCUIT 5 YEAR AVERAGE (SAIDI):	39.74
10. REPORTING YEAR (SAIDI):	62.32
11. CIRCUIT 5 YEAR AVERAGE (SAIFI):	0.65
12. REPORTING YEAR (SAIFI):	1.08

13. LIST OF CORRECTIVE ACTION, IF ANY, TAKEN OR TO BE TAKEN

None needed. EKPC had one equipment failure that caused a substation level outage.

TREE CAUSE CODE BREAKDOWN

EQUIPMENT CAUSE CODE BREAKDOWN

NO EQUIP CODE 0.0%, ARRESTER 0.0%, POLE/CROSSARM 0.0%,
ANCHOR/GUY 0.0%, CONDUCTOR 0.0%,
CONNECTOR/CLAMP/SPLICE/DEADEND 0.0%,
INSULATOR 0.0%,PORCELAIN CUTOUT 0.0%, TRANSFORMER 0.0%,
PROTECTIVE DEVICE 100.0%,OVERLOAD 0.0%

SECTION 5: CIRCUIT REPORTING
(CIRCUITS WITH SAIDI AND/OR SAIFI EXCEEDING 5 YEAR AVERAGE)
(CIRCUIT NUMBERS SHOULD BE REPORTED EXCLUDING MED)

CIRCUIT # 37

ROANOKE - 3

1. SUBSTATION NAME AND NUMBER:

ROANOKE (23)

2. SUBSTATION LOCATION
(COUNTY-ROAD-TOWN):

LARUE - GRAY RD - ROANOKE

3. CIRCUIT NAME AND NUMBER:

ROANOKE - 3

4. CIRCUIT LOCATION

(TOWN-ROAD-GENERAL AREA):

HODGENVILLE, KY - DAN DUNN RD, CARTER BROTHERS RD

5. TOTAL CIRCUIT LENGTH (MILES):

33.54

6. CUSTOMER COUNT FOR THIS CIRCUIT:

255

7. DATE OF LAST CIRCUIT TRIM (MM/YY):

07/22

8. LIST OF OUTAGE(S):

OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):

CONTRACTOR	<u>0.00%</u>	PUBLIC ACCIDENTS, OTHER	<u>24.81%</u>
EQUIPMENT / MATERIAL FAILURE	<u>0.38%</u>	SMALL ANIMALS OR BIRDS	<u>0.00%</u>
LIGHTNING	<u>0.00%</u>	TREES	<u>12.79%</u>
NO CAUSE CODE	<u>0.00%</u>	WIND, HIGH WIND	<u>3.51%</u>
PLANNED OUTAGE	<u>2.24%</u>	WEATHER	<u>0.00%</u>
POWER SUPPLIER	<u>56.29%</u>		

9. CIRCUIT 5 YEAR AVERAGE (SAIDI):

112.87

10. REPORTING YEAR (SAIDI):

106.18

11. CIRCUIT 5 YEAR AVERAGE (SAIFI):

1.21

12. REPORTING YEAR (SAIFI):

1.31

13. LIST OF CORRECTIVE ACTION, IF ANY,
TAKEN OR TO BE TAKEN

None needed. EKPC had one equipment failure that caused a substation level outage.

TREE CAUSE CODE BREAKDOWN

DEAD TREE (IN-ROW) 0.0%, VEGETATION (I.E. VINES) 0.0%, GROW IN
98.0%, OVERHANG 0.0%, GREEN TREE FAILURE (OUT-OF-ROW) 0.0%,
DEAD TREE (OUT-OF-ROW) 0.0%, NO EQUIP CODE 0.0%

EQUIPMENT CAUSE CODE BREAKDOWN

NO EQUIP CODE 0.0%, ARRESTER 0.0%, POLE/CROSSARM 0.0%,
ANCHOR/GUY 0.0%, CONDUCTOR 0.0%,
CONNECTOR/CLAMP/SPLICE/DEADEND 100.0%,
INSULATOR 0.0%, PORCELAIN CUTOUT 0.0%, TRANSFORMER 0.0%,
PROTECTIVE DEVICE 0.0%, OVERLOAD 0.0%

SECTION 6: VEGETATION MANAGEMENT PLAN REVIEW
INCLUDE CURRENT VEGETATION MANGEMENT PLAN

See attached "Vegetation Management Program 2-18-11 Nolin.pdf"

SECTION 7: UTILITY COMMENTS