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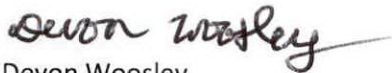
Public Service Commission
P.O. Box 615
211 Sower Boulevard
Frankfort, Kentucky 40602-0615

RE: Administrative Case No. 2011-00450

Enclosed is a paper copy of the 2015 electric distribution utility annual reliability report for Nolin RECC, as well as a copy of Nolin RECC's vegetation management program. Additionally, the enclosed flash disk contains electronic copies of these files.

Please let us know if there are any questions or concerns.

Regards,



Devon Woosley
System Engineer/ SCADA Administrator

Enclosures

Kentucky Public Service Commission
Electric Distribution Utility Annual Reliability Report

SECTION 1: CONTACT INFORMATION

UTILITY NAME:	_____
REPORT PREPARED BY:	Nolin RECC
E-MAIL ADDRESS OF PREPARER:	_____
PHONE NUMBER OF PREPARER:	GDS Associates, Inc. D/B/A Hi-Line Engineering

	<u>braxton.underwood@gdsassociates.com</u>

	770-425-8100

SECTION 2: REPORTING YEAR

CALENDAR YEAR OF REPORT:	_____
	2015

SECTION 3: MAJOR EVENT DAYS (MED)

TMED:	_____
FIRST DATE USED TO DETERMINE TMED:	9.34
LAST DATE USED TO DETERMINE TMED:	_____
NUMBER OF MED IN REPORT YEAR:	1/1/2010

	12/31/2014

	0

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: <u>34,658</u>	TOTAL CIRCUITS: <u>82</u>
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5-YEAR AVERAGE (2010-2014)		Excluding MED REPORTING YEAR	
SAIDI:	<u>84.491</u>	SAIDI:	<u>110.802</u>
SAIFI:	<u>.906</u>	SAIFI:	<u>1.118</u>

5-YEAR AVERAGE (2010-2014)		Including MED REPORTING YEAR	
SAIDI:	<u>118.712</u>	SAIDI:	<u>110.802</u>
SAIFI:	<u>1.039</u>	SAIFI:	<u>1.118</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: _____ COLESBURG-1 _____

1. SUBSTATION NAME AND NUMBER: _____ COLESBURG 1 _____

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN): _____ HARDIN - HALL & BARDSTOWN RD. - YOUNGER CREEK _____

3. CIRCUIT NAME AND NUMBER: _____ COLESBURG-1 _____

4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA): _____ ELIZABETHTOWN, KY - YOUNGERS CREEK RD./ DEVERS RD. _____

5. TOTAL CIRCUIT LENGTH (MILES): _____ 41.11 _____

6. CUSTOMER COUNT FOR THIS CIRCUIT: _____ 398 _____

7. DATE OF LAST CIRCUIT TRIM (Month- YY): _____ January-13 _____

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):		
CONTRACTOR	<u>0.00%</u>	PUBLIC ACCIDENTS, OTHER	<u>10.52%</u>
EQUIPMENT / MATERIAL FAILURE	<u>0.10%</u>	SMALL ANIMALS OR BIRDS	<u>0.00%</u>
LIGHTNING	<u>2.35%</u>	TREES	<u>33.68%</u>
NO CAUSE CODE	<u>0.00%</u>	WIND, HIGH WIND	<u>0.00%</u>
POWER SUPPLIER	<u>50.02%</u>	WEATHER	<u>3.34%</u>

9. CIRCUIT 5 YEAR AVERAGE (SAIDI): _____ 75.36 _____

10. REPORTING YEAR (SAIDI): _____ 249.50 _____

11. CIRCUIT 5 YEAR AVERAGE (SAIFI): _____ 0.79 _____

12. REPORTING YEAR (SAIFI): _____ 2.70 _____

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

Nolin RECC to work with EKPC to review remedies for transmission/substation reliability issues. Review ROW conditions and vegetation management cycle.

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

CIRCUIT #2: _____ COLESBURG-2 _____

1. SUBSTATION NAME AND NUMBER: _____ COLESBURG 1 _____

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN): _____ HARDIN - HALL & BARDSTOWN RD. - YOUNGER CREEK _____

3. CIRCUIT NAME AND NUMBER: _____ COLESBURG-2 _____

4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA): _____ ELIZABETHTOWN, KY - BARDSTOWN RD./ MOUNTAIN VIEW ESTATES RD. _____

5. TOTAL CIRCUIT LENGTH (MILES): _____ 13.35 _____

6. CUSTOMER COUNT FOR THIS CIRCUIT: _____ 187 _____

7. DATE OF LAST CIRCUIT TRIM (Month- YY): _____ January-13 _____

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>0.78%</u>
NO CAUSE CODE	<u>0.00%</u>	WIND, HIGH WIND <u>0.00%</u>
POWER SUPPLIER	<u>99.22%</u>	WEATHER <u>0.00%</u>

9. CIRCUIT 5 YEAR AVERAGE (SAIDI): _____ 10.67 _____

10. REPORTING YEAR (SAIDI): _____ 125.78 _____

11. CIRCUIT 5 YEAR AVERAGE (SAIFI): _____ 0.20 _____

12. REPORTING YEAR (SAIFI): _____ 1.01 _____

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

Nolin RECC to work with EKPC to review remedies for transmission/substation reliability issues.

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

CIRCUIT #3: _____ COLESBURG-4 _____

1. SUBSTATION NAME AND NUMBER: _____ COLESBURG 1 _____

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN): _____ HARDIN - HALL & BARDSTOWN RD. - YOUNGER CREEK _____

3. CIRCUIT NAME AND NUMBER: _____ COLESBURG-4 _____

4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA): _____ ELIZABETHTOWN, KY - LOWER COLESBURG RD/BATTLE TRAINING RD, HAPPY HOLLOW RD _____

5. TOTAL CIRCUIT LENGTH (MILES): _____ 36.8 _____

6. CUSTOMER COUNT FOR THIS CIRCUIT: _____ 213 _____

7. DATE OF LAST CIRCUIT TRIM (Month- YY): _____ January-13 _____

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):	
CONTRACTOR	<u>0.00%</u>	PUBLIC ACCIDENTS, OTHER <u>0.54%</u>
EQUIPMENT / MATERIAL FAILURE	<u>1.99%</u>	SMALL ANIMALS OR BIRDS <u>0.00%</u>
LIGHTNING	<u>0.12%</u>	TREES <u>20.68%</u>
NO CAUSE CODE	<u>1.92%</u>	WIND, HIGH WIND <u>0.00%</u>
POWER SUPPLIER	<u>70.37%</u>	WEATHER <u>4.38%</u>

9. CIRCUIT 5 YEAR AVERAGE (SAIDI): _____ 43.21 _____

10. REPORTING YEAR (SAIDI): _____ 177.36 _____

11. CIRCUIT 5 YEAR AVERAGE (SAIFI): _____ 0.62 _____

12. REPORTING YEAR (SAIFI): _____ 2.08 _____

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

Nolin RECC to work with EKPC to review remedies for transmission/substation reliability issues.

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

CIRCUIT #4: _____ ETOWN 1-4 _____

1. SUBSTATION NAME AND NUMBER: _____ ETOWN 1 2 _____
 2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN): _____ HARDIN - WOODLAND DR. - E-TOWN _____
 3. CIRCUIT NAME AND NUMBER: _____ ETOWN 1-4 _____
 4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA): _____ ELIZABETHTOWN, KY - E. NALLS RD. _____
 5. TOTAL CIRCUIT LENGTH (MILES): _____ 2.25 _____
 6. CUSTOMER COUNT FOR THIS CIRCUIT: _____ 52 _____
 7. DATE OF LAST CIRCUIT TRIM (Month- YY): _____ May-14 _____

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

9. CIRCUIT 5 YEAR AVERAGE (SAIDI): _____ 8.98 _____
 10. REPORTING YEAR (SAIDI): _____ 45.00 _____
 11. CIRCUIT 5 YEAR AVERAGE (SAIFI): _____ 0.34 _____
 12. REPORTING YEAR (SAIFI): _____ 1.00 _____

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

Nolin RECC to work with EKPC to review remedies for transmission/substation reliability issues.

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

CIRCUIT #5: ETOWN 1-5

1. SUBSTATION NAME AND NUMBER: ETOWN 1 2

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN): HARDIN - WOODLAND DR. - E-TOWN

3. CIRCUIT NAME AND NUMBER: ETOWN 1-5

4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA): ELIZABETHTOWN, KY - BYPASS/ BANKVIEW RD./ DIXIE RD./ FREEMAN LAKE PARK RD.

5. TOTAL CIRCUIT LENGTH (MILES): 11.54

6. CUSTOMER COUNT FOR THIS CIRCUIT: 527

7. DATE OF LAST CIRCUIT TRIM (Month- YY): January-14

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):	
CONTRACTOR	0.00%	PUBLIC ACCIDENTS, OTHER 0.00%
EQUIPMENT / MATERIAL FAILURE	17.71%	SMALL ANIMALS OR BIRDS 0.00%
LIGHTNING	0.12%	TREES 0.05%
NO CAUSE CODE	0.00%	WIND, HIGH WIND 0.00%
POWER SUPPLIER	82.12%	WEATHER 0.00%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI): 87.70

10. REPORTING YEAR (SAIDI): 54.80

11. CIRCUIT 5 YEAR AVERAGE (SAIFI): 0.62

12. REPORTING YEAR (SAIFI): 1.14

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

Nolin RECC to work with EKPC to review remedies for transmission/substation reliability issues.

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

CIRCUIT #6: _____ ETOWN 2-3 _____

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 2-3 _____
 4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA): _____ ELIZABETHTOWN, KY - DEERFIELD HILLS RD./ RINEYVILLE RD. _____
 5. TOTAL CIRCUIT LENGTH (MILES): _____ 7.34 _____
 6. CUSTOMER COUNT FOR THIS CIRCUIT: _____ 298 _____
 7. DATE OF LAST CIRCUIT TRIM (Month- YY): _____ July-12 _____

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):	
CONTRACTOR	0.00%	PUBLIC ACCIDENTS, OTHER 0.00%
EQUIPMENT / MATERIAL FAILURE	99.80%	SMALL ANIMALS OR BIRDS 0.13%
LIGHTNING	0.00%	TREES 0.00%
NO CAUSE CODE	0.07%	WIND, HIGH WIND 0.00%
POWER SUPPLIER	0.00%	WEATHER 0.00%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI): _____ 15.11 _____
 10. REPORTING YEAR (SAIDI): _____ 99.92 _____
 11. CIRCUIT 5 YEAR AVERAGE (SAIFI): _____ 0.53 _____
 12. REPORTING YEAR (SAIFI): _____ 1.11 _____

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

Feeder inspection to identify equipment for maintenance.

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

CIRCUIT #42: _____ 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./ PEACH ORCHARD RD. _____
 5. TOTAL CIRCUIT LENGTH (MILES): _____ 20.28 _____
 6. CUSTOMER COUNT FOR THIS CIRCUIT: _____ 747 _____
 7. DATE OF LAST CIRCUIT TRIM (Month- YY): _____ December-13 _____

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):		
CONTRACTOR	0.00%	PUBLIC ACCIDENTS, OTHER	0.00%
EQUIPMENT / MATERIAL FAILURE	0.10%	SMALL ANIMALS OR BIRDS	0.00%
LIGHTNING	98.39%	TREES	0.00%
NO CAUSE CODE	1.51%	WIND, HIGH WIND	0.00%
POWER SUPPLIER	0.00%	WEATHER	0.00%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI): _____ No History _____
 10. REPORTING YEAR (SAIDI): _____ 74.76 _____
 11. CIRCUIT 5 YEAR AVERAGE (SAIFI): _____ No History _____
 12. REPORTING YEAR (SAIFI): _____ 1.03 _____

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

Identify new surge arrestor placement opportunities. Review overvoltage protection.

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

CIRCUIT #7: SOUTH BOUNDARY-3

1. SUBSTATION NAME AND NUMBER:	<u>SOUTH BOUNDARY 14</u>
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN):	<u>HARDIN - HWY 313 - RADCLIFF</u>
3. CIRCUIT NAME AND NUMBER:	<u>SOUTH BOUNDARY-3</u>
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA):	<u>RADCLIFF, KY - SOUTH BOUNDARY RD (N. OF SUB.) / AUSTIN DR / SHELBY AVE</u>
5. TOTAL CIRCUIT LENGTH (MILES):	<u>22.55</u>
6. CUSTOMER COUNT FOR THIS CIRCUIT:	<u>768</u>
7. DATE OF LAST CIRCUIT TRIM (Month- YY):	<u>April-15</u>

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):	
CONTRACTOR	<u>31.96%</u>	PUBLIC ACCIDENTS, OTHER <u>0.76%</u>
EQUIPMENT / MATERIAL FAILURE	<u>44.45%</u>	SMALL ANIMALS OR BIRDS <u>0.14%</u>
LIGHTNING	<u>0.32%</u>	TREES <u>0.00%</u>
NO CAUSE CODE	<u>22.37%</u>	WIND, HIGH WIND <u>0.00%</u>
POWER SUPPLIER	<u>0.00%</u>	WEATHER <u>0.00%</u>

9. CIRCUIT 5 YEAR AVERAGE (SAIDI):	<u>36.68</u>
10. REPORTING YEAR (SAIDI):	<u>31.55</u>
11. CIRCUIT 5 YEAR AVERAGE (SAIFI):	<u>0.64</u>
12. REPORTING YEAR (SAIFI):	<u>1.16</u>

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

Feeder inspection to identify equipment for maintenance.
 Nolin RECC to monitor contractor performance to insure outage contribution issues have been corrected.

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

CIRCUIT #8: _____ SOUTH BOUNDARY-4 _____

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-4 _____

4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA): _____ RADCLIFF, KY - SOUTH BOUNDARY RD (N. OF SUB.) / 7th ARMORED DIVISION RD _____

5. TOTAL CIRCUIT LENGTH (MILES): _____ 3.02 _____

6. CUSTOMER COUNT FOR THIS CIRCUIT: _____ 239 _____

7. DATE OF LAST CIRCUIT TRIM (Month- YY): _____ April-15 _____

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):		
CONTRACTOR	94.08%	PUBLIC ACCIDENTS, OTHER	0.00%
EQUIPMENT / MATERIAL FAILURE	3.83%	SMALL ANIMALS OR BIRDS	0.00%
LIGHTNING	0.00%	TREES	1.44%
NO CAUSE CODE	0.00%	WIND, HIGH WIND	0.00%
POWER SUPPLIER	0.64%	WEATHER	0.00%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI): _____ 20.56 _____

10. REPORTING YEAR (SAIDI): _____ 19.64 _____

11. CIRCUIT 5 YEAR AVERAGE (SAIFI): _____ 0.30 _____

12. REPORTING YEAR (SAIFI): _____ 0.98 _____

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

Nolin RECC to monitor contractor performance to insure outage contribution issues have been corrected.

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

CIRCUIT #9: 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.
5. TOTAL CIRCUIT LENGTH (MILES): 13.98
6. CUSTOMER COUNT FOR THIS CIRCUIT: 242
7. DATE OF LAST CIRCUIT TRIM (Month- YY): January-15

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):		
CONTRACTOR	0.00%	PUBLIC ACCIDENTS, OTHER	0.00%
EQUIPMENT / MATERIAL FAILURE	49.65%	SMALL ANIMALS OR BIRDS	0.00%
LIGHTNING	0.02%	TREES	47.66%
NO CAUSE CODE	2.12%	WIND, HIGH WIND	0.00%
POWER SUPPLIER	0.00%	WEATHER	0.55%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI): 51.62
10. REPORTING YEAR (SAIDI): 140.16
11. CIRCUIT 5 YEAR AVERAGE (SAIFI): 0.68
12. REPORTING YEAR (SAIFI): 2.62

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

Feeder inspection to identify equipment for maintenance.
Circuit was trimmed recently to remedy tree related outages.
Nolin RECC to monitor this feeder to make sure ROW issues have been corrected.

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

CIRCUIT #10:	GLENDALE-1
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-1
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA):	GLENDALE, KY - W. GLENDALE HODGENVILLE RD / MUD SPLASH RD / ANDOVER RD
5. TOTAL CIRCUIT LENGTH (MILES):	9.54
6. CUSTOMER COUNT FOR THIS CIRCUIT:	194
7. DATE OF LAST CIRCUIT TRIM (Month- YY):	November-14

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):		
CONTRACTOR	0.00%	PUBLIC ACCIDENTS, OTHER	47.62%
EQUIPMENT / MATERIAL FAILURE	0.41%	SMALL ANIMALS OR BIRDS	0.00%
LIGHTNING	0.00%	TREES	0.00%
NO CAUSE CODE	0.00%	WIND, HIGH WIND	0.00%
POWER SUPPLIER	51.98%	WEATHER	0.00%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI):	19.48
10. REPORTING YEAR (SAIDI):	78.49
11. CIRCUIT 5 YEAR AVERAGE (SAIFI):	0.26
12. REPORTING YEAR (SAIFI):	1.99

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

Nolin RECC to work with EKPC to review remedies for transmission/substation reliability issues. Feeder inspection will identify areas for correction.

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

CIRCUIT #11:

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):

42.2

6. CUSTOMER COUNT FOR THIS CIRCUIT:

858

7. DATE OF LAST CIRCUIT TRIM (Month- YY):

November-14

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>7.55%</u>	SMALL ANIMALS OR BIRDS	<u>0.25%</u>
LIGHTNING	<u>1.69%</u>	TREES	<u>32.97%</u>
NO CAUSE CODE	<u>4.07%</u>	WIND, HIGH WIND	<u>0.00%</u>
POWER SUPPLIER	<u>53.47%</u>	WEATHER	<u>0.01%</u>

9. CIRCUIT 5 YEAR AVERAGE (SAIDI):

84.35

10. REPORTING YEAR (SAIDI):

76.31

11. CIRCUIT 5 YEAR AVERAGE (SAIFI):

0.93

12. REPORTING YEAR (SAIFI):

1.26

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

Nolin RECC to work with EKPC to review remedies for transmission/substation reliability issues. Review ROW conditions and vegetation management cycle.

SECTION 5: CIRCUIT REPORTING

(CIRCUITS WITH SAIDI AND/OR SAIFI EXCEEDING 5 YEAR AVERAGE)

(CIRCUIT NUMBERS SHOULD BE REPORTED EXCLUDING MED)

CIRCUIT #13:

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):

29.43

6. CUSTOMER COUNT FOR THIS CIRCUIT:

204

7. DATE OF LAST CIRCUIT TRIM (Month- YY):

January-15

8. LIST OF OUTAGE(S):

OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):

CONTRACTOR

0.00%

PUBLIC ACCIDENTS, OTHER

0.00%

EQUIPMENT / MATERIAL FAILURE

2.21%

SMALL ANIMALS OR BIRDS

8.17%

LIGHTNING

16.63%

TREES

4.54%

NO CAUSE CODE

0.00%

WIND, HIGH WIND

0.00%

POWER SUPPLIER

68.45%

WEATHER

0.00%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI):

61.99

10. REPORTING YEAR (SAIDI):

59.61

11. CIRCUIT 5 YEAR AVERAGE (SAIFI):

0.66

12. REPORTING YEAR (SAIFI):

1.25

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

Nolin RECC to work with EKPC to review remedies for transmission/substation reliability issues.

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

CIRCUIT #14: _____ HODGENVILLE-4 _____

1. SUBSTATION NAME AND NUMBER: _____ HODGENVILLE 4 _____

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN): _____ LARUE - HWY 31E (NEAR WADDELL RD)- HODGENVILLE _____

3. CIRCUIT NAME AND NUMBER: _____ HODGENVILLE-4 _____

4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA): _____ HODGENVILLE, KY - OLD ELIZABETHTOWN RD./ CARTER BROTHERS RD. _____

5. TOTAL CIRCUIT LENGTH (MILES): _____ 26.8 _____

6. CUSTOMER COUNT FOR THIS CIRCUIT: _____ 341 _____

7. DATE OF LAST CIRCUIT TRIM (Month- YY): _____ January-13 _____

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):		
CONTRACTOR	0.00%	PUBLIC ACCIDENTS, OTHER	96.90%
EQUIPMENT / MATERIAL FAILURE	1.25%	SMALL ANIMALS OR BIRDS	0.00%
LIGHTNING	1.21%	TREES	0.00%
NO CAUSE CODE	0.65%	WIND, HIGH WIND	0.00%
POWER SUPPLIER	0.00%	WEATHER	0.00%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI): _____ 31.79 _____

10. REPORTING YEAR (SAIDI): _____ 48.16 _____

11. CIRCUIT 5 YEAR AVERAGE (SAIFI): _____ 0.57 _____

12. REPORTING YEAR (SAIFI): _____ 0.33 _____

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

Feeder inspection will identify areas for correction.

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

CIRCUIT #15: _____ HODGENVILLE-5 _____

1. SUBSTATION NAME AND NUMBER: _____ HODGENVILLE 4 _____

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN): _____ LARUE - HWY 31E (NEAR WADDELL RD)- HODGENVILLE _____

3. CIRCUIT NAME AND NUMBER: _____ HODGENVILLE-5 _____

4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA): _____ HODGENVILLE, KY - CARTER BROTHERS RD./ DAN DUNN RD. _____

5. TOTAL CIRCUIT LENGTH (MILES): _____ 61.58 _____

6. CUSTOMER COUNT FOR THIS CIRCUIT: _____ 437 _____

7. DATE OF LAST CIRCUIT TRIM (Month- YY): _____ September-14 _____

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):		
CONTRACTOR	<u>0.00%</u>	PUBLIC ACCIDENTS, OTHER	<u>44.70%</u>
EQUIPMENT / MATERIAL FAILURE	<u>0.00%</u>	SMALL ANIMALS OR BIRDS	<u>0.00%</u>
LIGHTNING	<u>14.35%</u>	TREES	<u>40.67%</u>
NO CAUSE CODE	<u>0.28%</u>	WIND, HIGH WIND	<u>0.00%</u>
POWER SUPPLIER	<u>0.00%</u>	WEATHER	<u>0.00%</u>

9. CIRCUIT 5 YEAR AVERAGE (SAIDI): _____ 35.20 _____

10. REPORTING YEAR (SAIDI): _____ 43.55 _____

11. CIRCUIT 5 YEAR AVERAGE (SAIFI): _____ 0.43 _____

12. REPORTING YEAR (SAIFI): _____ 0.33 _____

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

Feeder inspection will identify areas for correction. Review ROW conditions and vegetation management cycle.

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

CIRCUIT #16: _____ KARGLE-3 _____

1. SUBSTATION NAME AND NUMBER: _____ KARGLE 15 _____
 2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN): _____ HARDIN - AUTO GLASS DR - ELIZABETHTOWN _____
 3. CIRCUIT NAME AND NUMBER: _____ KARGLE-3 _____
 4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA): _____ ELIZABETHTOWN, KY - AUTO GLASS DR -AT AGC Automotive Americas _____
 5. TOTAL CIRCUIT LENGTH (MILES): _____ 0.01 _____
 6. CUSTOMER COUNT FOR THIS CIRCUIT: _____ 1 _____
 7. DATE OF LAST CIRCUIT TRIM (Month- YY): _____ N/A _____

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

9. CIRCUIT 5 YEAR AVERAGE (SAIDI): _____ No History _____
 10. REPORTING YEAR (SAIDI): _____ 582.00 _____
 11. CIRCUIT 5 YEAR AVERAGE (SAIFI): _____ No History _____
 12. REPORTING YEAR (SAIFI): _____ 1.00 _____

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

Outage cause resolved with impacted customer on this dedicated feeder.

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

CIRCUIT #17: _____ LOGSDON-3 _____

1. SUBSTATION NAME AND NUMBER: _____ LOGSDON 18 _____
 2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN): _____ HARDIN - HILL ST (NEAR ETHAN CT) - VINE GROVE _____
 3. CIRCUIT NAME AND NUMBER: _____ LOGSDON-3 _____
 4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA): _____ RADCLIFF, KY -W. CROCUS DR / ELM RD / N LOGSDON PKWY _____
 5. TOTAL CIRCUIT LENGTH (MILES): _____ 15.02 _____
 6. CUSTOMER COUNT FOR THIS CIRCUIT: _____ 1005 _____
 7. DATE OF LAST CIRCUIT TRIM (Month- YY): _____ January-15 _____

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):	
CONTRACTOR	35.57%	PUBLIC ACCIDENTS, OTHER 0.00%
EQUIPMENT / MATERIAL FAILURE	5.86%	SMALL ANIMALS OR BIRDS 25.22%
LIGHTNING	20.99%	TREES 12.35%
NO CAUSE CODE	0.00%	WIND, HIGH WIND 0.00%
POWER SUPPLIER	0.00%	WEATHER 0.00%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI): _____ 25.48 _____
 10. REPORTING YEAR (SAIDI): _____ 28.25 _____
 11. CIRCUIT 5 YEAR AVERAGE (SAIFI): _____ 0.32 _____
 12. REPORTING YEAR (SAIFI): _____ 0.65 _____

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

Nolin RECC to monitor contractor performance to insure outage contribution issues have been corrected. Feeder inspection will identify areas to mitigate animal caused outages.

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

CIRCUIT #18: _____ LOGSDON-4 _____

1. SUBSTATION NAME AND NUMBER:	LOGSDON 18
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN):	HARDIN - HILL ST (NEAR ETHAN CT) - VINE GROVE
3. CIRCUIT NAME AND NUMBER:	LOGSDON-4
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA):	RADCLIFF, KY - VINELAND CENTER DR / , HILL ST / , MANLEY AVE / AIRPORT RD
5. TOTAL CIRCUIT LENGTH (MILES):	9.09
6. CUSTOMER COUNT FOR THIS CIRCUIT:	435
7. DATE OF LAST CIRCUIT TRIM (Month- YY):	March-15

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):		
CONTRACTOR	0.00%	PUBLIC ACCIDENTS, OTHER	54.24%
EQUIPMENT / MATERIAL FAILURE	0.00%	SMALL ANIMALS OR BIRDS	0.00%
LIGHTNING	0.00%	TREES	0.00%
NO CAUSE CODE	45.76%	WIND, HIGH WIND	0.00%
POWER SUPPLIER	0.00%	WEATHER	0.00%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI):	18.26
10. REPORTING YEAR (SAIDI):	69.55
11. CIRCUIT 5 YEAR AVERAGE (SAIFI):	0.28
12. REPORTING YEAR (SAIFI):	0.79

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

Feeder inspection will identify areas for correction. Feeder inspection will identify areas for correction.

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

CIRCUIT #19: _____ LOGSDON-5 _____

1. SUBSTATION NAME AND NUMBER: _____ LOGSDON 18 _____
2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN): _____ HARDIN - HILL ST (NEAR ETHAN CT) - VINE GROVE _____
3. CIRCUIT NAME AND NUMBER: _____ LOGSDON-5 _____
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA): _____ RADCLIFF, KY - W. VINE ST./ S. LOGSDON PKWY _____
5. TOTAL CIRCUIT LENGTH (MILES): _____ 7.3 _____
6. CUSTOMER COUNT FOR THIS CIRCUIT: _____ 513 _____
7. DATE OF LAST CIRCUIT TRIM (Month- YY): _____ March-15 _____

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):	
CONTRACTOR	0.00%	PUBLIC ACCIDENTS, OTHER 0.88%
EQUIPMENT / MATERIAL FAILURE	90.12%	SMALL ANIMALS OR BIRDS 0.33%
LIGHTNING	6.39%	TREES 1.92%
NO CAUSE CODE	0.13%	WIND, HIGH WIND 0.00%
POWER SUPPLIER	0.24%	WEATHER 0.00%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI): _____ 22.36 _____
10. REPORTING YEAR (SAIDI): _____ 34.63 _____
11. CIRCUIT 5 YEAR AVERAGE (SAIFI): _____ 0.31 _____
12. REPORTING YEAR (SAIFI): _____ 0.35 _____

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

Feeder inspection to identify equipment for maintenance.

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

CIRCUIT #20: MAGNOLIA-1

1. SUBSTATION NAME AND NUMBER: MAGNOLIA 5
 2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN): LARUE - NEW JACKSON HWY - MAGNOLIA
 3. CIRCUIT NAME AND NUMBER: MAGNOLIA-1
 4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA): MAGNOLIA, KY- JE JONES RD, MT SHERMAN, BAILEY X-ROADS, MT TABOR RD, HWY 210, HWY 61.
 5. TOTAL CIRCUIT LENGTH (MILES): 107.19
 6. CUSTOMER COUNT FOR THIS CIRCUIT: 980
 7. DATE OF LAST CIRCUIT TRIM (Month- YY): January-16

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):	
CONTRACTOR	0.00%	PUBLIC ACCIDENTS, OTHER 2.57%
EQUIPMENT / MATERIAL FAILURE	29.67%	SMALL ANIMALS OR BIRDS 44.52%
LIGHTNING	1.53%	TREES 20.66%
NO CAUSE CODE	0.00%	WIND, HIGH WIND 1.06%
POWER SUPPLIER	0.00%	WEATHER 0.00%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI): 126.48
 10. REPORTING YEAR (SAIDI): 159.53
 11. CIRCUIT 5 YEAR AVERAGE (SAIFI): 1.33
 12. REPORTING YEAR (SAIFI): 2.31

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

Feeder inspection will identify areas to mitigate animal caused outages. Feeder inspection to identify equipment for maintenance.

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

CIRCUIT #21: 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 TO BRASHEARS RD, NEW JACKSON HWY NORTH OF SUBSTATION, HAWKINS RD, SONORA RD, SIBERIA RD, MURRIELTOWN RD.

5. TOTAL CIRCUIT LENGTH (MILES): 77.19

6. CUSTOMER COUNT FOR THIS CIRCUIT: 493

7. DATE OF LAST CIRCUIT TRIM (Month- YY): August-15

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):		
CONTRACTOR	0.00%	PUBLIC ACCIDENTS, OTHER	15.74%
EQUIPMENT / MATERIAL FAILURE	33.26%	SMALL ANIMALS OR BIRDS	1.71%
LIGHTNING	23.51%	TREES	23.73%
NO CAUSE CODE	0.00%	WIND, HIGH WIND	0.00%
POWER SUPPLIER	2.06%	WEATHER	0.00%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI): 35.21

10. REPORTING YEAR (SAIDI): 75.15

11. CIRCUIT 5 YEAR AVERAGE (SAIFI): 0.59

12. REPORTING YEAR (SAIFI): 0.70

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

Feeder inspection to identify equipment for maintenance.
 Circuit was trimmed recently to remedy tree related outages.
 Nolin RECC to monitor this feeder to make sure ROW issues have been corrected.

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

CIRCUIT #43: _____ RADCLIFF-2 _____

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-2
4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA):	VINE GROVE, KY - KNOX AVE, WEST SIDE OF SAFARI TRL, RED HILL RD TO GERONIMO CIR, DITTO LN.
5. TOTAL CIRCUIT LENGTH (MILES):	22.04
6. CUSTOMER COUNT FOR THIS CIRCUIT:	422
7. DATE OF LAST CIRCUIT TRIM (Month- YY):	April-13

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):		
CONTRACTOR	0.00%	PUBLIC ACCIDENTS, OTHER	68.07%
EQUIPMENT / MATERIAL FAILURE	21.03%	SMALL ANIMALS OR BIRDS	0.00%
LIGHTNING	0.32%	TREES	0.00%
NO CAUSE CODE	0.00%	WIND, HIGH WIND	0.00%
POWER SUPPLIER	0.00%	WEATHER	10.57%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI):	99.00
10. REPORTING YEAR (SAIDI):	114.73
11. CIRCUIT 5 YEAR AVERAGE (SAIFI):	1.23
12. REPORTING YEAR (SAIFI):	1.17

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

Feeder inspection will identify areas for correction.

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

CIRCUIT #22: 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): 20.19
 6. CUSTOMER COUNT FOR THIS CIRCUIT: 449
 7. DATE OF LAST CIRCUIT TRIM (Month- YY): December-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>0.40%</u>	SMALL ANIMALS OR BIRDS	<u>3.85%</u>
LIGHTNING	<u>0.00%</u>	TREES	<u>0.00%</u>
NO CAUSE CODE	<u>95.75%</u>	WIND, HIGH WIND	<u>0.00%</u>
POWER SUPPLIER	<u>0.00%</u>	WEATHER	<u>0.00%</u>

9. CIRCUIT 5 YEAR AVERAGE (SAIDI): 1.52
 10. REPORTING YEAR (SAIDI): 87.93
 11. CIRCUIT 5 YEAR AVERAGE (SAIFI): 0.02
 12. REPORTING YEAR (SAIFI): 1.03

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

Feeder inspection will identify areas for correction.

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

CIRCUIT #23: _____ 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): _____ 50.26 _____

6. CUSTOMER COUNT FOR THIS CIRCUIT: _____ 391 _____

7. DATE OF LAST CIRCUIT TRIM (Month- YY): _____ May-15 _____

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):		
CONTRACTOR	0.00%	PUBLIC ACCIDENTS, OTHER	0.17%
EQUIPMENT / MATERIAL FAILURE	0.45%	SMALL ANIMALS OR BIRDS	0.00%
LIGHTNING	2.71%	TREES	0.00%
NO CAUSE CODE	95.31%	WIND, HIGH WIND	0.00%
POWER SUPPLIER	0.00%	WEATHER	1.37%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI): _____ 100.03 _____

10. REPORTING YEAR (SAIDI): _____ 89.54 _____

11. CIRCUIT 5 YEAR AVERAGE (SAIFI): _____ 0.73 _____

12. REPORTING YEAR (SAIFI): _____ 1.09 _____

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

Feeder inspection will identify areas for correction.

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

CIRCUIT #24: _____ 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): _____ 28.6 _____
 6. CUSTOMER COUNT FOR THIS CIRCUIT: _____ 504 _____
 7. DATE OF LAST CIRCUIT TRIM (Month- YY): _____ October-13 _____

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):		
CONTRACTOR	0.00%	PUBLIC ACCIDENTS, OTHER	50.69%
EQUIPMENT / MATERIAL FAILURE	2.00%	SMALL ANIMALS OR BIRDS	0.00%
LIGHTNING	0.22%	TREES	0.00%
NO CAUSE CODE	42.58%	WIND, HIGH WIND	0.00%
POWER SUPPLIER	0.00%	WEATHER	4.51%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI): _____ 61.68 _____
 10. REPORTING YEAR (SAIDI): _____ 197.28 _____
 11. CIRCUIT 5 YEAR AVERAGE (SAIFI): _____ 0.34 _____
 12. REPORTING YEAR (SAIFI): _____ 2.76 _____

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

Feeder inspection will identify areas for correction. Feeder inspection will identify areas for correction.

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

CIRCUIT #25: _____ STEPHENSBURG-1 _____

1. SUBSTATION NAME AND NUMBER: _____ STEPHENSBURG 6 _____
 2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN): _____ HARDIN-LEITCHFIELD RD-STEPHENSBURG _____
 3. CIRCUIT NAME AND NUMBER: _____ STEPHENSBURG-1 _____
 4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA): _____ GLENDALE, KY - STAR MILLS EASTVIEW RD, BACON CREEK RD, HWY 222, CECILIA SMITH MILL RD, PARTRIDGE WAY. _____
 5. TOTAL CIRCUIT LENGTH (MILES): _____ 41.57 _____
 6. CUSTOMER COUNT FOR THIS CIRCUIT: _____ 401 _____
 7. DATE OF LAST CIRCUIT TRIM (Month- YY): _____ December-14 _____

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):		
CONTRACTOR	0.00%	PUBLIC ACCIDENTS, OTHER	0.08%
EQUIPMENT / MATERIAL FAILURE	0.90%	SMALL ANIMALS OR BIRDS	0.00%
LIGHTNING	0.54%	TREES	35.83%
NO CAUSE CODE	0.03%	WIND, HIGH WIND	0.00%
POWER SUPPLIER	62.63%	WEATHER	0.00%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI): _____ 55.14 _____
 10. REPORTING YEAR (SAIDI): _____ 343.29 _____
 11. CIRCUIT 5 YEAR AVERAGE (SAIFI): _____ 0.86 _____
 12. REPORTING YEAR (SAIFI): _____ 2.90 _____

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

Nolin RECC to work with EKPC to review remedies for transmission/substation reliability issues.

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

CIRCUIT #26: _____ 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 - SONORA HARDIN SPRINGS RD. _____

5. TOTAL CIRCUIT LENGTH (MILES): _____ 46.37 _____

6. CUSTOMER COUNT FOR THIS CIRCUIT: _____ 259 _____

7. DATE OF LAST CIRCUIT TRIM (Month- YY): _____ December-14 _____

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):	
CONTRACTOR	0.00%	PUBLIC ACCIDENTS, OTHER 0.13%
EQUIPMENT / MATERIAL FAILURE	0.10%	SMALL ANIMALS OR BIRDS 0.14%
LIGHTNING	1.49%	TREES 1.60%
NO CAUSE CODE	0.10%	WIND, HIGH WIND 0.00%
POWER SUPPLIER	96.45%	WEATHER 0.00%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI): _____ 64.42 _____

10. REPORTING YEAR (SAIDI): _____ 215.24 _____

11. CIRCUIT 5 YEAR AVERAGE (SAIFI): _____ 1.12 _____

12. REPORTING YEAR (SAIFI): _____ 2.07 _____

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

Nolin RECC to work with EKPC to review remedies for transmission/substation reliability issues.

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

CIRCUIT #27: _____ 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): _____ STEPHENSBURG, KY - LEITCHFIELD RD./ SONORA HARDIN SPRINGS RD./ WEBB MILLS RD. _____
 5. TOTAL CIRCUIT LENGTH (MILES): _____ 69.62 _____
 6. CUSTOMER COUNT FOR THIS CIRCUIT: _____ 554 _____
 7. DATE OF LAST CIRCUIT TRIM (Month- YY): _____ December-14 _____

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):			
CONTRACTOR	0.00%	PUBLIC ACCIDENTS, OTHER	0.00%	
EQUIPMENT / MATERIAL FAILURE	0.13%	SMALL ANIMALS OR BIRDS	0.00%	
LIGHTNING	11.23%	TREES	10.47%	
NO CAUSE CODE	0.04%	WIND, HIGH WIND	0.00%	
POWER SUPPLIER	78.12%	WEATHER	0.00%	

9. CIRCUIT 5 YEAR AVERAGE (SAIDI): _____ 51.69 _____
 10. REPORTING YEAR (SAIDI): _____ 265.75 _____
 11. CIRCUIT 5 YEAR AVERAGE (SAIFI): _____ 0.76 _____
 12. REPORTING YEAR (SAIFI): _____ 2.44 _____

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

Nolin RECC to work with EKPC to review remedies for transmission/substation reliability issues.

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

CIRCUIT #28: _____ STEPHENSBURG-4 _____

1. SUBSTATION NAME AND NUMBER: _____ STEPHENSBURG 6 _____
 2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN): _____ HARDIN-LEITCHFIELD RD-STEPHENSBURG _____
 3. CIRCUIT NAME AND NUMBER: _____ STEPHENSBURG-4 _____
 4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA): _____ EASTVIEW, KY - SONORA HARDIN SPRINGS RD./ EASTVIEW RD. _____
 5. TOTAL CIRCUIT LENGTH (MILES): _____ 74.89 _____
 6. CUSTOMER COUNT FOR THIS CIRCUIT: _____ 573 _____
 7. DATE OF LAST CIRCUIT TRIM (Month- YY): _____ December-14 _____

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):		
CONTRACTOR	0.00%	PUBLIC ACCIDENTS, OTHER	0.00%
EQUIPMENT / MATERIAL FAILURE	0.04%	SMALL ANIMALS OR BIRDS	0.77%
LIGHTNING	1.48%	TREES	9.06%
NO CAUSE CODE	17.42%	WIND, HIGH WIND	0.00%
POWER SUPPLIER	48.92%	WEATHER	22.31%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI): _____ 60.52 _____
 10. REPORTING YEAR (SAIDI): _____ 424.33 _____
 11. CIRCUIT 5 YEAR AVERAGE (SAIFI): _____ 0.95 _____
 12. REPORTING YEAR (SAIFI): _____ 3.62 _____

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

Nolin RECC to work with EKPC to review remedies for transmission/substation reliability issues. Review sectionalizing on feeder to minimize number of customers impacted by equipment operations.

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

CIRCUIT #29: _____ STEPHENSBURG-5 _____

1. SUBSTATION NAME AND NUMBER: _____ STEPHENSBURG 6 _____

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN): _____ HARDIN-LEITCHFIELD RD-STEPHENSBURG _____

3. CIRCUIT NAME AND NUMBER: _____ STEPHENSBURG-5 _____

4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA): _____ STEPHENSBURG, KY - EASTVIEW RD./ NACKE PIKE RD. _____

5. TOTAL CIRCUIT LENGTH (MILES): _____ 71.45 _____

6. CUSTOMER COUNT FOR THIS CIRCUIT: _____ 605 _____

7. DATE OF LAST CIRCUIT TRIM (Month- YY): _____ December-14 _____

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):	
CONTRACTOR	0.00%	PUBLIC ACCIDENTS, OTHER 2.04%
EQUIPMENT / MATERIAL FAILURE	4.83%	SMALL ANIMALS OR BIRDS 1.92%
LIGHTNING	0.04%	TREES 0.17%
NO CAUSE CODE	0.00%	WIND, HIGH WIND 0.00%
POWER SUPPLIER	89.16%	WEATHER 1.83%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI): _____ 43.62 _____

10. REPORTING YEAR (SAIDI): _____ 232.83 _____

11. CIRCUIT 5 YEAR AVERAGE (SAIFI): _____ 0.64 _____

12. REPORTING YEAR (SAIFI): _____ 2.25 _____

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

Nolin RECC to work with EKPC to review remedies for transmission/substation reliability issues.

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

CIRCUIT #30: _____ THARP-3 _____

1. SUBSTATION NAME AND NUMBER: _____ THARP 12 _____
 2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN): _____ HARDIN - ST. JOHN RD. - ETOWN _____
 3. CIRCUIT NAME AND NUMBER: _____ THARP-3 _____
 4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA): _____ ELIZABETHTOWN, KY - SAINT JOHN RD./ RING RD. _____
 5. TOTAL CIRCUIT LENGTH (MILES): _____ 2.43 _____
 6. CUSTOMER COUNT FOR THIS CIRCUIT: _____ 13 _____
 7. DATE OF LAST CIRCUIT TRIM (Month- YY): _____ May-15 _____

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):		
CONTRACTOR	0.00%	PUBLIC ACCIDENTS, OTHER	0.00%
EQUIPMENT / MATERIAL FAILURE	76.98%	SMALL ANIMALS OR BIRDS	0.00%
LIGHTNING	0.00%	TREES	0.00%
NO CAUSE CODE	0.00%	WIND, HIGH WIND	23.02%
POWER SUPPLIER	0.00%	WEATHER	0.00%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI): _____ 50.31 _____
 10. REPORTING YEAR (SAIDI): _____ 89.82 _____
 11. CIRCUIT 5 YEAR AVERAGE (SAIFI): _____ 1.05 _____
 12. REPORTING YEAR (SAIFI): _____ 1.31 _____

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

Feeder inspection to identify equipment for maintenance.

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

CIRCUIT #31: _____ TUNNEL HILL 1-1 _____

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 1-1 _____
 4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA): _____ ELIZABETHTOWN, KY - DOLPHIN RD./ COMMERCE DR. _____
 5. TOTAL CIRCUIT LENGTH (MILES): _____ 7.46 _____
 6. CUSTOMER COUNT FOR THIS CIRCUIT: _____ 437 _____
 7. DATE OF LAST CIRCUIT TRIM (Month- YY): _____ March-13 _____

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):	
CONTRACTOR	0.00%	PUBLIC ACCIDENTS, OTHER 0.00%
EQUIPMENT / MATERIAL FAILURE	59.77%	SMALL ANIMALS OR BIRDS 0.00%
LIGHTNING	0.06%	TREES 0.00%
NO CAUSE CODE	40.17%	WIND, HIGH WIND 0.00%
POWER SUPPLIER	0.00%	WEATHER 0.00%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI): _____ 80.06 _____
 10. REPORTING YEAR (SAIDI): _____ 135.52 _____
 11. CIRCUIT 5 YEAR AVERAGE (SAIFI): _____ 0.37 _____
 12. REPORTING YEAR (SAIFI): _____ 2.29 _____

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

Feeder inspection to identify equipment for maintenance.
 Feeder inspection will identify areas for correction.

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

CIRCUIT #32: _____ 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): _____ 7.41 _____

6. CUSTOMER COUNT FOR THIS CIRCUIT: _____ 708 _____

7. DATE OF LAST CIRCUIT TRIM (Month- YY): _____ April-13 _____

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):	
CONTRACTOR	0.00%	PUBLIC ACCIDENTS, OTHER 0.14%
EQUIPMENT / MATERIAL FAILURE	0.18%	SMALL ANIMALS OR BIRDS 0.00%
LIGHTNING	0.04%	TREES 0.00%
NO CAUSE CODE	99.64%	WIND, HIGH WIND 0.00%
POWER SUPPLIER	0.00%	WEATHER 0.00%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI): _____ 10.83 _____

10. REPORTING YEAR (SAIDI): _____ 140.90 _____

11. CIRCUIT 5 YEAR AVERAGE (SAIFI): _____ 0.23 _____

12. REPORTING YEAR (SAIFI): _____ 1.02 _____

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

Feeder inspection will identify areas for correction.

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

CIRCUIT #33: TUNNEL HILL 1-4

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 1-4

4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA): ELIZABETHTOWN, KY - TUNNEL HILL RD, RING RD, FINANCIAL DR

5. TOTAL CIRCUIT LENGTH (MILES): 2.26

6. CUSTOMER COUNT FOR THIS CIRCUIT: 57

7. DATE OF LAST CIRCUIT TRIM (Month- YY): August-13

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

9. CIRCUIT 5 YEAR AVERAGE (SAIDI): No History

10. REPORTING YEAR (SAIDI): 4.06

11. CIRCUIT 5 YEAR AVERAGE (SAIFI): No History

12. REPORTING YEAR (SAIFI): 0.04

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

Feeder inspection will identify areas for correction.

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

CIRCUIT #34: _____ TUNNEL HILL 2-4 _____

1. SUBSTATION NAME AND NUMBER: _____ TUNNEL HILL 2 19 _____

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN): _____ HARDIN - TUNNEL HILL RD. - E-TOWN _____

3. CIRCUIT NAME AND NUMBER: _____ TUNNEL HILL 2-4 _____

4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA): _____ ELIZABETHTOWN, KY - OLD TUNNEL HILL RD, WOODEN LN, FELIX CT, TUNNEL HILL RD, BLUE GRASS RD _____

5. TOTAL CIRCUIT LENGTH (MILES): _____ 15.27 _____

6. CUSTOMER COUNT FOR THIS CIRCUIT: _____ 555 _____

7. DATE OF LAST CIRCUIT TRIM (Month- YY): _____ December-15 _____

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):		
CONTRACTOR	0.00%	PUBLIC ACCIDENTS, OTHER	0.00%
EQUIPMENT / MATERIAL FAILURE	1.67%	SMALL ANIMALS OR BIRDS	57.43%
LIGHTNING	19.59%	TREES	9.75%
NO CAUSE CODE	11.56%	WIND, HIGH WIND	0.00%
POWER SUPPLIER	0.00%	WEATHER	0.00%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI): _____ 60.59 _____

10. REPORTING YEAR (SAIDI): _____ 20.18 _____

11. CIRCUIT 5 YEAR AVERAGE (SAIFI): _____ 0.44 _____

12. REPORTING YEAR (SAIFI): _____ 0.46 _____

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

Feeder inspection will identify areas to mitigate animal caused outages. Identify new surge arrestor placement opportunities. Review overvoltage protection.

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

CIRCUIT #35: 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):	46.28
6. CUSTOMER COUNT FOR THIS CIRCUIT:	348
7. DATE OF LAST CIRCUIT TRIM (Month- YY):	August-15

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):	
CONTRACTOR	0.00%	PUBLIC ACCIDENTS, OTHER 0.33%
EQUIPMENT / MATERIAL FAILURE	0.20%	SMALL ANIMALS OR BIRDS 0.00%
LIGHTNING	0.39%	TREES 0.06%
NO CAUSE CODE	0.36%	WIND, HIGH WIND 98.67%
POWER SUPPLIER	0.00%	WEATHER 0.00%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI):	32.61
10. REPORTING YEAR (SAIDI):	113.47
11. CIRCUIT 5 YEAR AVERAGE (SAIFI):	0.65
12. REPORTING YEAR (SAIFI):	0.98

13. LIST OF CORRECTIVE ACTION, IF ANY, TAKEN OR TO BE TAKEN	Feeder inspection will identify areas to mitigate wind caused outages.
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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 #36: 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): 45.32
 6. CUSTOMER COUNT FOR THIS CIRCUIT: 339
 7. DATE OF LAST CIRCUIT TRIM (Month- YY): April-12

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>23.25%</u>	SMALL ANIMALS OR BIRDS	<u>0.00%</u>
LIGHTNING	<u>1.71%</u>	TREES	<u>22.37%</u>
NO CAUSE CODE	<u>2.09%</u>	WIND, HIGH WIND	<u>12.38%</u>
POWER SUPPLIER	<u>37.18%</u>	WEATHER	<u>1.00%</u>

9. CIRCUIT 5 YEAR AVERAGE (SAIDI): 167.01
 10. REPORTING YEAR (SAIDI): 414.78
 11. CIRCUIT 5 YEAR AVERAGE (SAIFI): 0.85
 12. REPORTING YEAR (SAIFI): 5.63

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

Nolin RECC to work with EKPC to review remedies for transmission/substation reliability issues. Feeder inspection to identify equipment for maintenance.

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

CIRCUIT #37: 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): 60.62

6. CUSTOMER COUNT FOR THIS CIRCUIT: 452

7. DATE OF LAST CIRCUIT TRIM (Month- YY): April-12

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>0.45%</u>	SMALL ANIMALS OR BIRDS <u>6.34%</u>
LIGHTNING	<u>5.40%</u>	TREES <u>0.12%</u>
NO CAUSE CODE	<u>1.10%</u>	WIND, HIGH WIND <u>0.00%</u>
POWER SUPPLIER	<u>79.09%</u>	WEATHER <u>7.41%</u>

9. CIRCUIT 5 YEAR AVERAGE (SAIDI): 170.76

10. REPORTING YEAR (SAIDI): 194.96

11. CIRCUIT 5 YEAR AVERAGE (SAIFI): 0.71

12. REPORTING YEAR (SAIFI): 2.29

13. LIST OF CORRECTIVE ACTION, IF ANY, TAKEN OR TO BE TAKEN	Nolin RECC to work with EKPC to review remedies for transmission/substation reliability issues.
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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 #38: _____ 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 - HARDINSBURG RD./ LONG GROVE RD. _____
 5. TOTAL CIRCUIT LENGTH (MILES): _____ 41.82 _____
 6. CUSTOMER COUNT FOR THIS CIRCUIT: _____ 492 _____
 7. DATE OF LAST CIRCUIT TRIM (Month- YY): _____ April-12 _____

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):	
CONTRACTOR	0.00%	PUBLIC ACCIDENTS, OTHER 47.61%
EQUIPMENT / MATERIAL FAILURE	5.09%	SMALL ANIMALS OR BIRDS 0.07%
LIGHTNING	11.20%	TREES 2.87%
NO CAUSE CODE	0.04%	WIND, HIGH WIND 0.00%
POWER SUPPLIER	31.03%	WEATHER 2.08%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI): _____ 163.52 _____
 10. REPORTING YEAR (SAIDI): _____ 496.89 _____
 11. CIRCUIT 5 YEAR AVERAGE (SAIFI): _____ 0.68 _____
 12. REPORTING YEAR (SAIFI): _____ 4.91 _____

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

Feeder inspection will identify areas for correction. Nolin RECC to work with EKPC to review remedies for transmission/substation reliability issues.

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

CIRCUIT #39: VERTREES-5

1. SUBSTATION NAME AND NUMBER: VERTREES 8

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN): HARDIN - SALT RIVER RD. - VERTREES

3. CIRCUIT NAME AND NUMBER: VERTREES-5

4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA): EAST VIEW, KY - SALT RIVER RD., LAUREL RIDGE RD., SONORA HARDIN SPRINGS RD., RIDGE TOP LN.

5. TOTAL CIRCUIT LENGTH (MILES): 70.85

6. CUSTOMER COUNT FOR THIS CIRCUIT: 477

7. DATE OF LAST CIRCUIT TRIM (Month- YY): March-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>0.31%</u>	SMALL ANIMALS OR BIRDS <u>0.08%</u>
LIGHTNING	<u>2.29%</u>	TREES <u>23.20%</u>
NO CAUSE CODE	<u>10.09%</u>	WIND, HIGH WIND <u>0.00%</u>
POWER SUPPLIER	<u>50.71%</u>	WEATHER <u>13.33%</u>

9. CIRCUIT 5 YEAR AVERAGE (SAIDI): 167.78

10. REPORTING YEAR (SAIDI): 304.06

11. CIRCUIT 5 YEAR AVERAGE (SAIFI): 1.18

12. REPORTING YEAR (SAIFI): 2.59

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

Nolin RECC to work with EKPC to review remedies for transmission/substation reliability issues. Circuit was trimmed recently to remedy tree related outages. Nolin RECC to monitor this feeder to make sure ROW issues have been corrected.

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

CIRCUIT #40: 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., DUGGIN SWITCH RD., SAINT ANDREWS DR., FORT AVE.
5. TOTAL CIRCUIT LENGTH (MILES):	25.19
6. CUSTOMER COUNT FOR THIS CIRCUIT:	534
7. DATE OF LAST CIRCUIT TRIM (Month- YY):	May-13

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):	
CONTRACTOR	0.00%	PUBLIC ACCIDENTS, OTHER 0.00%
EQUIPMENT / MATERIAL FAILURE	0.27%	SMALL ANIMALS OR BIRDS 0.00%
LIGHTNING	59.28%	TREES 0.15%
NO CAUSE CODE	33.66%	WIND, HIGH WIND 0.00%
POWER SUPPLIER	0.00%	WEATHER 6.64%

9. CIRCUIT 5 YEAR AVERAGE (SAIDI):	136.38
10. REPORTING YEAR (SAIDI):	138.86
11. CIRCUIT 5 YEAR AVERAGE (SAIFI):	1.64
12. REPORTING YEAR (SAIFI):	2.02

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

Identify new surge arrestor placement opportunities. Review overvoltage protection. Feeder inspection will identify areas for correction.

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

CIRCUIT #44: 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): 16.85

6. CUSTOMER COUNT FOR THIS CIRCUIT: 285

7. DATE OF LAST CIRCUIT TRIM (Month- YY): April-13

8. LIST OF OUTAGE(S):	OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):	
CONTRACTOR	<u>0.00%</u>	PUBLIC ACCIDENTS, OTHER <u>0.05%</u>
EQUIPMENT / MATERIAL FAILURE	<u>15.82%</u>	SMALL ANIMALS OR BIRDS <u>0.00%</u>
LIGHTNING	<u>0.00%</u>	TREES <u>0.26%</u>
NO CAUSE CODE	<u>1.67%</u>	WIND, HIGH WIND <u>0.00%</u>
POWER SUPPLIER	<u>0.00%</u>	WEATHER <u>82.21%</u>

9. CIRCUIT 5 YEAR AVERAGE (SAIDI): 134.06

10. REPORTING YEAR (SAIDI): 134.78

11. CIRCUIT 5 YEAR AVERAGE (SAIFI): 1.23

12. REPORTING YEAR (SAIFI): 0.52

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

Review sectionalizing on feeder to minimize number of customers impacted by equipment operations.

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

CIRCUIT #45: WILLIAMS-1

1. SUBSTATION NAME AND NUMBER: WILLIAMS 16

2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN): HARDIN - BARDSTOWN RD. - E-TOWN

3. CIRCUIT NAME AND NUMBER: WILLIAMS-1

4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA): ELIZABETHTOWN, KY - BARDSTOWN RD./ LINCOLN RD.

5. TOTAL CIRCUIT LENGTH (MILES): 30.43

6. CUSTOMER COUNT FOR THIS CIRCUIT: 816

7. DATE OF LAST CIRCUIT TRIM (Month- YY): December-13

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>0.50%</u>	SMALL ANIMALS OR BIRDS	<u>0.00%</u>
LIGHTNING	<u>1.94%</u>	TREES	<u>2.75%</u>
NO CAUSE CODE	<u>0.06%</u>	WIND, HIGH WIND	<u>0.00%</u>
POWER SUPPLIER	<u>94.49%</u>	WEATHER	<u>0.27%</u>

9. CIRCUIT 5 YEAR AVERAGE (SAIDI): 49.94

10. REPORTING YEAR (SAIDI): 298.45

11. CIRCUIT 5 YEAR AVERAGE (SAIFI): 0.69

12. REPORTING YEAR (SAIFI): 1.12

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

Nolin RECC to work with EKPC to review remedies for transmission/substation reliability issues.

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

CIRCUIT #46: WILLIAMS-2

1. SUBSTATION NAME AND NUMBER: WILLIAMS 16
 2. SUBSTATION LOCATION (COUNTY-ROAD-TOWN): HARDIN - BARDSTOWN RD. - E-TOWN
 3. CIRCUIT NAME AND NUMBER: WILLIAMS-2
 4. CIRCUIT LOCATION (TOWN-ROAD-GENERAL AREA): ELIZABETHTOWN, KY - TO BARDSTOWN RD
 5. TOTAL CIRCUIT LENGTH (MILES): 0.21
 6. CUSTOMER COUNT FOR THIS CIRCUIT: 1
 7. DATE OF LAST CIRCUIT TRIM (Month- YY): December-13

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>
POWER SUPPLIER	<u>100.00%</u>	WEATHER <u>0.00%</u>

9. CIRCUIT 5 YEAR AVERAGE (SAIDI): No History
 10. REPORTING YEAR (SAIDI): 282.00
 11. CIRCUIT 5 YEAR AVERAGE (SAIFI): No History
 12. REPORTING YEAR (SAIFI): 1.00

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

Nolin RECC to work with EKPC to review remedies for transmission/substation reliability issues.

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

CIRCUIT #41: 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): 71.32

6. CUSTOMER COUNT FOR THIS CIRCUIT: 1124

7. DATE OF LAST CIRCUIT TRIM (Month- YY): December-13

8. LIST OF OUTAGE(S):		OUTAGE MINUTES (% OF TOTAL OUTAGE MINUTES):	
CONTRACTOR	<u>0.00%</u>	PUBLIC ACCIDENTS, OTHER	<u>2.45%</u>
EQUIPMENT / MATERIAL FAILURE	<u>23.90%</u>	SMALL ANIMALS OR BIRDS	<u>12.74%</u>
LIGHTNING	<u>0.49%</u>	TREES	<u>0.36%</u>
NO CAUSE CODE	<u>0.00%</u>	WIND, HIGH WIND	<u>0.00%</u>
POWER SUPPLIER	<u>58.42%</u>	WEATHER	<u>1.64%</u>

9. CIRCUIT 5 YEAR AVERAGE (SAIDI): 68.40

10. REPORTING YEAR (SAIDI): 482.73

11. CIRCUIT 5 YEAR AVERAGE (SAIFI): 0.78

12. REPORTING YEAR (SAIFI): 3.15

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

Nolin RECC to work with EKPC to review remedies for transmission/substation reliability issues. Feeder inspection to identify equipment for maintenance.

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

CIRCUIT #47: 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): 13.52

6. CUSTOMER COUNT FOR THIS CIRCUIT: 452

7. DATE OF LAST CIRCUIT TRIM (Month- YY): December-13

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>2.20%</u>	SMALL ANIMALS OR BIRDS	<u>0.04%</u>
LIGHTNING	<u>2.58%</u>	TREES	<u>0.00%</u>
NO CAUSE CODE	<u>0.00%</u>	WIND, HIGH WIND	<u>0.00%</u>
POWER SUPPLIER	<u>95.18%</u>	WEATHER	<u>0.00%</u>

9. CIRCUIT 5 YEAR AVERAGE (SAIDI): 32.06

10. REPORTING YEAR (SAIDI): 296.29

11. CIRCUIT 5 YEAR AVERAGE (SAIFI): 0.39

12. REPORTING YEAR (SAIFI): 1.19

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

Nolin RECC to work with EKPC to review remedies for transmission/substation reliability issues.

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

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

SECTION 7: UTILITY COMMENTS

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Vegetation Management Program

Definitions of Terms Used in Standard

This section includes newly defined or revised terms used in this standard. New or revised definitions, listed below, become approved when the standard is placed in operation. When the standard becomes effective, these defined terms will be removed from the individual standard and added to the Glossary.

Fire Risk: The likelihood that a fire will ignite or spread in a particular geographic area.

Flashover: An electrical discharge through air around or over the surface of insulation, between objects of different potential, caused by placing a voltage across the air space that results in the ionization of the air space.

IEEE: Institute of Electrical and Electronics Engineers, Inc.

Vegetation Inspection: The systematic examination of a distribution corridor to document vegetation conditions.

Operating Voltage: The voltage level by which an electrical system is designated and to which certain operating characteristics of the system are related; also, the effective (root-mean-square) potential difference between any two conductors or between a conductor and the ground. The actual voltage of the circuit may vary somewhat above or below this value.

Rated Electrical Operating Conditions: The specified or reasonably anticipated conditions under which the electrical system or an individual electrical circuit is intend/designed to operate.

Right-of-Way (ROW): A corridor of land on which electric lines may be located. The distribution owner may own the land in fee, own an easement, or have certain franchise, prescription, or license rights to construct and maintain lines.

Sustained Outage: The de-energized condition of a distribution line resulting from a fault or disturbance following an unsuccessful automatic reclosing sequence and/or unsuccessful manual reclosing procedure.

Distribution Line: A system of structures, wires, insulators and associated hardware that carry electric energy from one point to another in an electric power system. Lines are operated at relatively high voltages varying from 120 V up to 7.2 kV, and are capable of transmitting quantities of electricity over long distances.

Vegetation: All plant material, growing or not, living or dead.

Introduction

Purpose:

To improve the reliability of the electric distribution systems by preventing outages from vegetation located on distribution rights-of-way (ROW) and minimizing outages from vegetation located adjacent to ROW, maintaining clearances between distribution lines and vegetation on and along distribution ROW.

This standard is developed for all distribution lines operated at 7.2 kV and to any lower voltage lines designated by the Nolin Rural Electric Cooperative Corporation (RECC) as critical to the reliability of the electric system in the region.

Requirements:

- 1) Nolin RECC will periodically review, and keep current, the formal distribution vegetation management program. The review will include the evaluation of objectives, practices, approved procedures, work specifications, and evaluation of SAIDI, SAIFI, CAIDI, and CAIFI. The outage management system (OMS) will collect information from the automated meter reading (AMR) system, supervisory control and data acquisition (SCADA) and input from the on-duty dispatcher for evaluation.
- 2) The plan defines a schedule for ROW vegetation inspections. This schedule will be flexible enough to adjust for changing conditions. The inspection schedule is based on the anticipated growth of vegetation and any other environmental or operational factors that could impact the relationship of vegetation to the Nolin RECC's distribution lines.
- 3) Encourage public outreach to educate the public, in general, about the use and acceptance of vegetation management on rights-of-way.
- 4) Nolin RECC will, during initial installation, identify clearances between vegetation and any overhead, ungrounded supply conductors, taking into consideration the line voltage, the effects of ambient temperature on conductor sag under maximum design loading, the configuration and insulated value of the line, and the effects of wind velocities on conductor sway. Specifically, Nolin RECC will establish clearances to be achieved at the time of vegetation management work to maintain a set of clearances identified to prevent flashover between vegetation and overhead-ungrounded supply conductors. Nolin RECC shall determine appropriate clearance distances to be achieved at the time of distribution vegetation management work based upon: operating voltage, appropriate vegetation management techniques, fire risk, reasonably anticipated tree and conductor movement, species types and growth rates, species failure characteristics, local climate and rainfall patterns, line terrain and elevation, location of the vegetation within the span, and worker approach distance requirements.

- 5) Nolin RECC will determine specific radial clearances to be maintained between vegetation and conductors under all rated electrical operating conditions. These minimum clearance distances are necessary to prevent flashover between vegetation and conductors and may vary due to such factors as has been stated. Nolin RECC shall develop mitigation measures to achieve sufficient clearances for the protection of the distribution facilities when it identifies locations on the ROW where it is restricted from attaining the clearances specified in this Requirement.
- 6) All personnel directly involved in the design and implementation of the Vegetation Management Program shall hold appropriate qualifications and training, as defined by Nolin RECC, to perform their duties.
- 7) Nolin RECC shall establish a process for the communication of vegetation conditions that present an imminent threat of an outage to a distribution line. This is so action may be taken (temporary reduction in line's consumers, switching line out of service, etc.) until the threat is relieved.
- 8) Nolin RECC shall create and implement an annual plan for vegetation management work to ensure the reliability of the system. The plan shall describe the methods used, such as manual clearing, mechanical clearing, herbicide treatment, or other actions. The plan should be flexible enough to adjust to changing conditions, taking into consideration the anticipated growth of vegetation and other environmental factors that may have an impact on the reliability of the distribution systems. Adjustments to the plan shall be documented as they occur. The plan should take into consideration the time required to obtain permissions or permits from landowners or regulatory authorities. Each procedure for documenting and tracking the planned vegetation management work and ensuring that the vegetation management work was completed according to work specifications.

Compliance to the Requirements

1. The overall 'Vegetation Management Plan' will be evaluated annually to establish the progress of the plans' past year improvement against prior years. The comparison will include outage data of specific feeders, overall system outages, record keeping process of outage tickets, time response to outage lengths, comparison of funds to lines lengths and type of work done, and AMR's blink reports. Each year the progress of the plan will be evaluated; deviations, deficiencies or improvements will be made for the following year, and work procedures will be considered.
2. The inspection and right of clearing schedule will be 3 years in dense housing areas (approximately 14 consumers per mile), fast growing tree (locust, sycamore etc.) areas and in areas where trimming maybe limited (historic sites, national forest, and sensitive environmental areas). Other areas will be on the normal 5-year cycle.
3. An article describing the need for right of way maintenance, safety issues associated with live electric lines and trees, and proper tree selection for planting near electric lines will be mailed to all consumer's service address.
4. During System inspection, employees working on existing facilities will make calls to the dispatcher about tree trimming or removal of trouble areas that may not comply with the RUS standard that is set forth in M1.30G "Right of way clearing guide" and standards set by the National Electrical Safety Code in Section 23. If no imminent danger exists, the dispatcher will generate a Work Order Ticket for the correction of the problem.
5. Staking sheets will have notes associated for tree trimming or removal with dimensions from the centerline of the line construction. The notes will remain with the staking sheets throughout the construction phase and final inspection of the jobs. The dimensions will comply with the RUS standard that is set forth in M1.30G "Right of way clearing guide" and standards set in the National Electrical Safety Code in Section 23.
6. Employees will have annual training on the RUS standards and National Electrical Safety Code relating to line construction and safety issues.
7. The dispatcher will be available 24 hours a day to take calls, make work order tickets, and dispatch employees for imminent danger of hazards to the public.
8. An overall system map will be color coded for work to be done each year. The map will be a base for planning and an estimate for budget numbers. The cost of various methods right of way control will be used as the land and environment dictate. Each year, during the planning period, an evaluation of outages and outages data will be used to set an estimated budget number. During the Budget planning, a dollar figure will be set aside for the various methods of right of way control. The areas, as budget permits, will be designated as to method and length of lines to be done.