



Jackson Purchase Energy
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Visit our Web Site www.JPEnergy.com

May 14, 2019

Mr. Kent Chandler
Executive Director
Kentucky Public Service Commission
211 Sower Boulevard
Frankfort, KY 40601

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MAY 27 2020

PUBLIC SERVICE
COMMISSION

RE: 2019 Annual Distribution Reliability Report

Executive Director Chandler:

Please find enclosed Jackson Purchase Energy Corporation's 2019 Annual Distribution Reliability Report as outlined by Administrative Case 2011-00450.

If you have any questions please contact me at 270-442-7321

Sincerely,

A handwritten signature in blue ink that reads "Scott Ribble".

Scott Ribble
Jackson Purchase Energy Corporation

enclosures



KENTUCKY PUBLIC SERVICE COMMISSION

Electric Distribution Utility Annual Reliability ReportA1:144

SECTION 1: CONTACT INFORMATION

UTILITY NAME	1.1	<u>Jackson Purchase Energy Corporation</u>
REPORT PREPARED BY	1.2	<u>Scott Ribble</u>
E-MAIL ADDRESS OF PREPARER	1.3	<u>scott.ribble@jpenergy.com</u>
PHONE NUMBER OF PREPARER	1.4	<u>270-442-7321</u>

SECTION 2: REPORT YEAR

CALENDAR YEAR OF REPORT	2.1	2019
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SECTION 3: MAJOR EVENT DAYS

TMED	3.1	8.86
FIRST DATE USED TO DETERMINE TMED	3.2	1/1/2014
LAST DATE USED TO DETERMINE TMED	3.3	12/31/2018
NUMBER OF MED IN REPORT YEAR	3.4	4

NOTE: Per IEEE 1366 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 are accumulated.

SECTION 4: SYSTEM RELIABILITY RESULTS

System - Wide Information

Total Customers	30044	Total Circuits	91
Excluding MED			
5 Year Average		Reporting Year	
SAIDI	113.56	SAIDI	137.356
SAIFI	1.18	SAIFI	1.5619
Including MED			
5 Year Average		Reporting Year	
SAIDI	351.16	SAIDI	404.293
SAIFI	1.75	SAIFI	2.3401

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[Electric Distribution Utility Annual Reliability Report](#)

Additional pages may be attached as necessary

SECTION 7: VEGETATION MANAGEMENT PLAN REVIEW

JPEC had established a four (4) year cycle on right-of-way maintenance and employs a contractor to perform that cycle clearing. JPEC is looking at increasing that cycle due to the cost per mile of trimming and clearing trees triple. JPEC has begun reclaiming the full width of the ROW to help extend the process. JPEC will use outage data to track tree related outages and will prioritize ROW spending to those circuits that require it. JPEC also employs contract crews that handles "hot-spot" or service order trimming. We have experienced over the last couple of years an increased tree problem from "danger trees" (trees outside of right-of-way) falling into our ROW and tearing down lines and poles. We are working with our members and contractors to identify those danger trees for removal.

SECTION 8: UTILITY COMMENTS

Overall, JPEC's system averaged 99.98% reliable when factoring out major event days and power supply outages. JPEC reliability numbers ended at CAIDI - 95.3 mins, SAIFI - 1.158, and SAIDI - 110.3. All reliability indices were within the past 5 year average. Engineering and Operations is focusing on a number of different areas in 2020 and beyond including the widening of ROW, bird deterrents around the lakes area, substation maintenance program and a new sectionalizing study.

Substation Name Joy
Substation Number 5
Circuit Name Carrsville
Circuit Number 5244
Circuit Location 05244-Carrsville
Total Circuit Length (Miles) 10.9
Customer Count 73.017045
Date of Last Circuit Trim 2016
Circuit 5 Year Average (SADI) 244.8856956
Reporting Year (SAIDI) 550.118126
Circuit 5 Year Average (SAIFI) 1.204127728
Reporting Year (SAIFI) 1.972142258

Outage Causes	
Cause	Percentage (%)
000 Power supply	0%
100 Construction	0%
110 Maintenance	0%
190 Other planned	0%
300 Material or equipment fault/failure	33.33%
310 Installation fault	0%
320 Conductor sag or inadequate clearance	0%
340 Overload	0%
350 Miscoordination of protection devices	0%
360 Other equipment installation/design	0%
400 Decay/age of material/equipment	0%
420 Tree growth	0%
430 Tree failure from overhang or dead tree without ice/snow	33.33%
435 Tree failure from outside of ROW	0%
440 Trees with ice/snow	0%
470 Borrower crew cuts tree	0%
490 Maintenance, other	0%
500 Lightning	0%
510 Wind, not trees	0%
520 Ice, sleet, frost, not trees	0%
530 Flood	0%
540 Storm	0%
590 Weather, other	0%
600 Animal/bird	33.33%
630 Squirrel	0%
690 Animal, other	0%
700 Customer-caused	0%
710 Motor vehicle	0%
715 Farming Equipment	0%
720 Aircraft	0%
730 Fire	0%
740 Public cuts tree	0%
750 Vandalism	0%
760 Switching error or caused by construction or maintenance	0%
790 Public, other	0%
800 Other	0%
999 Cause unknown	0%

100%

Corrective Action Plan
 No Corrective Action is planned.

Substation Name Joy
Substation Number 5
Circuit Name Lola
Circuit Number 5254
Circuit Location 05254-Lola
Total Circuit Length (Miles) 56.5
Customer Count 298.633522
Date of Last Circuit Trim 2016
Circuit 5 Year Average (SADI) 354.6918174
Reporting Year (SAIDI) 120.803584
Circuit 5 Year Average (SAIFI) 1.241648032
Reporting Year (SAIFI) 2.193323762

Outage Causes	
Cause	Percentage (%)
000 Power supply	0%
100 Construction	0%
110 Maintenance	5.00%
190 Other planned	0%
300 Material or equipment fault/failure	15.00%
310 Installation fault	0%
320 Conductor sag or inadequate clearance	0%
340 Overload	0%
350 Miscoordination of protection devices	0%
360 Other equipment installation/design	0%
400 Decay/age of material/equipment	0%
420 Tree growth	5.00%
430 Tree failure from overhang or dead tree without ice/snow	10.00%
435 Tree failure from outside of ROW	0%
440 Trees with ice/snow	0%
470 Borrower crew cuts tree	0%
490 Maintenance, other	0%
500 Lightning	20.00%
510 Wind, not trees	0%
520 Ice, sleet, frost, not trees	0%
530 Flood	0%
540 Storm	0%
590 Weather, other	0%
600 Animal/bird	5.00%
630 Squirrel	0%
690 Animal, other	0%
700 Customer-caused	0%
710 Motor vehicle	0%
715 Farming Equipment	0%
720 Aircraft	0%
730 Fire	5.00%
740 Public cuts tree	0%
750 Vandalism	0%
760 Switching error or caused by construction or maintenance	0%
790 Public, other	0%
800 Other	0%
999 Cause unknown	35.00%

100%

Corrective Action Plan
 No Corrective Action is planned.

Substation Name Burna
Substation Number 14
Circuit Name Smithland
Circuit Number 14254
Circuit Location 14254-Smithland
Total Circuit Length (Miles) 69.7
Customer Count 332.728767
Date of Last Circuit Trim 2015
Circuit 5 Year Average (SADI) 361.592894
Reporting Year (SAIDI) 452.756163
Circuit 5 Year Average (SAIFI) 1.898983987
Reporting Year (SAIFI) 3.801895494

Outage Causes	
Cause	Percentage (%)
000 Power supply	0%
100 Construction	0%
110 Maintenance	8.33%
190 Other planned	0%
300 Material or equipment fault/failure	12.50%
310 Installation fault	0%
320 Conductor sag or inadequate clearance	0%
340 Overload	0%
350 Miscoordination of protection devices	0%
360 Other equipment installation/design	0%
400 Decay/age of material/equipment	0%
420 Tree growth	4.17%
430 Tree failure from overhang or dead tree without ice/snow	4.17%
435 Tree failure from outside of ROW	8.33%
440 Trees with ice/snow	0%
470 Borrower crew cuts tree	0%
490 Maintenance, other	0%
500 Lightning	20.83%
510 Wind, not trees	0%
520 Ice, sleet, frost, not trees	0%
530 Flood	0%
540 Storm	8.33%
590 Weather, other	0%
600 Animal/bird	4.17%
630 Squirrel	0%
690 Animal, other	0%
700 Customer-caused	0%
710 Motor vehicle	4.17%
715 Farming Equipment	0%
720 Aircraft	0%
730 Fire	0%
740 Public cuts tree	4.17%
750 Vandalism	0%
760 Switching error or caused by construction or maintenance	0%
790 Public, other	0%
800 Other	0%
999 Cause unknown	20.83%

100%

Corrective Action Plan

Circuit is scheduled for trimming in 2020. No further corrective action is planned.

Substation Name Cumberland
Substation Number 15
Circuit Name Quarry
Circuit Number 15234
Circuit Location 15234-Quarry
Total Circuit Length (Miles) 5.5
Customer Count 30.643835
Date of Last Circuit Trim 2019
Circuit 5 Year Average (SADI) 132.6656024
Reporting Year (SAIDI) 459.570416
Circuit 5 Year Average (SAIFI) 0.333892097
Reporting Year (SAIFI) 2.83907024

Outage Causes

Cause	Percentage (%)
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000 Power supply	0%
100 Construction	0%
110 Maintenance	0%
190 Other planned	0%
300 Material or equipment fault/failure	0%
310 Installation fault	0%
320 Conductor sag or inadequate clearance	0%
340 Overload	0%
350 Miscoordination of protection devices	0%
360 Other equipment installation/design	0%
400 Decay/age of material/equipment	0%
420 Tree growth	0%
430 Tree failure from overhang or dead tree without ice/snow	0%
435 Tree failure from outside of ROW	0%
440 Trees with ice/snow	0%
470 Borrower crew cuts tree	0%
490 Maintenance, other	0%
500 Lightning	0%
510 Wind, not trees	0%
520 Ice, sleet, frost, not trees	0%
530 Flood	0%
540 Storm	0%
590 Weather, other	0%
600 Animal/bird	0%
630 Squirrel	0%
690 Animal, other	33.33%
700 Customer-caused	66.67%
710 Motor vehicle	0%
715 Farming Equipment	0%
720 Aircraft	0%
730 Fire	0%
740 Public cuts tree	0%
750 Vandalism	0%
760 Switching error or caused by construction or maintenance	0%
790 Public, other	0%
800 Other	0%
999 Cause unknown	0%

100%

Corrective Action Plan
 No Corrective Action is planned.

Substation Name Ragland
Substation Number 19
Circuit Name Monkey's Eyebrow
Circuit Number 19214
Circuit Location 9214-Monkeys Eyebrow
Total Circuit Length (Miles) 51
Customer Count 253.367123
Date of Last Circuit Trim 2017
Circuit 5 Year Average (SADI) 155.7615856
Reporting Year (SAIDI) 317.152434
Circuit 5 Year Average (SAIFI) 1.000994488
Reporting Year (SAIFI) 2.344424142

Outage Causes	
Cause	Percentage (%)
000 Power supply	0%
100 Construction	0%
110 Maintenance	0%
190 Other planned	0%
300 Material or equipment fault/failure	6.45%
310 Installation fault	0%
320 Conductor sag or inadequate clearance	0%
340 Overload	0%
350 Miscoordination of protection devices	0%
360 Other equipment installation/design	0%
400 Decay/age of material/equipment	0%
420 Tree growth	3.23%
430 Tree failure from overhang or dead tree without ice/snow	25.81%
435 Tree failure from outside of ROW	0%
440 Trees with ice/snow	0%
470 Borrower crew cuts tree	0%
490 Maintenance, other	3.23%
500 Lightning	16.13%
510 Wind, not trees	0%
520 Ice, sleet, frost, not trees	0%
530 Flood	0%
540 Storm	0%
590 Weather, other	0%
600 Animal/bird	0%
630 Squirrel	6.45%
690 Animal, other	0%
700 Customer-caused	3.23%
710 Motor vehicle	9.68%
715 Farming Equipment	9.68%
720 Aircraft	0%
730 Fire	0%
740 Public cuts tree	0%
750 Vandalism	0%
760 Switching error or caused by construction or maintenance	0%
790 Public, other	0%
800 Other	0%
999 Cause unknown	16.13%

100%

Corrective Action Plan
 No Corrective Action is planned.

Substation Name LaCenter
Substation Number 26
Circuit Name Damron's
Circuit Number 26214
Circuit Location 26214-Damrons
Total Circuit Length (Miles) 39.7
Customer Count 229.410958
Date of Last Circuit Trim 2015
Circuit 5 Year Average (SADI) 263.855927
Reporting Year (SAIDI) 89.886726
Circuit 5 Year Average (SAIFI) 0.947143692
Reporting Year (SAIFI) 1.53436437

Outage Causes	
Cause	Percentage (%)
000 Power supply	0%
100 Construction	0%
110 Maintenance	7.14%
190 Other planned	0%
300 Material or equipment fault/failure	14.29%
310 Installation fault	0%
320 Conductor sag or inadequate clearance	0%
340 Overload	0%
350 Miscoordination of protection devices	0%
360 Other equipment installation/design	0%
400 Decay/age of material/equipment	0%
420 Tree growth	0%
430 Tree failure from overhang or dead tree without ice/snow	7.14%
435 Tree failure from outside of ROW	14.29%
440 Trees with ice/snow	0%
470 Borrower crew cuts tree	0%
490 Maintenance, other	0%
500 Lightning	21.43%
510 Wind, not trees	0%
520 Ice, sleet, frost, not trees	0%
530 Flood	0%
540 Storm	7.14%
590 Weather, other	0%
600 Animal/bird	0%
630 Squirrel	0%
690 Animal, other	7.14%
700 Customer-caused	0%
710 Motor vehicle	0%
715 Farming Equipment	7.14%
720 Aircraft	0%
730 Fire	0%
740 Public cuts tree	0%
750 Vandalism	0%
760 Switching error or caused by construction or maintenance	0%
790 Public, other	0%
800 Other	0%
999 Cause unknown	14.29%

100%

Corrective Action Plan
 No Corrective Action is planned.

Substation Name High Point
Substation Number 29
Circuit Name High Point
Circuit Number 2901
Circuit Location 2901-High Point
Total Circuit Length (Miles) 21.4
Customer Count 197.082191
Date of Last Circuit Trim 2015
Circuit 5 Year Average (SADI) 177.279687
Reporting Year (SAIDI) 154.89984
Circuit 5 Year Average (SAIFI) 1.337065082
Reporting Year (SAIFI) 1.593243907

Outage Causes	
Cause	Percentage (%)
000 Power supply	0%
100 Construction	17.24%
110 Maintenance	41.38%
190 Other planned	3.45%
300 Material or equipment fault/failure	3.45%
310 Installation fault	0%
320 Conductor sag or inadequate clearance	0%
340 Overload	0%
350 Miscoordination of protection devices	0%
360 Other equipment installation/design	0%
400 Decay/age of material/equipment	0%
420 Tree growth	6.90%
430 Tree failure from overhang or dead tree without ice/snow	6.90%
435 Tree failure from outside of ROW	0%
440 Trees with ice/snow	0%
470 Borrower crew cuts tree	0%
490 Maintenance, other	0%
500 Lightning	3.45%
510 Wind, not trees	0%
520 Ice, sleet, frost, not trees	0%
530 Flood	0%
540 Storm	6.90%
590 Weather, other	0%
600 Animal/bird	3.45%
630 Squirrel	0%
690 Animal, other	0%
700 Customer-caused	3.45%
710 Motor vehicle	0%
715 Farming Equipment	0%
720 Aircraft	0%
730 Fire	0%
740 Public cuts tree	0%
750 Vandalism	0%
760 Switching error or caused by construction or maintenance	0%
790 Public, other	0%
800 Other	0%
999 Cause unknown	3.45%

100%

Corrective Action Plan

No Corrective Action is planned. Contractor spent a lot of time working pole change outs and planned outages.

Substation Name High Point
Substation Number 29
Circuit Name Carneal Rd
Circuit Number 2902
Circuit Location 2902-Carneal Rd
Total Circuit Length (Miles) 32.5
Customer Count 247.564383
Date of Last Circuit Trim 2015
Circuit 5 Year Average (SADI) 496.0513164
Reporting Year (SAIDI) 181.698188
Circuit 5 Year Average (SAIFI) 2.080425015
Reporting Year (SAIFI) 2.710406044

Outage Causes	
Cause	Percentage (%)
000 Power supply	0%
100 Construction	9.68%
110 Maintenance	35.48%
190 Other planned	3.23%
300 Material or equipment fault/failure	3.23%
310 Installation fault	0%
320 Conductor sag or inadequate clearance	0%
340 Overload	0%
350 Miscoordination of protection devices	0%
360 Other equipment installation/design	0%
400 Decay/age of material/equipment	0%
420 Tree growth	0%
430 Tree failure from overhang or dead tree without ice/snow	6.45%
435 Tree failure from outside of ROW	0%
440 Trees with ice/snow	0%
470 Borrower crew cuts tree	0%
490 Maintenance, other	3.23%
500 Lightning	9.68%
510 Wind, not trees	0%
520 Ice, sleet, frost, not trees	0%
530 Flood	0%
540 Storm	0%
590 Weather, other	0%
600 Animal/bird	0%
630 Squirrel	3.23%
690 Animal, other	0%
700 Customer-caused	0%
710 Motor vehicle	0%
715 Farming Equipment	0%
720 Aircraft	0%
730 Fire	0%
740 Public cuts tree	0%
750 Vandalism	0%
760 Switching error or caused by construction or maintenance	0%
790 Public, other	3.23%
800 Other	0%
999 Cause unknown	22.58%

100%

Corrective Action Plan

No corrective action is planned. Contractor spent a lot of time working pole change outs and planned outages.

Substation Name Ledbetter
Substation Number 31
Circuit Name River Crossing
Circuit Number 3103
Circuit Location 3103-River Crossing
Total Circuit Length (Miles) 5.2
Customer Count 34.005479
Date of Last Circuit Trim 2016
Circuit 5 Year Average (SADI) 22.5976252
Reporting Year (SAIDI) 76.575895
Circuit 5 Year Average (SAIFI) 0.206397935
Reporting Year (SAIFI) 1.146874008

		Outage Causes	
		Cause	Percentage (%)
000	Power supply		0%
100	Construction		0%
110	Maintenance		0%
190	Other planned		0%
300	Material or equipment fault/failure		0%
310	Installation fault		0%
320	Conductor sag or inadequate clearance		0%
340	Overload		0%
350	Miscoordination of protection devices		0%
360	Other equipment installation/design		0%
400	Decay/age of material/equipment		0%
420	Tree growth		0%
430	Tree failure from overhang or dead tree without ice/snow		0%
435	Tree failure from outside of ROW		0%
440	Trees with ice/snow		0%
470	Borrower crew cuts tree		0%
490	Maintenance, other		0%
500	Lightning		50.00%
510	Wind, not trees		0%
520	Ice, sleet, frost, not trees		0%
530	Flood		0%
540	Storm		0%
590	Weather, other		0%
600	Animal/bird		0%
630	Squirrel		0%
690	Animal, other		0%
700	Customer-caused		0%
710	Motor vehicle		0%
715	Farming Equipment		0%
720	Aircraft		0%
730	Fire		0%
740	Public cuts tree		0%
750	Vandalism		0%
760	Switching error or caused by construction or maintenance		0%
790	Public, other		0%
800	Other		50.00%
999	Cause unknown		0%

100%

Corrective Action Plan
 No corrective action is planned.

Substation Name Ledbetter
Substation Number 31
Circuit Name Ledbetter
Circuit Number 3104
Circuit Location 3104-Ledbetter
Total Circuit Length (Miles) 61.6
Customer Count 1005.786301
Date of Last Circuit Trim 2016
Circuit 5 Year Average (SADI) 196.5199722
Reporting Year (SAIDI) 101.122872
Circuit 5 Year Average (SAIFI) 1.189877919
Reporting Year (SAIFI) 1.460548825

Outage Causes	
Cause	Percentage (%)
000 Power supply	0%
100 Construction	8.51%
110 Maintenance	17.02%
190 Other planned	0%
300 Material or equipment fault/failure	6.38%
310 Installation fault	0%
320 Conductor sag or inadequate clearance	0%
340 Overload	0%
350 Miscoordination of protection devices	0%
360 Other equipment installation/design	0%
400 Decay/age of material/equipment	0%
420 Tree growth	2.13%
430 Tree failure from overhang or dead tree without ice/snow	4.26%
435 Tree failure from outside of ROW	2.13%
440 Trees with ice/snow	0%
470 Borrower crew cuts tree	0%
490 Maintenance, other	4.26%
500 Lightning	6.38%
510 Wind, not trees	0%
520 Ice, sleet, frost, not trees	0%
530 Flood	0%
540 Storm	4.26%
590 Weather, other	0%
600 Animal/bird	0%
630 Squirrel	14.89%
690 Animal, other	4.26%
700 Customer-caused	0%
710 Motor vehicle	0%
715 Farming Equipment	0%
720 Aircraft	0%
730 Fire	0%
740 Public cuts tree	0%
750 Vandalism	0%
760 Switching error or caused by construction or maintenance	0%
790 Public, other	2.13%
800 Other	4.26%
999 Cause unknown	19.15%

100%

Corrective Action Plan
 No Corrective Action is planned.

Substation Name Smithland
Substation Number 32
Circuit Name Smithland
Circuit Number 3201
Circuit Location 3201-Smithland
Total Circuit Length (Miles) 67.9
Customer Count 381.39452
Date of Last Circuit Trim 2019
Circuit 5 Year Average (SADI) 285.7329632
Reporting Year (SAIDI) 234.950937
Circuit 5 Year Average (SAIFI) 1.992722911
Reporting Year (SAIFI) 2.212931638

Outage Causes	
Cause	Percentage (%)
000 Power supply	0%
100 Construction	0%
110 Maintenance	18.18%
190 Other planned	0%
300 Material or equipment fault/failure	9.09%
310 Installation fault	0%
320 Conductor sag or inadequate clearance	0%
340 Overload	0%
350 Miscoordination of protection devices	0%
360 Other equipment installation/design	0%
400 Decay/age of material/equipment	0%
420 Tree growth	0%
430 Tree failure from overhang or dead tree without ice/snow	40.91%
435 Tree failure from outside of ROW	0%
440 Trees with ice/snow	0%
470 Borrower crew cuts tree	0%
490 Maintenance, other	0%
500 Lightning	13.64%
510 Wind, not trees	0%
520 Ice, sleet, frost, not trees	0%
530 Flood	0%
540 Storm	4.55%
590 Weather, other	0%
600 Animal/bird	0%
630 Squirrel	13.64%
690 Animal, other	0%
700 Customer-caused	0%
710 Motor vehicle	0%
715 Farming Equipment	0%
720 Aircraft	0%
730 Fire	0%
740 Public cuts tree	0%
750 Vandalism	0%
760 Switching error or caused by construction or maintenance	0%
790 Public, other	0%
800 Other	0%
999 Cause unknown	0%

100%

Corrective Action Plan

Circuit trimming was finished at the end of 2019. No further corrective action is planned.

Substation Name Little Union
Substation Number 39
Circuit Name Airport
Circuit Number 3901
Circuit Location 3901-Airport
Total Circuit Length (Miles) 35.9
Customer Count 543.920547
Date of Last Circuit Trim 2017
Circuit 5 Year Average (SADI) 167.8192622
Reporting Year (SAIDI) 258.618654
Circuit 5 Year Average (SAIFI) 1.796906869
Reporting Year (SAIFI) 2.663992026

Outage Causes	
Cause	Percentage (%)
000 Power supply	0%
100 Construction	3.45%
110 Maintenance	31.03%
190 Other planned	0%
300 Material or equipment fault/failure	6.90%
310 Installation fault	0%
320 Conductor sag or inadequate clearance	0%
340 Overload	0%
350 Miscoordination of protection devices	0%
360 Other equipment installation/design	0%
400 Decay/age of material/equipment	0%
420 Tree growth	3.45%
430 Tree failure from overhang or dead tree without ice/snow	6.90%
435 Tree failure from outside of ROW	3.45%
440 Trees with ice/snow	0%
470 Borrower crew cuts tree	0%
490 Maintenance, other	6.90%
500 Lightning	6.90%
510 Wind, not trees	3.45%
520 Ice, sleet, frost, not trees	0%
530 Flood	0%
540 Storm	0%
590 Weather, other	0%
600 Animal/bird	0%
630 Squirrel	13.79%
690 Animal, other	0%
700 Customer-caused	0%
710 Motor vehicle	0%
715 Farming Equipment	0%
720 Aircraft	0%
730 Fire	0%
740 Public cuts tree	0%
750 Vandalism	0%
760 Switching error or caused by construction or maintenance	0%
790 Public, other	0%
800 Other	0%
999 Cause unknown	13.79%

100%

Corrective Action Plan

Circuit is scheduled to be trimmed in 2021. No further corrective action is planned.

Substation Name Husbands Road
Substation Number 40
Circuit Name Lydon Rd
Circuit Number 40234
Circuit Location 40234-Lydon Rd
Total Circuit Length (Miles) 32.1
Customer Count 454.284931
Date of Last Circuit Trim 2018
Circuit 5 Year Average (SADI) 107.2236202
Reporting Year (SAIDI) 20.69406
Circuit 5 Year Average (SAIFI) 0.810635973
Reporting Year (SAIFI) 1.111637137

Outage Causes	
Cause	Percentage (%)
000 Power supply	0%
100 Construction	0%
110 Maintenance	16.67%
190 Other planned	8.33%
300 Material or equipment fault/failure	8.33%
310 Installation fault	0%
320 Conductor sag or inadequate clearance	0%
340 Overload	0%
350 Miscoordination of protection devices	0%
360 Other equipment installation/design	0%
400 Decay/age of material/equipment	0%
420 Tree growth	0%
430 Tree failure from overhang or dead tree without ice/snow	8.33%
435 Tree failure from outside of ROW	0%
440 Trees with ice/snow	0%
470 Borrower crew cuts tree	0%
490 Maintenance, other	8.33%
500 Lightning	0%
510 Wind, not trees	0%
520 Ice, sleet, frost, not trees	0%
530 Flood	0%
540 Storm	0%
590 Weather, other	0%
600 Animal/bird	0%
630 Squirrel	16.67%
690 Animal, other	0%
700 Customer-caused	8.33%
710 Motor vehicle	0%
715 Farming Equipment	0%
720 Aircraft	0%
730 Fire	0%
740 Public cuts tree	0%
750 Vandalism	0%
760 Switching error or caused by construction or maintenance	0%
790 Public, other	0%
800 Other	8.33%
999 Cause unknown	16.67%

100%

Corrective Action Plan
 No Corrective Action is planned.

Substation Name Culp
Substation Number 42
Circuit Name Proform
Circuit Number 42214
Circuit Location 42214-Proform
Total Circuit Length (Miles) 25.7
Customer Count 428.476712
Date of Last Circuit Trim 2018
Circuit 5 Year Average (SAIDI) 203.1345786
Reporting Year (SAIDI) 95.956206
Circuit 5 Year Average (SAIFI) 1.05110743
Reporting Year (SAIFI) 1.60335435

Outage Causes	
Cause	Percentage (%)
000 Power supply	0%
100 Construction	4.35%
110 Maintenance	39.13%
190 Other planned	0%
300 Material or equipment fault/failure	17.39%
310 Installation fault	0%
320 Conductor sag or inadequate clearance	0%
340 Overload	0%
350 Miscoordination of protection devices	0%
360 Other equipment installation/design	0%
400 Decay/age of material/equipment	0%
420 Tree growth	0%
430 Tree failure from overhang or dead tree without ice/snow	4.35%
435 Tree failure from outside of ROW	0%
440 Trees with ice/snow	0%
470 Borrower crew cuts tree	0%
490 Maintenance, other	0%
500 Lightning	0%
510 Wind, not trees	0%
520 Ice, sleet, frost, not trees	0%
530 Flood	0%
540 Storm	0%
590 Weather, other	0%
600 Animal/bird	4.35%
630 Squirrel	21.74%
690 Animal, other	0%
700 Customer-caused	0%
710 Motor vehicle	0%
715 Farming Equipment	0%
720 Aircraft	0%
730 Fire	0%
740 Public cuts tree	0%
750 Vandalism	0%
760 Switching error or caused by construction or maintenance	0%
790 Public, other	0%
800 Other	4.35%
999 Cause unknown	4.35%

100%

Corrective Action Plan
 No Corrective Action is planned.

Substation Name Culp
Substation Number 42
Circuit Name Little Cypress
Circuit Number 42224
Circuit Location 42224-Little Cypress
Total Circuit Length (Miles) 8.1
Customer Count 50.961643
Date of Last Circuit Trim 2018
Circuit 5 Year Average (SADI) 143.4502742
Reporting Year (SAIDI) 52.470835
Circuit 5 Year Average (SAIFI) 0.489273007
Reporting Year (SAIFI) 1.059620468

Outage Causes	
Cause	Percentage (%)
000 Power supply	0%
100 Construction	0%
110 Maintenance	25.00%
190 Other planned	0%
300 Material or equipment fault/failure	0%
310 Installation fault	0%
320 Conductor sag or inadequate clearance	0%
340 Overload	0%
350 Miscoordination of protection devices	0%
360 Other equipment installation/design	0%
400 Decay/age of material/equipment	0%
420 Tree growth	0%
430 Tree failure from overhang or dead tree without ice/snow	0%
435 Tree failure from outside of ROW	0%
440 Trees with ice/snow	0%
470 Borrower crew cuts tree	0%
490 Maintenance, other	0%
500 Lightning	0%
510 Wind, not trees	0%
520 Ice, sleet, frost, not trees	0%
530 Flood	0%
540 Storm	0%
590 Weather, other	0%
600 Animal/bird	0%
630 Squirrel	25.00%
690 Animal, other	0%
700 Customer-caused	0%
710 Motor vehicle	0%
715 Farming Equipment	0%
720 Aircraft	0%
730 Fire	0%
740 Public cuts tree	0%
750 Vandalism	0%
760 Switching error or caused by construction or maintenance	0%
790 Public, other	0%
800 Other	0%
999 Cause unknown	50.00%

100%

Corrective Action Plan
 No Corrective Action is planned.

Substation Name Culp
Substation Number 42
Circuit Name Possum Trot
Circuit Number 42234
Circuit Location 42234-Possum Trot
Total Circuit Length (Miles) 18.7
Customer Count 203.304109
Date of Last Circuit Trim 2018
Circuit 5 Year Average (SADI) 239.4465264
Reporting Year (SAIDI) 214.673477
Circuit 5 Year Average (SAIFI) 0.731266307
Reporting Year (SAIFI) 1.859283621

Outage Causes	
Cause	Percentage (%)
000 Power supply	0%
100 Construction	0%
110 Maintenance	23.08%
190 Other planned	0%
300 Material or equipment fault/failure	7.69%
310 Installation fault	0%
320 Conductor sag or inadequate clearance	0%
340 Overload	0%
350 Miscoordination of protection devices	0%
360 Other equipment installation/design	0%
400 Decay/age of material/equipment	0%
420 Tree growth	7.69%
430 Tree failure from overhang or dead tree without ice/snow	7.69%
435 Tree failure from outside of ROW	0%
440 Trees with ice/snow	0%
470 Borrower crew cuts tree	0%
490 Maintenance, other	0%
500 Lightning	0%
510 Wind, not trees	0%
520 Ice, sleet, frost, not trees	0%
530 Flood	0%
540 Storm	0%
590 Weather, other	0%
600 Animal/bird	0%
630 Squirrel	46.15%
690 Animal, other	0%
700 Customer-caused	0%
710 Motor vehicle	0%
715 Farming Equipment	0%
720 Aircraft	0%
730 Fire	0%
740 Public cuts tree	0%
750 Vandalism	0%
760 Switching error or caused by construction or maintenance	0%
790 Public, other	0%
800 Other	0%
999 Cause unknown	7.69%

100%

Corrective Action Plan
 No Corrective Action is planned.

Substation Name Culp
Substation Number 42
Circuit Name Sharpe
Circuit Number 42244
Circuit Location 42244-Sharpe
Total Circuit Length (Miles) 78.5
Customer Count 1072.775342
Date of Last Circuit Trim 2018
Circuit 5 Year Average (SADI) 70.5578328
Reporting Year (SAIDI) 74.055579
Circuit 5 Year Average (SAIFI) 0.843726219
Reporting Year (SAIFI) 1.200624166

Outage Causes	
Cause	Percentage (%)
000 Power supply	0%
100 Construction	10.71%
110 Maintenance	28.57%
190 Other planned	0%
300 Material or equipment fault/failure	10.71%
310 Installation fault	0%
320 Conductor sag or inadequate clearance	0%
340 Overload	0%
350 Miscoordination of protection devices	0%
360 Other equipment installation/design	0%
400 Decay/age of material/equipment	0%
420 Tree growth	3.57%
430 Tree failure from overhang or dead tree without ice/snow	0%
435 Tree failure from outside of ROW	1.79%
440 Trees with ice/snow	0%
470 Borrower crew cuts tree	0%
490 Maintenance, other	0%
500 Lightning	3.57%
510 Wind, not trees	0%
520 Ice, sleet, frost, not trees	0%
530 Flood	0%
540 Storm	1.79%
590 Weather, other	0%
600 Animal/bird	1.79%
630 Squirrel	21.43%
690 Animal, other	0%
700 Customer-caused	1.79%
710 Motor vehicle	0%
715 Farming Equipment	0%
720 Aircraft	0%
730 Fire	0%
740 Public cuts tree	0%
750 Vandalism	0%
760 Switching error or caused by construction or maintenance	0%
790 Public, other	1.79%
800 Other	0%
999 Cause unknown	12.50%

100%

Corrective Action Plan
 No Corrective Action is planned.

Substation Name Calvert City
Substation Number 43
Circuit Name CC/Hwy 95
Circuit Number 43214
Circuit Location 43214-Hwy 95
Total Circuit Length (Miles) 18.6
Customer Count 240.39726
Date of Last Circuit Trim 2017
Circuit 5 Year Average (SADI) 119.1778076
Reporting Year (SAIDI) 248.946265
Circuit 5 Year Average (SAIFI) 0.5115737
Reporting Year (SAIFI) 1.256253919

Outage Causes	
Cause	Percentage (%)
000 Power supply	0%
100 Construction	0%
110 Maintenance	0%
190 Other planned	0%
300 Material or equipment fault/failure	6.67%
310 Installation fault	0%
320 Conductor sag or inadequate clearance	0%
340 Overload	0%
350 Miscoordination of protection devices	0%
360 Other equipment installation/design	0%
400 Decay/age of material/equipment	0%
420 Tree growth	6.67%
430 Tree failure from overhang or dead tree without ice/snow	0%
435 Tree failure from outside of ROW	13.33%
440 Trees with ice/snow	0%
470 Borrower crew cuts tree	0%
490 Maintenance, other	0%
500 Lightning	0%
510 Wind, not trees	0%
520 Ice, sleet, frost, not trees	0%
530 Flood	0%
540 Storm	0%
590 Weather, other	0%
600 Animal/bird	6.67%
630 Squirrel	40.00%
690 Animal, other	0%
700 Customer-caused	6.67%
710 Motor vehicle	0%
715 Farming Equipment	0%
720 Aircraft	0%
730 Fire	0%
740 Public cuts tree	0%
750 Vandalism	0%
760 Switching error or caused by construction or maintenance	0%
790 Public, other	0%
800 Other	0%
999 Cause unknown	20.00%

100%

Corrective Action Plan
 No Corrective Action is planned.

Substation Name Calvert City
Substation Number 43
Circuit Name CC Hgts
Circuit Number 43224
Circuit Location 43224-Calvert Heights
Total Circuit Length (Miles) 28.2
Customer Count 648.816438
Date of Last Circuit Trim 2017
Circuit 5 Year Average (SAIDI) 95.8541186
Reporting Year (SAIDI) 121.125167
Circuit 5 Year Average (SAIFI) 0.652659868
Reporting Year (SAIFI) 1.649156737

Outage Causes	
Cause	Percentage (%)
000 Power supply	0%
100 Construction	13.79%
110 Maintenance	13.79%
190 Other planned	0%
300 Material or equipment fault/failure	3.45%
310 Installation fault	0%
320 Conductor sag or inadequate clearance	0%
340 Overload	0%
350 Miscoordination of protection devices	0%
360 Other equipment installation/design	0%
400 Decay/age of material/equipment	0%
420 Tree growth	0%
430 Tree failure from overhang or dead tree without ice/snow	10.34%
435 Tree failure from outside of ROW	0%
440 Trees with ice/snow	0%
470 Borrower crew cuts tree	0%
490 Maintenance, other	3.45%
500 Lightning	3.45%
510 Wind, not trees	0%
520 Ice, sleet, frost, not trees	0%
530 Flood	0%
540 Storm	0%
590 Weather, other	0%
600 Animal/bird	3.45%
630 Squirrel	20.69%
690 Animal, other	3.45%
700 Customer-caused	3.45%
710 Motor vehicle	3.45%
715 Farming Equipment	0%
720 Aircraft	0%
730 Fire	0%
740 Public cuts tree	0%
750 Vandalism	0%
760 Switching error or caused by construction or maintenance	0%
790 Public, other	0%
800 Other	0%
999 Cause unknown	17.24%

100%

Corrective Action Plan
 No Corrective Action is planned.

Substation Name	Vulcan
Substation Number	45
Circuit Name	Vulcan 1-Rock Crusher
Circuit Number	45234
Circuit Location	234-Vulcan1 Rock Crusher
Total Circuit Length (Miles)	1.3
Customer Count	2
Date of Last Circuit Trim	0
Circuit 5 Year Average (SADI)	38
Reporting Year (SAIDI)	394.5
Circuit 5 Year Average (SAIFI)	0.3
Reporting Year (SAIFI)	2

Outage Causes	
Cause	Percentage (%)
000 Power supply	0%
100 Construction	0%
110 Maintenance	25.00%
190 Other planned	0%
300 Material or equipment fault/failure	50.00%
310 Installation fault	0%
320 Conductor sag or inadequate clearance	0%
340 Overload	0%
350 Miscoordination of protection devices	0%
360 Other equipment installation/design	0%
400 Decay/age of material/equipment	0%
420 Tree growth	0%
430 Tree failure from overhang or dead tree without ice/snow	0%
435 Tree failure from outside of ROW	0%
440 Trees with ice/snow	0%
470 Borrower crew cuts tree	0%
490 Maintenance, other	0%
500 Lightning	0%
510 Wind, not trees	0%
520 Ice, sleet, frost, not trees	0%
530 Flood	0%
540 Storm	0%
590 Weather, other	0%
600 Animal/bird	0%
630 Squirrel	0%
690 Animal, other	0%
700 Customer-caused	0%
710 Motor vehicle	0%
715 Farming Equipment	0%
720 Aircraft	0%
730 Fire	0%
740 Public cuts tree	0%
750 Vandalism	0%
760 Switching error or caused by construction or maintenance	0%
790 Public, other	0%
800 Other	0%
999 Cause unknown	25.00%

100%

Corrective Action Plan

Substation lightning arrester failure. No corrective action is planned.

Substation Name Vulcan
Substation Number 45
Circuit Name Kinder Morgan 1
Circuit Number 45244
Circuit Location 45244-Kinder Morgan 1
Total Circuit Length (Miles) 7.7
Customer Count 33.923404
Date of Last Circuit Trim 0
Circuit 5 Year Average (SADI) 156.8098072
Reporting Year (SAIDI) 721.06561
Circuit 5 Year Average (SAIFI) 1.010140491
Reporting Year (SAIFI) 2.888861035

Outage Causes	
Cause	Percentage (%)
000 Power supply	0%
100 Construction	0%
110 Maintenance	0%
190 Other planned	0%
300 Material or equipment fault/failure	33.33%
310 Installation fault	0%
320 Conductor sag or inadequate clearance	0%
340 Overload	0%
350 Miscoordination of protection devices	0%
360 Other equipment installation/design	0%
400 Decay/age of material/equipment	0%
420 Tree growth	0%
430 Tree failure from overhang or dead tree without ice/snow	33.33%
435 Tree failure from outside of ROW	0%
440 Trees with ice/snow	0%
470 Borrower crew cuts tree	0%
490 Maintenance, other	0%
500 Lightning	0%
510 Wind, not trees	0%
520 Ice, sleet, frost, not trees	0%
530 Flood	0%
540 Storm	0%
590 Weather, other	0%
600 Animal/bird	33.33%
630 Squirrel	0%
690 Animal, other	0%
700 Customer-caused	0%
710 Motor vehicle	0%
715 Farming Equipment	0%
720 Aircraft	0%
730 Fire	0%
740 Public cuts tree	0%
750 Vandalism	0%
760 Switching error or caused by construction or maintenance	0%
790 Public, other	0%
800 Other	0%
999 Cause unknown	0%

100%

Corrective Action Plan

Substation lightning arrester failure and Osprey nests. JPEC has installed nesting deterrents to limit Osprey caused outages.

Substation Name Vulcan
Substation Number 45
Circuit Name Vulcan 2 Hwy 62
Circuit Number 45254
Circuit Location 45254-Vulcan 2 Hwy 62
Total Circuit Length (Miles) 5.5
Customer Count 3
Date of Last Circuit Trim 0
Circuit 5 Year Average (SADI) 56.5666666
Reporting Year (SAIDI) 137.333333
Circuit 5 Year Average (SAIFI) 0.366666667
Reporting Year (SAIFI) 1.333333333

Outage Causes	
Cause	Percentage (%)
000 Power supply	0%
100 Construction	0%
110 Maintenance	0%
190 Other planned	0%
300 Material or equipment fault/failure	50.00%
310 Installation fault	0%
320 Conductor sag or inadequate clearance	0%
340 Overload	0%
350 Miscoordination of protection devices	0%
360 Other equipment installation/design	0%
400 Decay/age of material/equipment	0%
420 Tree growth	0%
430 Tree failure from overhang or dead tree without ice/snow	0%
435 Tree failure from outside of ROW	0%
440 Trees with ice/snow	0%
470 Borrower crew cuts tree	0%
490 Maintenance, other	0%
500 Lightning	0%
510 Wind, not trees	0%
520 Ice, sleet, frost, not trees	0%
530 Flood	0%
540 Storm	0%
590 Weather, other	0%
600 Animal/bird	50.00%
630 Squirrel	0%
690 Animal, other	0%
700 Customer-caused	0%
710 Motor vehicle	0%
715 Farming Equipment	0%
720 Aircraft	0%
730 Fire	0%
740 Public cuts tree	0%
750 Vandalism	0%
760 Switching error or caused by construction or maintenance	0%
790 Public, other	0%
800 Other	0%
999 Cause unknown	0%

100%

Corrective Action Plan

Substation lightning arrester failure and Osprey nests. JPEC has installed nesting deterrents to limit Osprey caused outages.

Substation Name New York
Substation Number 47
Circuit Name Hinkleville
Circuit Number 47210
Circuit Location 47214-Hinkleville
Total Circuit Length (Miles) 44.6
Customer Count 265.556164
Date of Last Circuit Trim 2017
Circuit 5 Year Average (SADI) 458.8650366
Reporting Year (SAIDI) 606.082711
Circuit 5 Year Average (SAIFI) 2.445697713
Reporting Year (SAIFI) 4.778650139

Outage Causes	
Cause	Percentage (%)
000 Power supply	0%
100 Construction	9.52%
110 Maintenance	4.76%
190 Other planned	0%
300 Material or equipment fault/failure	4.76%
310 Installation fault	0%
320 Conductor sag or inadequate clearance	0%
340 Overload	0%
350 Miscoordination of protection devices	0%
360 Other equipment installation/design	0%
400 Decay/age of material/equipment	0%
420 Tree growth	4.76%
430 Tree failure from overhang or dead tree without ice/snow	19.05%
435 Tree failure from outside of ROW	4.76%
440 Trees with ice/snow	0%
470 Borrower crew cuts tree	0%
490 Maintenance, other	0%
500 Lightning	4.76%
510 Wind, not trees	9.52%
520 Ice, sleet, frost, not trees	0%
530 Flood	0%
540 Storm	4.76%
590 Weather, other	0%
600 Animal/bird	9.52%
630 Squirrel	0%
690 Animal, other	0%
700 Customer-caused	0%
710 Motor vehicle	0%
715 Farming Equipment	9.52%
720 Aircraft	0%
730 Fire	0%
740 Public cuts tree	0%
750 Vandalism	0%
760 Switching error or caused by construction or maintenance	0%
790 Public, other	0%
800 Other	9.52%
999 Cause unknown	4.76%

100%

Corrective Action Plan
 No corrective action is planned.

Substation Name Lovelaceville
Substation Number 49
Circuit Name Blandville
Circuit Number 4901
Circuit Location 4901-Blandville
Total Circuit Length (Miles) 20.3
Customer Count 129.427397
Date of Last Circuit Trim 2015
Circuit 5 Year Average (SAIDI) 382.2523196
Reporting Year (SAIDI) 275.343558
Circuit 5 Year Average (SAIFI) 1.958479314
Reporting Year (SAIFI) 2.263817451

		Outage Causes	
		Cause	Percentage (%)
		000 Power supply	0%
		100 Construction	0%
		110 Maintenance	11.76%
		190 Other planned	0%
		300 Material or equipment fault/failure	0%
		310 Installation fault	0%
		320 Conductor sag or inadequate clearance	0%
		340 Overload	0%
		350 Miscoordination of protection devices	0%
		360 Other equipment installation/design	0%
		400 Decay/age of material/equipment	0%
		420 Tree growth	0%
		430 Tree failure from overhang or dead tree without ice/snow	0%
		435 Tree failure from outside of ROW	11.76%
		440 Trees with ice/snow	0%
		470 Borrower crew cuts tree	0%
		490 Maintenance, other	0%
		500 Lightning	5.88%
		510 Wind, not trees	0%
		520 Ice, sleet, frost, not trees	0%
		530 Flood	0%
		540 Storm	5.88%
		590 Weather, other	0%
		600 Animal/bird	0%
		630 Squirrel	11.76%
		690 Animal, other	0%
		700 Customer-caused	0%
		710 Motor vehicle	0%
		715 Farming Equipment	0%
		720 Aircraft	0%
		730 Fire	0%
		740 Public cuts tree	0%
		750 Vandalism	0%
		760 Switching error or caused by construction or maintenance	0%
		790 Public, other	5.88%
		800 Other	0%
		999 Cause unknown	47.06%

100%

Corrective Action Plan

Circuit is scheduled to be trimmed in 2020. No further corrective action is planned.

Substation Name Krebs Station Road
Substation Number 50
Circuit Name Browns Plating
Circuit Number 5001
Circuit Location 5001-Browns Plating
Total Circuit Length (Miles) 37.5
Customer Count 521.580821
Date of Last Circuit Trim 2016
Circuit 5 Year Average (SADI) 306.1377428
Reporting Year (SAIDI) 79.525546
Circuit 5 Year Average (SAIFI) 1.515268351
Reporting Year (SAIFI) 1.518460741

Outage Causes	
Cause	Percentage (%)
000 Power supply	0%
100 Construction	0%
110 Maintenance	12.50%
190 Other planned	0%
300 Material or equipment fault/failure	18.75%
310 Installation fault	0%
320 Conductor sag or inadequate clearance	0%
340 Overload	0%
350 Miscoordination of protection devices	0%
360 Other equipment installation/design	0%
400 Decay/age of material/equipment	0%
420 Tree growth	0%
430 Tree failure from overhang or dead tree without ice/snow	18.75%
435 Tree failure from outside of ROW	0%
440 Trees with ice/snow	0%
470 Borrower crew cuts tree	0%
490 Maintenance, other	0%
500 Lightning	6.25%
510 Wind, not trees	0%
520 Ice, sleet, frost, not trees	0%
530 Flood	0%
540 Storm	0%
590 Weather, other	0%
600 Animal/bird	0%
630 Squirrel	25.00%
690 Animal, other	0%
700 Customer-caused	0%
710 Motor vehicle	12.50%
715 Farming Equipment	0%
720 Aircraft	0%
730 Fire	0%
740 Public cuts tree	0%
750 Vandalism	0%
760 Switching error or caused by construction or maintenance	0%
790 Public, other	0%
800 Other	0%
999 Cause unknown	6.25%

100%

Corrective Action Plan
 No corrective action is planned.

Substation Name Krebs Station Road
Substation Number 50
Circuit Name Clinton Road
Circuit Number 5003
Circuit Location 5003-Clinton Rd
Total Circuit Length (Miles) 52.7
Customer Count 602.852054
Date of Last Circuit Trim 2016
Circuit 5 Year Average (SAIDI) 178.7281312
Reporting Year (SAIDI) 339.501207
Circuit 5 Year Average (SAIFI) 1.33886569
Reporting Year (SAIFI) 1.640535175

Outage Causes

Cause	Percentage (%)
000 Power supply	0%
100 Construction	20.45%
110 Maintenance	9.09%
190 Other planned	0%
300 Material or equipment fault/failure	0%
310 Installation fault	0%
320 Conductor sag or inadequate clearance	0%
340 Overload	0%
350 Miscoordination of protection devices	0%
360 Other equipment installation/design	0%
400 Decay/age of material/equipment	0%
420 Tree growth	4.55%
430 Tree failure from overhang or dead tree without ice/snow	22.73%
435 Tree failure from outside of ROW	4.55%
440 Trees with ice/snow	0%
470 Borrower crew cuts tree	0%
490 Maintenance, other	0%
500 Lightning	4.55%
510 Wind, not trees	0%
520 Ice, sleet, frost, not trees	0%
530 Flood	0%
540 Storm	2.27%
590 Weather, other	0%
600 Animal/bird	2.27%
630 Squirrel	18.18%
690 Animal, other	0%
700 Customer-caused	2.27%
710 Motor vehicle	0%
715 Farming Equipment	0%
720 Aircraft	0%
730 Fire	0%
740 Public cuts tree	0%
750 Vandalism	0%
760 Switching error or caused by construction or maintenance	0%
790 Public, other	2.27%
800 Other	0%
999 Cause unknown	6.82%

100%

Corrective Action Plan

Circuit is scheduled to be trimmed in 2020. No further corrective action is planned.

Substation Name Freemont
Substation Number 51
Circuit Name Symsonia
Circuit Number 51214
Circuit Location 51214-Symsonia
Total Circuit Length (Miles) 93.3
Customer Count 1013.706849
Date of Last Circuit Trim 2019
Circuit 5 Year Average (SADI) 124.8173294
Reporting Year (SAIDI) 168.018002
Circuit 5 Year Average (SAIFI) 0.867242283
Reporting Year (SAIFI) 1.76185058

Outage Causes	
Cause	Percentage (%)
000 Power supply	0%
100 Construction	7.14%
110 Maintenance	9.52%
190 Other planned	0%
300 Material or equipment fault/failure	14.29%
310 Installation fault	0%
320 Conductor sag or inadequate clearance	0%
340 Overload	0%
350 Miscoordination of protection devices	0%
360 Other equipment installation/design	2.38%
400 Decay/age of material/equipment	0%
420 Tree growth	0%
430 Tree failure from overhang or dead tree without ice/snow	16.67%
435 Tree failure from outside of ROW	4.76%
440 Trees with ice/snow	0%
470 Borrower crew cuts tree	0%
490 Maintenance, other	2.38%
500 Lightning	4.76%
510 Wind, not trees	0%
520 Ice, sleet, frost, not trees	0%
530 Flood	0%
540 Storm	2.38%
590 Weather, other	0%
600 Animal/bird	2.38%
630 Squirrel	16.67%
690 Animal, other	0%
700 Customer-caused	0%
710 Motor vehicle	4.76%
715 Farming Equipment	0%
720 Aircraft	0%
730 Fire	0%
740 Public cuts tree	2.38%
750 Vandalism	0%
760 Switching error or caused by construction or maintenance	0%
790 Public, other	0%
800 Other	2.38%
999 Cause unknown	7.14%

100%

Corrective Action Plan
 No corrective action is planned.

Substation Name Freemont
Substation Number 51
Circuit Name Bonds Rd
Circuit Number 51254
Circuit Location 51254-Bonds Rd
Total Circuit Length (Miles) 17.5
Customer Count 119.980821
Date of Last Circuit Trim 2019
Circuit 5 Year Average (SADI) 185.769569
Reporting Year (SAIDI) 485.502595
Circuit 5 Year Average (SAIFI) 1.136046734
Reporting Year (SAIFI) 3.033818213

Outage Causes	
Cause	Percentage (%)
000 Power supply	0%
100 Construction	0%
110 Maintenance	10.00%
190 Other planned	0%
300 Material or equipment fault/failure	40.00%
310 Installation fault	0%
320 Conductor sag or inadequate clearance	0%
340 Overload	0%
350 Miscoordination of protection devices	0%
360 Other equipment installation/design	0%
400 Decay/age of material/equipment	0%
420 Tree growth	0%
430 Tree failure from overhang or dead tree without ice/snow	10.00%
435 Tree failure from outside of ROW	0%
440 Trees with ice/snow	0%
470 Borrower crew cuts tree	0%
490 Maintenance, other	0%
500 Lightning	10.00%
510 Wind, not trees	0%
520 Ice, sleet, frost, not trees	0%
530 Flood	0%
540 Storm	0%
590 Weather, other	0%
600 Animal/bird	0%
630 Squirrel	0%
690 Animal, other	0%
700 Customer-caused	0%
710 Motor vehicle	10.00%
715 Farming Equipment	0%
720 Aircraft	0%
730 Fire	0%
740 Public cuts tree	10.00%
750 Vandalism	0%
760 Switching error or caused by construction or maintenance	0%
790 Public, other	0%
800 Other	10.00%
999 Cause unknown	0%

100%

Corrective Action Plan
 No corrective action is planned.

Substation Name Kansas
Substation Number 61
Circuit Name US 45-Folsomdale
Circuit Number 6102
Circuit Location 3102-US 45 Folsomdale
Total Circuit Length (Miles) 29.1
Customer Count 212.583561
Date of Last Circuit Trim 2016
Circuit 5 Year Average (SADI) 85.3535792
Reporting Year (SAIDI) 74.351939
Circuit 5 Year Average (SAIFI) 0.71209885
Reporting Year (SAIFI) 1.10544766

Outage Causes	
Cause	Percentage (%)
000 Power supply	0%
100 Construction	0%
110 Maintenance	8.33%
190 Other planned	0%
300 Material or equipment fault/failure	33.33%
310 Installation fault	8.33%
320 Conductor sag or inadequate clearance	0%
340 Overload	0%
350 Miscoordination of protection devices	0%
360 Other equipment installation/design	0%
400 Decay/age of material/equipment	0%
420 Tree growth	0%
430 Tree failure from overhang or dead tree without ice/snow	8.33%
435 Tree failure from outside of ROW	0%
440 Trees with ice/snow	0%
470 Borrower crew cuts tree	0%
490 Maintenance, other	0%
500 Lightning	8.33%
510 Wind, not trees	0%
520 Ice, sleet, frost, not trees	0%
530 Flood	0%
540 Storm	0%
590 Weather, other	0%
600 Animal/bird	0%
630 Squirrel	8.33%
690 Animal, other	8.33%
700 Customer-caused	0%
710 Motor vehicle	0%
715 Farming Equipment	0%
720 Aircraft	0%
730 Fire	0%
740 Public cuts tree	0%
750 Vandalism	0%
760 Switching error or caused by construction or maintenance	0%
790 Public, other	8.33%
800 Other	0%
999 Cause unknown	8.33%

100%

Corrective Action Plan
 No corrective action is planned.

Substation Name Kansas
Substation Number 61
Circuit Name Melber
Circuit Number 6103
Circuit Location 6103-Melber
Total Circuit Length (Miles) 53.1
Customer Count 536.783561
Date of Last Circuit Trim 2016
Circuit 5 Year Average (SADI) 255.3426474
Reporting Year (SAIDI) 96.005175
Circuit 5 Year Average (SAIFI) 0.8988205
Reporting Year (SAIFI) 0.974321939

Outage Causes	
Cause	Percentage (%)
000 Power supply	0%
100 Construction	17.14%
110 Maintenance	31.43%
190 Other planned	0%
300 Material or equipment fault/failure	0%
310 Installation fault	0%
320 Conductor sag or inadequate clearance	0%
340 Overload	2.86%
350 Miscoordination of protection devices	0%
360 Other equipment installation/design	0%
400 Decay/age of material/equipment	0%
420 Tree growth	0%
430 Tree failure from overhang or dead tree without ice/snow	11.43%
435 Tree failure from outside of ROW	2.86%
440 Trees with ice/snow	0%
470 Borrower crew cuts tree	0%
490 Maintenance, other	0%
500 Lightning	5.71%
510 Wind, not trees	2.86%
520 Ice, sleet, frost, not trees	0%
530 Flood	0%
540 Storm	0%
590 Weather, other	0%
600 Animal/bird	0%
630 Squirrel	5.71%
690 Animal, other	0%
700 Customer-caused	0%
710 Motor vehicle	2.86%
715 Farming Equipment	0%
720 Aircraft	0%
730 Fire	0%
740 Public cuts tree	2.86%
750 Vandalism	0%
760 Switching error or caused by construction or maintenance	0%
790 Public, other	0%
800 Other	0%
999 Cause unknown	14.29%

100%

Corrective Action Plan
 No corrective action is planned.

Substation Name Draffenville
Substation Number 66
Circuit Name Draffenville
Circuit Number 66214
Circuit Location 66214-Draffenville
Total Circuit Length (Miles) 29.3
Customer Count 483.873972
Date of Last Circuit Trim 2019
Circuit 5 Year Average (SADI) 8.5582362
Reporting Year (SAIDI) 12.817387
Circuit 5 Year Average (SAIFI) 0.060958014
Reporting Year (SAIFI) 0.095066076

Outage Causes	
Cause	Percentage (%)
000 Power supply	0%
100 Construction	18.18%
110 Maintenance	18.18%
190 Other planned	0%
300 Material or equipment fault/failure	0%
310 Installation fault	0%
320 Conductor sag or inadequate clearance	0%
340 Overload	0%
350 Miscoordination of protection devices	0%
360 Other equipment installation/design	0%
400 Decay/age of material/equipment	0%
420 Tree growth	0%
430 Tree failure from overhang or dead tree without ice/snow	9.09%
435 Tree failure from outside of ROW	0%
440 Trees with ice/snow	0%
470 Borrower crew cuts tree	0%
490 Maintenance, other	0%
500 Lightning	0%
510 Wind, not trees	0%
520 Ice, sleet, frost, not trees	0%
530 Flood	0%
540 Storm	0%
590 Weather, other	0%
600 Animal/bird	0%
630 Squirrel	9.09%
690 Animal, other	0%
700 Customer-caused	0%
710 Motor vehicle	9.09%
715 Farming Equipment	0%
720 Aircraft	0%
730 Fire	0%
740 Public cuts tree	0%
750 Vandalism	0%
760 Switching error or caused by construction or maintenance	0%
790 Public, other	9.09%
800 Other	0%
999 Cause unknown	27.27%

100%

Corrective Action Plan
 No corrective action is planned.

Substation Name Olivet Church Road
Substation Number 74
Circuit Name Olivet Ch Rd
Circuit Number 74214
Circuit Location 74214-Olivet Ch Rd
Total Circuit Length (Miles) 23.2
Customer Count 563.4
Date of Last Circuit Trim 2015
Circuit 5 Year Average (SADI) 43.8759094
Reporting Year (SAIDI) 58.945686
Circuit 5 Year Average (SAIFI) 0.444898506
Reporting Year (SAIFI) 1.025914093

Outage Causes	
Cause	Percentage (%)
000 Power supply	0%
100 Construction	18.18%
110 Maintenance	54.55%
190 Other planned	0%
300 Material or equipment fault/failure	0%
310 Installation fault	0%
320 Conductor sag or inadequate clearance	0%
340 Overload	0%
350 Miscoordination of protection devices	0%
360 Other equipment installation/design	0%
400 Decay/age of material/equipment	0%
420 Tree growth	0%
430 Tree failure from overhang or dead tree without ice/snow	0%
435 Tree failure from outside of ROW	0%
440 Trees with ice/snow	0%
470 Borrower crew cuts tree	0%
490 Maintenance, other	0%
500 Lightning	0%
510 Wind, not trees	0%
520 Ice, sleet, frost, not trees	0%
530 Flood	0%
540 Storm	0%
590 Weather, other	0%
600 Animal/bird	0%
630 Squirrel	27.27%
690 Animal, other	0%
700 Customer-caused	0%
710 Motor vehicle	0%
715 Farming Equipment	0%
720 Aircraft	0%
730 Fire	0%
740 Public cuts tree	0%
750 Vandalism	0%
760 Switching error or caused by construction or maintenance	0%
790 Public, other	0%
800 Other	0%
999 Cause unknown	0%

100%

Corrective Action Plan
 No corrective action is planned.

Substation Name Olivet Church Road
Substation Number 74
Circuit Name Info Age Park
Circuit Number 74234
Circuit Location 74234-Info Age Park
Total Circuit Length (Miles) 2.7
Customer Count 8.043835
Date of Last Circuit Trim 2015
Circuit 5 Year Average (SAIDI) 49.525
Reporting Year (SAIDI) 101.195511
Circuit 5 Year Average (SAIFI) 0.175
Reporting Year (SAIFI) 0.248637621

Outage Causes

Cause	Percentage (%)
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000 Power supply	0%
100 Construction	0%
110 Maintenance	0%
190 Other planned	0%
300 Material or equipment fault/failure	100.00%
310 Installation fault	0%
320 Conductor sag or inadequate clearance	0%
340 Overload	0%
350 Miscoordination of protection devices	0%
360 Other equipment installation/design	0%
400 Decay/age of material/equipment	0%
420 Tree growth	0%
430 Tree failure from overhang or dead tree without ice/snow	0%
435 Tree failure from outside of ROW	0%
440 Trees with ice/snow	0%
470 Borrower crew cuts tree	0%
490 Maintenance, other	0%
500 Lightning	0%
510 Wind, not trees	0%
520 Ice, sleet, frost, not trees	0%
530 Flood	0%
540 Storm	0%
590 Weather, other	0%
600 Animal/bird	0%
630 Squirrel	0%
690 Animal, other	0%
700 Customer-caused	0%
710 Motor vehicle	0%
715 Farming Equipment	0%
720 Aircraft	0%
730 Fire	0%
740 Public cuts tree	0%
750 Vandalism	0%
760 Switching error or caused by construction or maintenance	0%
790 Public, other	0%
800 Other	0%
999 Cause unknown	0%

100%

Corrective Action Plan
 No corrective action is planned.

Substation Name Grand Rivers
Substation Number 76
Circuit Name Pelican-GR #1
Circuit Number 7604
Circuit Location 7604-Pelican GR #1
Total Circuit Length (Miles) 24.3
Customer Count 368.747945
Date of Last Circuit Trim 2016
Circuit 5 Year Average (SADI) 245.773321
Reporting Year (SAIDI) 255.035997
Circuit 5 Year Average (SAIFI) 1.350859973
Reporting Year (SAIFI) 2.850185375

		Outage Causes	
		Cause	Percentage (%)
000	Power supply		0%
100	Construction		0%
110	Maintenance		0%
190	Other planned		0%
300	Material or equipment fault/failure		18.75%
310	Installation fault		0%
320	Conductor sag or inadequate clearance		0%
340	Overload		0%
350	Miscoordination of protection devices		0%
360	Other equipment installation/design		0%
400	Decay/age of material/equipment		0%
420	Tree growth		0%
430	Tree failure from overhang or dead tree without ice/snow		31.25%
435	Tree failure from outside of ROW		0%
440	Trees with ice/snow		0%
470	Borrower crew cuts tree		0%
490	Maintenance, other		0%
500	Lightning		6.25%
510	Wind, not trees		0%
520	Ice, sleet, frost, not trees		0%
530	Flood		0%
540	Storm		0%
590	Weather, other		0%
600	Animal/bird		6.25%
630	Squirrel		12.50%
690	Animal, other		6.25%
700	Customer-caused		0%
710	Motor vehicle		0%
715	Farming Equipment		0%
720	Aircraft		0%
730	Fire		0%
740	Public cuts tree		0%
750	Vandalism		0%
760	Switching error or caused by construction or maintenance		0%
790	Public, other		0%
800	Other		0%
999	Cause unknown		18.75%

100%

Corrective Action Plan
 Circuit is scheduled to be trimmed in 2021.

Substation Name Grand Rivers
Substation Number 76
Circuit Name Averitt-GR #2
Circuit Number 7605
Circuit Location 7605-Averitt GR #2
Total Circuit Length (Miles) 44
Customer Count 650.838356
Date of Last Circuit Trim 2016
Circuit 5 Year Average (SADI) 340.3269802
Reporting Year (SAIDI) 758.721417
Circuit 5 Year Average (SAIFI) 1.965733839
Reporting Year (SAIFI) 6.301103741

Outage Causes	
Cause	Percentage (%)
000 Power supply	0%
100 Construction	0%
110 Maintenance	13.51%
190 Other planned	0%
300 Material or equipment fault/failure	5.41%
310 Installation fault	0%
320 Conductor sag or inadequate clearance	0%
340 Overload	0%
350 Miscoordination of protection devices	0%
360 Other equipment installation/design	0%
400 Decay/age of material/equipment	0%
420 Tree growth	2.70%
430 Tree failure from overhang or dead tree without ice/snow	10.81%
435 Tree failure from outside of ROW	0%
440 Trees with ice/snow	2.70%
470 Borrower crew cuts tree	0%
490 Maintenance, other	2.70%
500 Lightning	2.70%
510 Wind, not trees	0%
520 Ice, sleet, frost, not trees	0%
530 Flood	0%
540 Storm	0%
590 Weather, other	0%
600 Animal/bird	10.81%
630 Squirrel	18.92%
690 Animal, other	2.70%
700 Customer-caused	0%
710 Motor vehicle	13.51%
715 Farming Equipment	0%
720 Aircraft	0%
730 Fire	0%
740 Public cuts tree	0%
750 Vandalism	0%
760 Switching error or caused by construction or maintenance	0%
790 Public, other	0%
800 Other	2.70%
999 Cause unknown	10.81%

100%

Corrective Action Plan

Large tree failure that circuit out, but 2-3 time circuit was out due to Osprey nests. JPEC has installed nesting deterrents to limit Osprey caused outages. Circuit is scheduled to be trimmed in 2021.

Substation Name Strawberry Hill
Substation Number 77
Circuit Name Hansen Rd-Top Circuit
Circuit Number 7702
Circuit Location 7702-Hansen Rd
Total Circuit Length (Miles) 30.2
Customer Count 651.320547
Date of Last Circuit Trim 2015
Circuit 5 Year Average (SADI) 149.950128
Reporting Year (SAIDI) 126.308006
Circuit 5 Year Average (SAIFI) 1.275817744
Reporting Year (SAIFI) 1.547625059

Outage Causes	
Cause	Percentage (%)
000 Power supply	0%
100 Construction	6.06%
110 Maintenance	51.52%
190 Other planned	0%
300 Material or equipment fault/failure	9.09%
310 Installation fault	0%
320 Conductor sag or inadequate clearance	0%
340 Overload	0%
350 Miscoordination of protection devices	0%
360 Other equipment installation/design	0%
400 Decay/age of material/equipment	0%
420 Tree growth	3.03%
430 Tree failure from overhang or dead tree without ice/snow	0%
435 Tree failure from outside of ROW	0%
440 Trees with ice/snow	0%
470 Borrower crew cuts tree	0%
490 Maintenance, other	0%
500 Lightning	0%
510 Wind, not trees	3.03%
520 Ice, sleet, frost, not trees	0%
530 Flood	0%
540 Storm	15.15%
590 Weather, other	0%
600 Animal/bird	3.03%
630 Squirrel	0%
690 Animal, other	0%
700 Customer-caused	0%
710 Motor vehicle	0%
715 Farming Equipment	0%
720 Aircraft	0%
730 Fire	0%
740 Public cuts tree	0%
750 Vandalism	0%
760 Switching error or caused by construction or maintenance	0%
790 Public, other	0%
800 Other	0%
999 Cause unknown	9.09%

100%

Corrective Action Plan
 No corrective action is planned.

Substation Name Possum Trot
Substation Number 78
Circuit Name Hwy 95 North
Circuit Number 7802
Circuit Location 7802-Possum Trot
Total Circuit Length (Miles) 42.2
Customer Count 536.632876
Date of Last Circuit Trim 2015
Circuit 5 Year Average (SAIDI) 41.4406742
Reporting Year (SAIDI) 160.679682
Circuit 5 Year Average (SAIFI) 0.281635988
Reporting Year (SAIFI) 1.205665976

		Outage Causes	
		Cause	Percentage (%)
000 Power supply			0%
100 Construction			13.04%
110 Maintenance			30.43%
190 Other planned			4.35%
300 Material or equipment fault/failure			13.04%
310 Installation fault			0%
320 Conductor sag or inadequate clearance			0%
340 Overload			0%
350 Miscoordination of protection devices			0%
360 Other equipment installation/design			4.35%
400 Decay/age of material/equipment			0%
420 Tree growth			0%
430 Tree failure from overhang or dead tree without ice/snow			0%
435 Tree failure from outside of ROW			0%
440 Trees with ice/snow			0%
470 Borrower crew cuts tree			0%
490 Maintenance, other			0%
500 Lightning			4.35%
510 Wind, not trees			0%
520 Ice, sleet, frost, not trees			0%
530 Flood			0%
540 Storm			0%
590 Weather, other			0%
600 Animal/bird			0%
630 Squirrel			13.04%
690 Animal, other			4.35%
700 Customer-caused			0%
710 Motor vehicle			0%
715 Farming Equipment			0%
720 Aircraft			0%
730 Fire			0%
740 Public cuts tree			0%
750 Vandalism			0%
760 Switching error or caused by construction or maintenance			0%
790 Public, other			0%
800 Other			0%
999 Cause unknown			13.04%

100%

Corrective Action Plan
 No corrective action is planned.

Substation Name Possum Trot
Substation Number 78
Circuit Name Possum Trot
Circuit Number 7803
Circuit Location 7803-Hwy 95
Total Circuit Length (Miles) 15
Customer Count 194.775342
Date of Last Circuit Trim 2015
Circuit 5 Year Average (SADI) 207.7643836
Reporting Year (SAIDI) 221.070077
Circuit 5 Year Average (SAIFI) 0.714594404
Reporting Year (SAIFI) 2.140928085

Outage Causes	
Cause	Percentage (%)
000 Power supply	0%
100 Construction	0%
110 Maintenance	23.08%
190 Other planned	0%
300 Material or equipment fault/failure	7.69%
310 Installation fault	0%
320 Conductor sag or inadequate clearance	0%
340 Overload	0%
350 Miscoordination of protection devices	0%
360 Other equipment installation/design	0%
400 Decay/age of material/equipment	0%
420 Tree growth	0%
430 Tree failure from overhang or dead tree without ice/snow	15.38%
435 Tree failure from outside of ROW	0%
440 Trees with ice/snow	0%
470 Borrower crew cuts tree	0%
490 Maintenance, other	0%
500 Lightning	7.69%
510 Wind, not trees	0%
520 Ice, sleet, frost, not trees	0%
530 Flood	0%
540 Storm	7.69%
590 Weather, other	0%
600 Animal/bird	0%
630 Squirrel	23.08%
690 Animal, other	0%
700 Customer-caused	0%
710 Motor vehicle	0%
715 Farming Equipment	0%
720 Aircraft	0%
730 Fire	0%
740 Public cuts tree	0%
750 Vandalism	0%
760 Switching error or caused by construction or maintenance	0%
790 Public, other	0%
800 Other	0%
999 Cause unknown	15.38%

100%

Corrective Action Plan
 No corrective action is planned.

Substation Name Possum Trot
Substation Number 78
Circuit Name Industrial Loop North
Circuit Number 7805
Circuit Location 7805-Industrial Loop
Total Circuit Length (Miles) 28.6
Customer Count 208.29863
Date of Last Circuit Trim 2015
Circuit 5 Year Average (SADI) 151.066439
Reporting Year (SAIDI) 201.062292
Circuit 5 Year Average (SAIFI) 1.097456263
Reporting Year (SAIFI) 1.689881494

Outage Causes	
Cause	Percentage (%)
000 Power supply	0%
100 Construction	5.00%
110 Maintenance	5.00%
190 Other planned	0%
300 Material or equipment fault/failure	10.00%
310 Installation fault	0%
320 Conductor sag or inadequate clearance	0%
340 Overload	0%
350 Miscoordination of protection devices	0%
360 Other equipment installation/design	0%
400 Decay/age of material/equipment	0%
420 Tree growth	0%
430 Tree failure from overhang or dead tree without ice/snow	0%
435 Tree failure from outside of ROW	0%
440 Trees with ice/snow	0%
470 Borrower crew cuts tree	0%
490 Maintenance, other	5.00%
500 Lightning	0%
510 Wind, not trees	0%
520 Ice, sleet, frost, not trees	0%
530 Flood	0%
540 Storm	0%
590 Weather, other	0%
600 Animal/bird	0%
630 Squirrel	20.00%
690 Animal, other	0%
700 Customer-caused	5.00%
710 Motor vehicle	15.00%
715 Farming Equipment	5.00%
720 Aircraft	0%
730 Fire	0%
740 Public cuts tree	0%
750 Vandalism	0%
760 Switching error or caused by construction or maintenance	0%
790 Public, other	10.00%
800 Other	0%
999 Cause unknown	20.00%

100%

Corrective Action Plan
 No corrective action is planned.

Substation Name Possum Trot
Substation Number 78
Circuit Name Coal Tek
Circuit Number 7806
Circuit Location 7806-CoalTek
Total Circuit Length (Miles) 4
Customer Count 3
Date of Last Circuit Trim 2015
Circuit 5 Year Average (SADI) 65.1946002
Reporting Year (SAIDI) 94
Circuit 5 Year Average (SAIFI) 0.309095806
Reporting Year (SAIFI) 0.666666667

Outage Causes	
Cause	Percentage (%)
000 Power supply	0%
100 Construction	0%
110 Maintenance	0%
190 Other planned	0%
300 Material or equipment fault/failure	0%
310 Installation fault	0%
320 Conductor sag or inadequate clearance	0%
340 Overload	0%
350 Miscoordination of protection devices	0%
360 Other equipment installation/design	0%
400 Decay/age of material/equipment	0%
420 Tree growth	0%
430 Tree failure from overhang or dead tree without ice/snow	0%
435 Tree failure from outside of ROW	0%
440 Trees with ice/snow	0%
470 Borrower crew cuts tree	0%
490 Maintenance, other	0%
500 Lightning	0%
510 Wind, not trees	0%
520 Ice, sleet, frost, not trees	0%
530 Flood	0%
540 Storm	0%
590 Weather, other	0%
600 Animal/bird	0%
630 Squirrel	0%
690 Animal, other	0%
700 Customer-caused	0%
710 Motor vehicle	0%
715 Farming Equipment	0%
720 Aircraft	0%
730 Fire	0%
740 Public cuts tree	0%
750 Vandalism	0%
760 Switching error or caused by construction or maintenance	0%
790 Public, other	0%
800 Other	0%
999 Cause unknown	100.00%

100%

Corrective Action Plan
 No corrective action is planned.

Substation Name Maxon
Substation Number 79
Circuit Name Maxon Rd
Circuit Number 79214
Circuit Location 79214-Maxon Rd
Total Circuit Length (Miles) 15.4
Customer Count 252.358904
Date of Last Circuit Trim 2017
Circuit 5 Year Average (SADI) 110.4078074
Reporting Year (SAIDI) 160.208335
Circuit 5 Year Average (SAIFI) 0.634118293
Reporting Year (SAIFI) 2.234912226

Outage Causes	
Cause	Percentage (%)
000 Power supply	0%
100 Construction	0%
110 Maintenance	12.50%
190 Other planned	0%
300 Material or equipment fault/failure	12.50%
310 Installation fault	0%
320 Conductor sag or inadequate clearance	0%
340 Overload	0%
350 Miscoordination of protection devices	0%
360 Other equipment installation/design	0%
400 Decay/age of material/equipment	0%
420 Tree growth	12.50%
430 Tree failure from overhang or dead tree without ice/snow	12.50%
435 Tree failure from outside of ROW	0%
440 Trees with ice/snow	0%
470 Borrower crew cuts tree	0%
490 Maintenance, other	0%
500 Lightning	0%
510 Wind, not trees	0%
520 Ice, sleet, frost, not trees	0%
530 Flood	0%
540 Storm	0%
590 Weather, other	0%
600 Animal/bird	0%
630 Squirrel	12.50%
690 Animal, other	0%
700 Customer-caused	0%
710 Motor vehicle	0%
715 Farming Equipment	0%
720 Aircraft	0%
730 Fire	0%
740 Public cuts tree	0%
750 Vandalism	0%
760 Switching error or caused by construction or maintenance	0%
790 Public, other	12.50%
800 Other	12.50%
999 Cause unknown	12.50%

100%

Corrective Action Plan
 No corrective action is planned.