



Jackson Purchase Energy
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March 31, 2014

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APR 01 2015

PUBLIC SERVICE
COMMISSION

Mr. Jeff Derouen
Executive Director
Kentucky Public Service Commission
P.O. Box 615
Frankfort, KY 40602-4636

RE: 2014 Reliability Report

Dear Mr. Derouen,

Please find enclosed Jackson Purchase Energy Corporation's 2013 Reliability report.

If you have any questions please let us know.

Thank You,

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

Scott Ribble, P.E.
VP of Engineering and Operations
Jackson Purchase Energy Corporation



Your Touchstone Energy® Partner
The power of human connections

KENTUCKY PUBLIC SERVICE COMMISSION

[Electric Distribution Utility Annual Reliability Report](#)

Additional pages may be attached as necessary

SECTION 7: VEGETATION MANAGEMENT PLAN REVIEW

JPEC has established a four (4) year cycle on R.O.W. Maintenance and has employed a contractor to handle those responsibilities. JPEC also employs a contract crew that handles mid-cycle trimming as well as all of our in-house construction and maintenance crews have the ability to recognize hazards and trim trees away from the line.

SECTION 8: UTILITY COMMENTS

This past year JPEC reported nearly 340 less outages than in 2013. Of the 37 circuits that fall outside the reporting year SAFI or SADI numbers 19 circuits had fewer outages than in 2013. That's 51% of the circuits reporting fewer outages than last year. When looking at the results, outages due to Maintenance, Equipment Failure, Lightning and Unknown were the major causes of outages for the year. At this time JPEC does not see the need to take any extraordinary measures for any circuit issues that have been identified as reoccurring or problematic at this time. JPEC continues to evaluate the need for work plan projects or system improvements that would be the direct result of outages across our system.

Substation Name Joy
Substation Number 5
Circuit Name Hampton-South
Circuit Number 501
Circuit Location 0501-Hampton South
Total Circuit Length (Miles) 57.3
Customer Count 185.235616
Date of Last Circuit Trim 4/1/12-5/1/12
Circuit 5 Year Average (SADI) 126.8324434
Reporting Year (SAIDI) 245.454956
Circuit 5 Year Average (SAIFI) 1.2777811
Reporting Year (SAIFI) 3.33089291

Outage Causes	
Cause	Percentage (%)
000 Power supply	0
100 Construction	0.142857143
110 Maintenance	0
190 Other planned	0
300 Material or equipment fault/failure	0.142857143
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	0.142857143
440 Trees with ice/snow	0
470 Borrower crew cuts tree	0
490 Maintenance, other	0.142857143
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	0.142857143
690 Animal, other	0
700 Customer-caused	0.285714286
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 Action Needed

Substation Name Joy
Substation Number 5
Circuit Name Lola
Circuit Number 505
Circuit Location 0505-Lola
Total Circuit Length (Miles) 56.1
Customer Count 297.466292
Date of Last Circuit Trim 4/1/12-5/1/12
Circuit 5 Year Average (SAIDI) 182.6999722
Reporting Year (SAIDI) 288.815917
Circuit 5 Year Average (SAIFI) 1.555929249
Reporting Year (SAIFI) 1.569925778

Outage Causes

Cause	Percentage (%)
-------	----------------

000 Power supply	0
100 Construction	0
110 Maintenance	0
190 Other planned	0
300 Material or equipment fault/failure	0.473684211
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	0.052631579
400 Decay/age of material/equipment	0.052631579
420 Tree growth	0
430 Tree failure from overhang or dead tree without ice/snow	0
440 Trees with ice/snow	0
470 Borrower crew cuts tree	0
490 Maintenance, other	0
500 Lightning	0.263157895
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	0.157894737

100%

Corrective Action Plan

No Action Needed

Substation Name Burna
Substation Number 14
Circuit Name Smithland
Circuit Number 1405
Circuit Location 1405-Smithland
Total Circuit Length (Miles) 70.5
Customer Count 359.980821
Date of Last Circuit Trim 1/1/11 - 2/28/11
Circuit 5 Year Average (SAIDI) 78.40550104
Reporting Year (SAIDI) 327.389663
Circuit 5 Year Average (SAIFI) 0.737592984
Reporting Year (SAIFI) 3.297397891

Outage Causes	
Cause	Percentage (%)
000 Power supply	0
100 Construction	0
110 Maintenance	0.033333333
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	0.233333333
440 Trees with ice/snow	0
470 Borrower crew cuts tree	0
490 Maintenance, other	0
500 Lightning	0.1
510 Wind, not trees	0.066666667
520 Ice, sleet, frost, not trees	0
530 Flood	0
540 Storm	0
590 Weather, other	0
600 Animal/bird	0.1
630 Squirrel	0.166666667
690 Animal, other	0.033333333
700 Customer-caused	0.1
710 Motor vehicle	0.033333333
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	0.133333333

100%

Corrective Action Plan

No Action Needed - Circuit due for Trim in 2015

Substation Name Cumberland
Substation Number 15
Circuit Name Quarry
Circuit Number 1503
Circuit Location 1503-Quarry
Total Circuit Length (Miles) 5.5
Customer Count 29.912328
Date of Last Circuit Trim 8/1/08 - 9/1/08
Circuit 5 Year Average (SADI) 99.7620755
Reporting Year (SAIDI) 146.227334
Circuit 5 Year Average (SAIFI) 1.324255486
Reporting Year (SAIFI) 1.337241287

Outage Causes

Cause	Percentage (%)
-------	----------------

000 Power supply	0.2
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
440 Trees with ice/snow	0
470 Borrower crew cuts tree	0
490 Maintenance, other	0
500 Lightning	0.4
510 Wind, not trees	0
520 Ice, sleet, frost, not trees	0
530 Flood	0
540 Storm	0.2
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	0.2

100%

Corrective Action Plan

No Action Needed

Outage Causes

Substation Name LaCenter
Substation Number 26
Circuit Name Oscar
Circuit Number 2602
Circuit Location 2602-Oscar
Total Circuit Length (Miles) 68.3
Customer Count 353.556164
Date of Last Circuit Trim 11/1/11-12/1/11
Circuit 5 Year Average (SAIDI) 68.72869649
Reporting Year (SAIDI) 205.95879
Circuit 5 Year Average (SAIFI) 0.764716938
Reporting Year (SAIFI) 2.169386587

Cause	Percentage (%)
000 Power supply	0
100 Construction	0
110 Maintenance	0.076923077
190 Other planned	0
300 Material or equipment fault/	0.076923077
310 Installation fault	0
320 Conductor sag or inadequa	0
340 Overload	0
350 Miscoordination of protectio	0
360 Other equipment installatio	0
400 Decay/age of material/equip	0.076923077
420 Tree growth	0.076923077
430 Tree failure from overhang	0.076923077
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	0.076923077
630 Squirrel	0.076923077
690 Animal, other	0.076923077
700 Customer-caused	0
710 Motor vehicle	0.076923077
715 Farming Equipment	0.076923077
720 Aircraft	0
730 Fire	0
740 Public cuts tree	0
750 Vandalism	0
760 Switching error or caused b	0
790 Public, other	0
800 Other	0
999 Cause unknown	0.230769231

100%

Corrective Action Plan

No Action Needed

Outage Causes

Substation Name Kevil
Substation Number 28
Circuit Name Kelley Rd
Circuit Number 2803
Circuit Location 2803-Kelley Rd
Total Circuit Length (Miles) 66
Customer Count 409.09041
Date of Last Circuit Trim 10/16/2013 - 12/4/13
Circuit 5 Year Average (SADI) 211.0366265
Reporting Year (SAIDI) 227.773611
Circuit 5 Year Average (SAIFI) 1.712451546
Reporting Year (SAIFI) 3.282892894

Cause	Percentage (%)
000 Power supply	0
100 Construction	0
110 Maintenance	0
190 Other planned	0.0625
300 Material or equipment fault/	0.0625
310 Installation fault	0
320 Conductor sag or inadequa	0
340 Overload	0
350 Miscoordination of protectio	0
360 Other equipment installatio	0
400 Decay/age of material/equip	0
420 Tree growth	0.0625
430 Tree failure from overhang	0.0625
440 Trees with ice/snow	0
470 Borrower crew cuts tree	0
490 Maintenance, other	0
500 Lightning	0.125
510 Wind, not trees	0
520 Ice, sleet, frost, not trees	0
530 Flood	0
540 Storm	0.0625
590 Weather, other	0
600 Animal/bird	0
630 Squirrel	0.0625
690 Animal, other	0.0625
700 Customer-caused	0
710 Motor vehicle	0.125
715 Farming Equipment	0
720 Aircraft	0
730 Fire	0
740 Public cuts tree	0
750 Vandalism	0
760 Switching error or caused b	0
790 Public, other	0
800 Other	0
999 Cause unknown	0.3125

100%

Corrective Action Plan

No Action Needed

Outage Causes

Substation Name High Point
Substation Number 29
Circuit Name High Point
Circuit Number 2901
Circuit Location 2901-High Point
Total Circuit Length (Miles) 30.7
Customer Count 195.147945
Date of Last Circuit Trim 8/1/11-9/1/11
Circuit 5 Year Average (SAIDI) 82.38872079
Reporting Year (SAIDI) 171.551896
Circuit 5 Year Average (SAIFI) 0.905926364
Reporting Year (SAIFI) 3.120709265

Cause	Percentage (%)
000 Power supply	0
100 Construction	0
110 Maintenance	0.181818182
190 Other planned	0
300 Material or equipment fault/	0
310 Installation fault	0.090909091
320 Conductor sag or inadequa	0
340 Overload	0
350 Miscoordination of protectio	0
360 Other equipment installatio	0
400 Decay/age of material/equip	0
420 Tree growth	0
430 Tree failure from overhang	0.181818182
440 Trees with ice/snow	0.181818182
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	0.181818182
715 Farming Equipment	0
720 Aircraft	0
730 Fire	0
740 Public cuts tree	0
750 Vandalism	0
760 Switching error or caused b	0
790 Public, other	0
800 Other	0
999 Cause unknown	0.181818182

100%

Corrective Action Plan

No Action Needed

Outage Causes

Substation Name High Point
Substation Number 29
Circuit Name Carneal Rd
Circuit Number 2902
Circuit Location 2902-Carneal Rd
Total Circuit Length (Miles) 27.9
Customer Count 177.679452
Date of Last Circuit Trim 8/1/11-9/1/11
Circuit 5 Year Average (SAIDI) 92.77669564
Reporting Year (SAIDI) 478.710391
Circuit 5 Year Average (SAIFI) 1.920305457
Reporting Year (SAIFI) 1.575871587

Cause	Percentage (%)
000 Power supply	0
100 Construction	0
110 Maintenance	0.642857143
190 Other planned	0
300 Material or equipment fault/	0
310 Installation fault	0
320 Conductor sag or inadequa	0
340 Overload	0
350 Miscoordination of protectio	0
360 Other equipment installatio	0
400 Decay/age of material/equip	0
420 Tree growth	0
430 Tree failure from overhang	0.142857143
440 Trees with ice/snow	0
470 Borrower crew cuts tree	0
490 Maintenance, other	0
500 Lightning	0.071428571
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	0.071428571
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 b	0
790 Public, other	0
800 Other	0
999 Cause unknown	0.071428571

100%

Corrective Action Plan

No Action Needed

Outage Causes

Substation Name Ledbetter
Substation Number 31
Circuit Name US 60 East
Circuit Number 3102
Circuit Location 3102-US 60 East
Total Circuit Length (Miles) 52.8
Customer Count 315.887671
Date of Last Circuit Trim 6/21/13 - 7/19/13
Circuit 5 Year Average (SAIDI) 170.2567206
Reporting Year (SAIDI) 164.403377
Circuit 5 Year Average (SAIFI) 2.178078909
Reporting Year (SAIFI) 2.212811908

Cause	Percentage (%)
000 Power supply	0
100 Construction	0
110 Maintenance	0
190 Other planned	0
300 Material or equipment fault/	0.153846154
310 Installation fault	0
320 Conductor sag or inadequa	0
340 Overload	0
350 Miscoordination of protectio	0
360 Other equipment installatio	0
400 Decay/age of material/equip	0
420 Tree growth	0
430 Tree failure from overhang	0
440 Trees with ice/snow	0.153846154
470 Borrower crew cuts tree	0
490 Maintenance, other	0
500 Lightning	0.307692308
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	0.076923077
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 b	0
790 Public, other	0
800 Other	0.076923077
999 Cause unknown	0.230769231

100%

Corrective Action Plan

No Action Needed

Outage Causes

Substation Name Ledbetter
Substation Number 31
Circuit Name River Crossing
Circuit Number 3103
Circuit Location 3103-River Crossing
Total Circuit Length (Miles) 5.1
Customer Count 33.915068
Date of Last Circuit Trim 6/21/13 - 7/19/13
Circuit 5 Year Average (SADI) 35.66839827
Reporting Year (SAIDI) 112.988126
Circuit 5 Year Average (SAIFI) 0.569047619
Reporting Year (SAIFI) 1.031989675

Cause	Percentage (%)
000 Power supply	0
100 Construction	0
110 Maintenance	0
190 Other planned	0
300 Material or equipment fault/failure	0.5
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
440 Trees with ice/snow	0
470 Borrower crew cuts tree	0
490 Maintenance, other	0
500 Lightning	0.5
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 Action Needed

Outage Causes

Substation Name Ledbetter
Substation Number 31
Circuit Name Ledbetter
Circuit Number 3104
Circuit Location 3104-Ledbetter
Total Circuit Length (Miles) 83.4
Customer Count 1009.789041
Date of Last Circuit Trim 6/21/13 - 7/19/13
Circuit 5 Year Average (SADI) 112.6902775
Reporting Year (SAIDI) 234.654953
Circuit 5 Year Average (SAIFI) 1.639707901
Reporting Year (SAIFI) 2.364850383

Cause	Percentage (%)
000 Power supply	0
100 Construction	0
110 Maintenance	0.1
190 Other planned	0
300 Material or equipment fault/	0.166666667
310 Installation fault	0
320 Conductor sag or inadequa	0
340 Overload	0
350 Miscoordination of protectio	0
360 Other equipment installatio	0
400 Decay/age of material/equip	0
420 Tree growth	0
430 Tree failure from overhang	0.166666667
440 Trees with ice/snow	0
470 Borrower crew cuts tree	0
490 Maintenance, other	0
500 Lightning	0.1
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	0.2
690 Animal, other	0
700 Customer-caused	0.033333333
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 b	0
790 Public, other	0
800 Other	0
999 Cause unknown	0.233333333

100%

Corrective Action Plan

No Action Needed

Outage Causes

Substation Name Smithland
Substation Number 32
Circuit Name Smithland
Circuit Number 3201
Circuit Location 3201-Smithland
Total Circuit Length (Miles) 45
Customer Count 392.964383
Date of Last Circuit Trim 10/29/10 - 12/10/10
Circuit 5 Year Average (SADI) 252.645041
Reporting Year (SAIDI) 416.740058
Circuit 5 Year Average (SAIFI) 2.294385697
Reporting Year (SAIFI) 4.280286135

Cause	Percentage (%)
000 Power supply	0
100 Construction	0.055555556
110 Maintenance	0.166666667
190 Other planned	0
300 Material or equipment fault/	0.222222222
310 Installation fault	0
320 Conductor sag or inadequa	0
340 Overload	0
350 Miscoordination of protectio	0
360 Other equipment installatio	0
400 Decay/age of material/equip	0.055555556
420 Tree growth	0
430 Tree failure from overhang	0.055555556
440 Trees with ice/snow	0
470 Borrower crew cuts tree	0
490 Maintenance, other	0.055555556
500 Lightning	0.055555556
510 Wind, not trees	0
520 Ice, sleet, frost, not trees	0
530 Flood	0
540 Storm	0.055555556
590 Weather, other	0
600 Animal/bird	0.111111111
630 Squirrel	0
690 Animal, other	0
700 Customer-caused	0.166666667
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 b	0
790 Public, other	0
800 Other	0
999 Cause unknown	0

100%

Corrective Action Plan

No Action Needed

Outage Causes

Substation Name Smithland
Substation Number 32
Circuit Name Tiline
Circuit Number 3202
Circuit Location 3202-Tiline
Total Circuit Length (Miles) 130.6
Customer Count 543.39178
Date of Last Circuit Trim 10/29/10 - 12/10/10
Circuit 5 Year Average (SAIDI) 398.5358245
Reporting Year (SAIDI) 480.925567
Circuit 5 Year Average (SAIFI) 3.106604085
Reporting Year (SAIFI) 5.491433823

Cause	Percentage (%)
000 Power supply	0
100 Construction	0
110 Maintenance	0.054054054
190 Other planned	0
300 Material or equipment fault/	0.135135135
310 Installation fault	0
320 Conductor sag or inadequa	0
340 Overload	0
350 Miscoordination of protectio	0
360 Other equipment installatio	0
400 Decay/age of material/equip	0
420 Tree growth	0
430 Tree failure from overhang	0.108108108
440 Trees with ice/snow	0.027027027
470 Borrower crew cuts tree	0
490 Maintenance, other	0
500 Lightning	0.108108108
510 Wind, not trees	0
520 Ice, sleet, frost, not trees	0
530 Flood	0
540 Storm	0.027027027
590 Weather, other	0
600 Animal/bird	0.027027027
630 Squirrel	0.108108108
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 b	0
790 Public, other	0.027027027
800 Other	0
999 Cause unknown	0.378378378

100%

Corrective Action Plan

No Action Needed

Substation Name Little Union
Substation Number 39
Circuit Name US 60 West
Circuit Number 3902
Circuit Location 3902-US 60 West
Total Circuit Length (Miles) 36.7
Customer Count 441.221917
Date of Last Circuit Trim 10/16/2013 - 12/28/13
Circuit 5 Year Average (SADI) 109.6938851
Reporting Year (SAIDI) 68.888237
Circuit 5 Year Average (SAIFI) 1.063086129
Reporting Year (SAIFI) 1.353060619

Outage Causes

Cause	Percentage (%)
000 Power supply	0
100 Construction	0
110 Maintenance	0.083333333
190 Other planned	0
300 Material or equipment fault/	0.166666667
310 Installation fault	0
320 Conductor sag or inadequa	0
340 Overload	0
350 Miscoordination of protectio	0
360 Other equipment installatio	0
400 Decay/age of material/equi	0
420 Tree growth	0
430 Tree failure from overhang	0
440 Trees with ice/snow	0
470 Borrower crew cuts tree	0
490 Maintenance, other	0
500 Lightning	0.083333333
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	0.083333333
630 Squirrel	0.166666667
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 b	0
790 Public, other	0
800 Other	0
999 Cause unknown	0.416666667

100%

Corrective Action Plan

No Action Needed

Outage Causes

Substation Name Husbands Road
Substation Number 40
Circuit Name Husbands Rd
Circuit Number 4024
Circuit Location 4024-Husbands Rd
Total Circuit Length (Miles) 44.2
Customer Count 773.946674
Date of Last Circuit Trim 2014
Circuit 5 Year Average (SAIDI) 61.38009795
Reporting Year (SAIDI) 169.5439808
Circuit 5 Year Average (SAIFI) 1.121324473
Reporting Year (SAIFI) 2.104796176

Cause	Percentage (%)
000 Power supply	0
100 Construction	0.038461538
110 Maintenance	0.192307692
190 Other planned	0
300 Material or equipment fault/	0.153846154
310 Installation fault	0
320 Conductor sag or inadequa	0
340 Overload	0
350 Miscoordination of protectio	0
360 Other equipment installatio	0.038461538
400 Decay/age of material/equip	0.038461538
420 Tree growth	0
430 Tree failure from overhang	0.038461538
440 Trees with ice/snow	0
470 Borrower crew cuts tree	0
490 Maintenance, other	0
500 Lightning	0.115384615
510 Wind, not trees	0.038461538
520 Ice, sleet, frost, not trees	0
530 Flood	0
540 Storm	0
590 Weather, other	0
600 Animal/bird	0
630 Squirrel	0.153846154
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 b	0
790 Public, other	0
800 Other	0
999 Cause unknown	0.192307692

100%

Corrective Action Plan

No Action Needed

Outage Causes

Substation Name Husbands Road
Substation Number 40
Circuit Name Lydon Rd
Circuit Number 4034
Circuit Location 4034-Lydon Rd
Total Circuit Length (Miles) 31.6
Customer Count 449.453476
Date of Last Circuit Trim 2014
Circuit 5 Year Average (SAIDI) 98.1153338
Reporting Year (SAIDI) 62.38910476
Circuit 5 Year Average (SAIFI) 0.875694959
Reporting Year (SAIFI) 1.030139992

Cause	Percentage (%)
000 Power supply	0
100 Construction	0
110 Maintenance	0.222222222
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
440 Trees with ice/snow	0.111111111
470 Borrower crew cuts tree	0
490 Maintenance, other	0.111111111
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	0.111111111
630 Squirrel	0.111111111
690 Animal, other	0
700 Customer-caused	0.222222222
710 Motor vehicle	0.111111111
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 Action Needed

Substation Name Husbands Road
Substation Number 40
Circuit Name Clarkline Rd
Circuit Number 4044
Circuit Location 4044-Clarkline Rd
Total Circuit Length (Miles) 26.4
Customer Count 302.5373345
Date of Last Circuit Trim 2014
Circuit 5 Year Average (SADI) 59.44674826
Reporting Year (SAIDI) 96.82110821
Circuit 5 Year Average (SAIFI) 1.13674737
Reporting Year (SAIFI) 2.049333848

Outage Causes	
Cause	Percentage (%)
000 Power supply	0
100 Construction	0
110 Maintenance	0.090909091
190 Other planned	0
300 Material or equipment fault/failure	0.090909091
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	0.090909091
430 Tree failure from overhang or dead tree without ice/snow	0.090909091
440 Trees with ice/snow	0
470 Borrower crew cuts tree	0
490 Maintenance, other	0
500 Lightning	0.090909091
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	0.090909091
630 Squirrel	0.090909091
690 Animal, other	0
700 Customer-caused	0.181818182
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	0.090909091
790 Public, other	0
800 Other	0.090909091
999 Cause unknown	0

100%

Corrective Action Plan

No Action Needed

Substation Name Reidland
Substation Number 41
Circuit Name Reidland Water
Circuit Number 4102
Circuit Location 102-Reidland Water
Total Circuit Length (Miles) 3
Customer Count 312.301369
Date of Last Circuit Trim 10/1/13-11/1/13
Circuit 5 Year Average (SADI) 39.19567433
Reporting Year (SAIDI) 204.814984
Circuit 5 Year Average (SAIFI) 0.603352709
Reporting Year (SAIFI) 1.780331613

Outage Causes

Cause	Percentage (%)
-------	----------------

000 Power supply	0
100 Construction	0
110 Maintenance	0.125
190 Other planned	0
300 Material or equipment fault/failure	0.1875
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	0.0625
440 Trees with ice/snow	0
470 Borrower crew cuts tree	0
490 Maintenance, other	0
500 Lightning	0.0625
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	0.1875
690 Animal, other	0
700 Customer-caused	0.0625
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	0.3125

100%

Corrective Action Plan

No Action Needed

Substation Name Culp
Substation Number 42
Circuit Name Proform
Circuit Number 4201
Circuit Location 4201-Proform
Total Circuit Length (Miles) 32.8
Customer Count 416.972602
Date of Last Circuit Trim 2014
Circuit 5 Year Average (SADI) 39.10149654
Reporting Year (SAIDI) 79.974079
Circuit 5 Year Average (SAIFI) 0.484456991
Reporting Year (SAIFI) 1.139163575

Outage Causes	
Cause	Percentage (%)
000 Power supply	0
100 Construction	0
110 Maintenance	0
190 Other planned	0.1
300 Material or equipment fault/failure	0.1
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	0.1
420 Tree growth	0
430 Tree failure from overhang or dead tree without ice/snow	0.2
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	0.3
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	0.2

100%

Corrective Action Plan

No Action Needed

Substation Name Culp
Substation Number 42
Circuit Name Little Cypress
Circuit Number 4202
Circuit Location 1202-Little Cypress
Total Circuit Length (Miles) 8.3
Customer Count 51.917808
Date of Last Circuit Trim 2014
Circuit 5 Year Average (SADI) 26.71541734
Reporting Year (SAIDI) 29.931926
Circuit 5 Year Average (SAIFI) 0.388295057
Reporting Year (SAIFI) 0.231134566

Outage Causes

Cause	Percentage (%)
-------	----------------

000 Power supply	0
100 Construction	0
110 Maintenance	0.5
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	0.25
440 Trees with ice/snow	0
470 Borrower crew cuts tree	0
490 Maintenance, other	0
500 Lightning	0.25
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	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 Action Needed

Substation Name Culp
Substation Number 42
Circuit Name Possum Trot
Circuit Number 4203
Circuit Location 4203-Possum Trot
Total Circuit Length (Miles) 18.6
Customer Count 207.032876
Date of Last Circuit Trim 2014
Circuit 5 Year Average (SAIDI) 65.016533
Reporting Year (SAIDI) 72.906295
Circuit 5 Year Average (SAIFI) 0.721101262
Reporting Year (SAIFI) 0.613429144

Outage Causes	
Cause	Percentage (%)
000 Power supply	0
100 Construction	0
110 Maintenance	0.333333333
190 Other planned	0
300 Material or equipment fault/failure	0.222222222
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/lage of material/equipment	0
420 Tree growth	0
430 Tree failure from overhang or dead tree without ice/snow	0
440 Trees with ice/snow	0
470 Borrower crew cuts tree	0
490 Maintenance, other	0
500 Lightning	0.222222222
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	0.222222222
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 Action Needed

Substation Name Vulcan
Substation Number 45
Circuit Name Kinder Morgan 1
Circuit Number 4504
Circuit Location 04-Kinder Morgan 1
Total Circuit Length (Miles) 7.7
Customer Count 34.676712
Date of Last Circuit Trim 0
Circuit 5 Year Average (SADI) 40.50555556
Reporting Year (SAIDI) 284.052305
Circuit 5 Year Average (SAIFI) 0.327777778
Reporting Year (SAIFI) 1.960970233

Outage Causes

Cause	Percentage (%)
-------	----------------

000 Power supply	0
100 Construction	0
110 Maintenance	0
190 Other planned	0
300 Material or equipment fault/failure	0.5
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
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	0.5
999 Cause unknown	0

100%

Corrective Action Plan

No Action Needed

Substation Name New York
Substation Number 47
Circuit Name US 286 East-Gage
Circuit Number 4702
Circuit Location 4702-US 286 East Gage
Total Circuit Length (Miles) 63.9
Customer Count 257.835616
Date of Last Circuit Trim 10/19/12 - 1/4/13
Circuit 5 Year Average (SADI) 101.8995191
Reporting Year (SAIDI) 43.035171
Circuit 5 Year Average (SAIFI) 0.965832035
Reporting Year (SAIFI) 0.480926576

Outage Causes

Cause	Percentage (%)
-------	----------------

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

Corrective Action Plan

No Action Needed

0%

Substation Name Lovelaceville
Substation Number 49
Circuit Name Cunningham
Circuit Number 4903
Circuit Location 4903-Cunningham
Total Circuit Length (Miles) 64.3
Customer Count 529.005479
Date of Last Circuit Trim 12/2/11 - 1/27/12
Circuit 5 Year Average (SADI) 241.8550425
Reporting Year (SAIDI) 186.70317
Circuit 5 Year Average (SAIFI) 1.673022714
Reporting Year (SAIFI) 2.154987132

Outage Causes		
Cause		Percentage (%)
000 Power supply		0
100 Construction		0
110 Maintenance		0.0625
190 Other planned		0
300 Material or equipment fault/failure		0.1875
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		0.0625
440 Trees with ice/snow		0
470 Borrower crew cuts tree		0
490 Maintenance, other		0
500 Lightning		0
510 Wind, not trees		0.125
520 Ice, sleet, frost, not trees		0
530 Flood		0
540 Storm		0
590 Weather, other		0
600 Animal/bird		0
630 Squirrel		0.125
690 Animal, other		0.0625
700 Customer-caused		0
710 Motor vehicle		0
715 Farming Equipment		0
720 Aircraft		0
730 Fire		0
740 Public cuts tree		0.0625
750 Vandalism		0
760 Switching error or caused by construction or maintenance		0
790 Public, other		0.0625
800 Other		0.0625
999 Cause unknown		0.1875

100%

Corrective Action Plan

No Action Needed

Substation Name Krebs Station Road
Substation Number 50
Circuit Name Browns Plating
Circuit Number 5001
Circuit Location 5001-Browns Plating
Total Circuit Length (Miles) 49.9
Customer Count 507.947945
Date of Last Circuit Trim 3/29/13 - 4/19/13
Circuit 5 Year Average (SADI) 164.3508599
Reporting Year (SAIDI) 169.084255
Circuit 5 Year Average (SAIFI) 1.806700722
Reporting Year (SAIFI) 2.161638827

Outage Causes	
Cause	Percentage (%)
000 Power supply	0
100 Construction	0
110 Maintenance	0.111111111
190 Other planned	0
300 Material or equipment fault/failure	0.166666667
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	0.055555556
440 Trees with ice/snow	0
470 Borrower crew cuts tree	0
490 Maintenance, other	0
500 Lightning	0.111111111
510 Wind, not trees	0
520 Ice, sleet, frost, not trees	0
530 Flood	0
540 Storm	0.055555556
590 Weather, other	0
600 Animal/bird	0
630 Squirrel	0.166666667
690 Animal, other	0.055555556
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	0.055555556
790 Public, other	0
800 Other	0
999 Cause unknown	0.222222222

100%

Corrective Action Plan

No Action Needed

Substation Name Krebs Station Road
Substation Number 50
Circuit Name Old US 45
Circuit Number 5002
Circuit Location 5002-Old US 45
Total Circuit Length (Miles) 105.1
Customer Count 850.879452
Date of Last Circuit Trim 3/29/13 - 4/19/13
Circuit 5 Year Average (SADI) 153.7298682
Reporting Year (SAIDI) 89.64137
Circuit 5 Year Average (SAIFI) 1.097914699
Reporting Year (SAIFI) 2.694858825

Outage Causes	
Cause	Percentage (%)
000 Power supply	0
100 Construction	0
110 Maintenance	0.08
190 Other planned	0
300 Material or equipment fault/failure	0.1
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	0.04
430 Tree failure from overhang or dead tree without ice/snow	0.06
440 Trees with ice/snow	0.02
470 Borrower crew cuts tree	0
490 Maintenance, other	0.08
500 Lightning	0.1
510 Wind, not trees	0
520 Ice, sleet, frost, not trees	0.02
530 Flood	0
540 Storm	0
590 Weather, other	0
600 Animal/bird	0.02
630 Squirrel	0.26
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	0.04
800 Other	0.02
999 Cause unknown	0.16

100%

Corrective Action Plan

No Action Needed

Substation Name Krebs Station Road
Substation Number 50
Circuit Name Clinton Road
Circuit Number 5003
Circuit Location 5003-Clinton Rd
Total Circuit Length (Miles) 90.2
Customer Count 715.454794
Date of Last Circuit Trim 3/29/13 - 4/19/13
Circuit 5 Year Average (SADI) 110.1506807
Reporting Year (SAIDI) 129.644808
Circuit 5 Year Average (SAIFI) 1.037948067
Reporting Year (SAIFI) 1.596187501

Outage Causes

Cause	Percentage (%)
-------	----------------

000 Power supply	0
100 Construction	0
110 Maintenance	0.171428571
190 Other planned	0
300 Material or equipment fault/failure	0
310 Installation fault	0
320 Conductor sag or inadequate clearance	0.028571429
340 Overload	0
350 Miscoordination of protection devices	0
360 Other equipment installation/design	0.028571429
400 Decay/age of material/equipment	0
420 Tree growth	0
430 Tree failure from overhang or dead tree without ice/snow	0.085714286
440 Trees with ice/snow	0.028571429
470 Borrower crew cuts tree	0
490 Maintenance, other	0
500 Lightning	0.2
510 Wind, not trees	0.028571429
520 Ice, sleet, frost, not trees	0
530 Flood	0
540 Storm	0.028571429
590 Weather, other	0.028571429
600 Animal/bird	0
630 Squirrel	0.114285714
690 Animal, other	0
700 Customer-caused	0.028571429
710 Motor vehicle	0.028571429
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	0.028571429
999 Cause unknown	0.171428571

100%

Corrective Action Plan

No Action Needed

Substation Name Freemont
Substation Number 51
Circuit Name Mc Neil Lane
Circuit Number 5102
Circuit Location 5102-McNeil Lane
Total Circuit Length (Miles) 45.6
Customer Count 389.832876
Date of Last Circuit Trim 2/19/10 - 6/25/10
Circuit 5 Year Average (SADI) 283.7518663
Reporting Year (SAIDI) 221.874565
Circuit 5 Year Average (SAIFI) 2.536111794
Reporting Year (SAIFI) 2.896112846

Outage Causes

Cause	Percentage (%)
-------	----------------

000 Power supply	0
100 Construction	0
110 Maintenance	0.125
190 Other planned	0
300 Material or equipment fault/failure	0.166666667
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	0.041666667
430 Tree failure from overhang or dead tree without ice/snow	0
440 Trees with ice/snow	0.125
470 Borrower crew cuts tree	0
490 Maintenance, other	0
500 Lightning	0.083333333
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	0.083333333
690 Animal, other	0
700 Customer-caused	0.041666667
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	0.041666667
790 Public, other	0
800 Other	0
999 Cause unknown	0.291666667

100%

Corrective Action Plan

No Action Needed

Substation Name Palma
Substation Number 54
Circuit Name Hwy 95 N to Hwy 62
Circuit Number 5401
Circuit Location 5401-Hwy 95
Total Circuit Length (Miles) 29.2
Customer Count 357.09315
Date of Last Circuit Trim 2014
Circuit 5 Year Average (SAIDI) 86.0259341
Reporting Year (SAIDI) 466.046464
Circuit 5 Year Average (SAIFI) 1.275571859
Reporting Year (SAIFI) 4.528230239

Outage Causes	
Cause	Percentage (%)
000 Power supply	0
100 Construction	0
110 Maintenance	0.285714286
190 Other planned	0
300 Material or equipment fault/failure	0.214285714
310 Installation fault	0.071428571
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	0.071428571
420 Tree growth	0.071428571
430 Tree failure from overhang or dead tree without ice/snow	0.071428571
440 Trees with ice/snow	0
470 Borrower crew cuts tree	0
490 Maintenance, other	0
500 Lightning	0.071428571
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	0.071428571
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	0.071428571

100%

Corrective Action Plan

No Action Needed

Substation Name Palma
Substation Number 54
Circuit Name Palma
Circuit Number 5403
Circuit Location 5403-Palma
Total Circuit Length (Miles) 55.6
Customer Count 716.432876
Date of Last Circuit Trim 2014
Circuit 5 Year Average (SADI) 76.40715051
Reporting Year (SAIDI) 126.031346
Circuit 5 Year Average (SAIFI) 1.023369118
Reporting Year (SAIFI) 2.328201365

Outage Causes

Cause	Percentage (%)
-------	----------------

000 Power supply	0
100 Construction	0
110 Maintenance	0.378378378
190 Other planned	0
300 Material or equipment fault/failure	0.027027027
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	0.027027027
430 Tree failure from overhang or dead tree without ice/snow	0
440 Trees with ice/snow	0.027027027
470 Borrower crew cuts tree	0
490 Maintenance, other	0
500 Lightning	0.054054054
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	0.108108108
690 Animal, other	0.027027027
700 Customer-caused	0.027027027
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	0.054054054
999 Cause unknown	0.27027027

100%

Corrective Action Plan

No Action Needed

Substation Name Kansas
Substation Number 61
Circuit Name US 45-Folsomdale
Circuit Number 6102
Circuit Location 6102-US 45 Folsomdale
Total Circuit Length (Miles) 105.1
Customer Count 217.884931
Date of Last Circuit Trim 6/22/12 - 8/24/12
Circuit 5 Year Average (SAIDI) 89.72206237
Reporting Year (SAIDI) 113.927107
Circuit 5 Year Average (SAIFI) 0.680344614
Reporting Year (SAIFI) 1.083140532

Outage Causes

Cause	Percentage (%)
-------	----------------

000 Power supply	0
100 Construction	0
110 Maintenance	0.142857143
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	0.285714286
440 Trees with ice/snow	0
470 Borrower crew cuts tree	0
490 Maintenance, other	0
500 Lightning	0.142857143
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	0.285714286
690 Animal, other	0
700 Customer-caused	0
710 Motor vehicle	0
715 Farming Equipment	0.142857143
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 Action Needed

Substation Name Kansas
Substation Number 61
Circuit Name Pottsville
Circuit Number 6104
Circuit Location 6104-Pottsville
Total Circuit Length (Miles) 46.9
Customer Count 348.016438
Date of Last Circuit Trim 6/22/12 - 8/24/12
Circuit 5 Year Average (SADI) 164.4397094
Reporting Year (SAIDI) 402.785571
Circuit 5 Year Average (SAIFI) 1.835092372
Reporting Year (SAIFI) 3.700974607

Outage Causes

Cause	Percentage (%)
000 Power supply	0
100 Construction	0
110 Maintenance	0.16
190 Other planned	0
300 Material or equipment fault/failure	0.08
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	0.12
440 Trees with ice/snow	0
470 Borrower crew cuts tree	0
490 Maintenance, other	0
500 Lightning	0.12
510 Wind, not trees	0
520 Ice, sleet, frost, not trees	0.04
530 Flood	0
540 Storm	0.12
590 Weather, other	0
600 Animal/bird	0.04
630 Squirrel	0.08
690 Animal, other	0
700 Customer-caused	0.04
710 Motor vehicle	0.08
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	0.12

100%

Corrective Action Plan

No Action Needed

Substation Name Olivet Church Road
Substation Number 74
Circuit Name Olivet Ch Rd
Circuit Number 7401
Circuit Location 7401-Info Age Park
Total Circuit Length (Miles) 21.1
Customer Count 532.980821
Date of Last Circuit Trim 6/1/11 - 7/31/11
Circuit 5 Year Average (SADI) 54.59789097
Reporting Year (SAIDI) 49.679085
Circuit 5 Year Average (SAIFI) 0.951996689
Reporting Year (SAIFI) 1.005664705

Outage Causes	
Cause	Percentage (%)
000 Power supply	0
100 Construction	0.25
110 Maintenance	0.25
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
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	0.25
715 Farming Equipment	0.25
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 Action Needed

Outage Causes

Substation Name Possum Trot
Substation Number 78
Circuit Name Industrial Loop North
Circuit Number 7805
Circuit Location 7805-Industrial Loop
Total Circuit Length (Miles) 28.8
Customer Count 200.380821
Date of Last Circuit Trim 2014
Circuit 5 Year Average (SADI) 201.1578236
Reporting Year (SAIDI) 257.834056
Circuit 5 Year Average (SAIFI) 2.403178541
Reporting Year (SAIFI) 2.854564609

Cause	Percentage (%)
000 Power supply	0
100 Construction	0
110 Maintenance	0
190 Other planned	0
300 Material or equipment fault/failure	0.076923077
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	0.230769231
440 Trees with ice/snow	0
470 Borrower crew cuts tree	0
490 Maintenance, other	0
500 Lightning	0.307692308
510 Wind, not trees	0
520 Ice, sleet, frost, not trees	0
530 Flood	0
540 Storm	0.076923077
590 Weather, other	0
600 Animal/bird	0
630 Squirrel	0.076923077
690 Animal, other	0
700 Customer-caused	0.076923077
710 Motor vehicle	0.076923077
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	0.076923077

100%

Corrective Action Plan

No Action Needed

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 3.413698
Date of Last Circuit Trim 2014
Circuit 5 Year Average (SAIDI) 31.5
Reporting Year (SAIDI) 118.639668
Circuit 5 Year Average (SAIFI) 0.7
Reporting Year (SAIFI) 0.878812361

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	1
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 Action Needed

Substation Name Maxon
Substation Number 79
Circuit Name Meredith Rd
Circuit Number 7914
Circuit Location 7914-Meredith Rd
Total Circuit Length (Miles) 2.9
Customer Count 10
Date of Last Circuit Trim 0
Circuit 5 Year Average (SADI) 25.53333333
Reporting Year (SAIDI) 22.6
Circuit 5 Year Average (SAIFI) 0.2
Reporting Year (SAIFI) 0.4

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
440 Trees with ice/snow	0
470 Borrower crew cuts tree	0
490 Maintenance, other	0
500 Lightning	0.5
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	0.5
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 Action Needed

Substation Name Maxon
Substation Number 79
Circuit Name Maxon Rd
Circuit Number 7924
Circuit Location 7924-Maxon Rd
Total Circuit Length (Miles) 39.9
Customer Count 440.626923
Date of Last Circuit Trim 0
Circuit 5 Year Average (SADI) 5.147126437
Reporting Year (SAIDI) 15.81837
Circuit 5 Year Average (SAIFI) 0.050114943
Reporting Year (SAIFI) 0.095318733

Outage Causes		Percentage (%)
Cause		
000 Power supply		0
100 Construction		0
110 Maintenance		0.363636364
190 Other planned		0
300 Material or equipment fault/failure		0.090909091
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
440 Trees with ice/snow		0
470 Borrower crew cuts tree		0
490 Maintenance, other		0
500 Lightning		0.090909091
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		0.090909091
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		0.363636364

100%

Corrective Action Plan

No Action Needed