

Illinois Commerce Commission
Assessment of AmerenIP's
Reliability Report and Reliability Performance
For Calendar Year 2009

Pursuant to 83 Illinois Administrative Code 411.140

July 12, 2011

1. Executive Summary

Beginning in the year 1999 and at least every three years thereafter, 83 Illinois Administrative Code Part 411.140(a) requires the Commission to assess the annual electric reliability report of each jurisdictional entity and evaluate its reliability performance. This report represents Staff's assessment of AmerenIP's 2009 annual electric reliability report and Staff's evaluation of AmerenIP's reliability performance during 2009.

Pursuant to Section 16-125 of the Illinois Public Utilities Act and the Commission's electric reliability rules in 83 Illinois Administrative Code, Part 411, Illinois Power Company d/b/a AmerenIP (AmerenIP) filed its annual electric reliability report for calendar year 2009 on May 28, 2010. Staff noted that AmerenIP's annual electric reliability report does not comply with 83 Ill Adm. Code 411.120 (b)(3) in two areas. AmerenIP agreed with Staff's findings and filed a revised version of its annual electric reliability report for calendar year 2009 on July 9, 2010.

In 2009, AmerenIP's System Average Interruption Frequency Index ("SAIFI") was 0.99 interruptions, about 43% below the average 1.74 SAIFI reported by the other five utilities. AmerenIP's worst circuit SAIFI was 3.44 in 2009, the second lowest of six reporting utilities. AmerenIP's Customer Average Interruption Duration Index ("CAIDI") was 187 minutes, the third highest of six reporting utilities and 3.5 minutes below the average 190.5 minutes CAIDI reported by the other five utilities. However, a 462 minutes CAIDI at one of AmerenIP's sister utilities (AmerenCIPS) caused the 190.5 minute average for five utilities to be significantly higher than it would otherwise have been. In fact, the other three Illinois electric utilities significantly outperformed the three Ameren utilities by recording much lower CAIDI numbers. AmerenIP's worst circuit CAIDI was 1,661 minutes, the third lowest of six reporting utilities. AmerenIP's Customer Average Interruption Frequency Index ("CAIFI") was 1.6, the lowest of six reporting utilities.

AmerenIP's reliability indices for 2009 compared to 2008 indicate that AmerenIP customers experienced fewer (SAIFI) and shorter (CAIDI) interruptions during 2009. In addition, for customers who experienced interruptions, the AmerenIP CAIFI indicates that those customers experienced fewer interruptions in 2009 than in 2008.

AmerenIP reported that 739 customers exceeded the electric service reliability targets in 2009. Of the 739 customers, AmerenIP reported nine customers (1.2%) experienced more than six interruptions and 651 customers (88%) experienced more than eighteen hours of total interruption duration in each of the last three consecutive years. In

addition, 73 customers (10%) experienced more than eighteen hours of total interruption duration in each of the last four consecutive years, and 6 customers (0.8%) experienced more than eighteen hours of total interruption duration in each of the last five consecutive years. The number of customers who exceeded the electric service reliability targets went down by 13 % from 850 in 2008 to 739 in 2009. The number of customers who exceeded reliability targets in 2009 is much lower than the 1,539 AmerenIP customers who exceeded reliability targets in 2005 and the 5,356 AmerenIP customers who exceeded reliability targets in 2006. On the other hand, the number of customers who exceeded reliability targets in 2009 is still much higher than the 397 AmerenIP customers who exceeded reliability targets in 2007, the 369 AmerenIP customers who exceeded reliability targets in 2004, and the 160 AmerenIP customers who exceeded reliability targets in 2003.

In 2009 AmerenIP had the second highest number of customers who exceeded the reliability targets (739 customers) compared to AmerenCIPS (355 customers), AmerenCILCO (588 customers), Mt. Carmel (three customers), MidAmerican (2,143 customers), and ComEd (182 customers). AmerenIP's 2009 revised annual electric reliability report contains a supplemental report that lists a unique identifying number for every customer who exceeded frequency or duration targets, number of consecutive years each frequency or duration target was exceeded, the cause of the interruption, the actions taken, and the plan to correct the interruption cause(s). AmerenIP reported that storms caused most customer interruptions during 2009. Actions taken and planned by AmerenIP to correct the cause of interruptions seem reasonable.

Compared to 2008 causes of interruptions, Staff noted increases in interruptions related to jurisdictional entity / contractor personnel – errors (“jurisdictional”), transmission, and weather in 2009. Staff encourages AmerenIP to work hard to reduce customer interruptions.

Compared to 2009 capital expenditures, AmerenIP reported that it plans to decrease its distribution and transmission capital expenditures for the next four years. On the other hand, AmerenIP reported that it plans to increase its distribution and transmission O&M for the next four years. AmerenIP planned to decrease its distribution tree trimming expenditures in the years of 2010 through 2012 compared to its actual distribution tree trimming expenditures in 2009. However, AmerenIP's 2008 budgeted distribution tree trimming expenditures for the year 2009 was less than the actual distribution tree trimming expenditures for that year. Finally, AmerenIP reduced its 2009 budgeted tree trimming expenditures for years 2010 and 2011 compared to its 2008 budgeted tree trimming expenditures for those years. In its revised 2009 reliability report, AmerenIP indicated that, due to the reduction in its projected revenue because of the ICC's Final

Order in Ameren Illinois Utilities' recent rate case, Ameren decided to reduce its total spending level as indicated above. In addition, AmerenIP reduced its budgeted tree trimming expenditures for years 2010 and 2011. Yet, AmerenIP claims that it will continue to provide safe and reliable service to meet regulatory requirements.

During 2009 AmerenIP had used Infrared Aerial Patrols to determine which pieces of sub-transmission equipment are currently operating at higher-than-desired temperatures, so mitigation efforts can be planned and scheduled to repair or replace equipment before it fails. Circuits will no longer be inspected from the air starting in 2010, but inspectors will walk pole to pole to test for hot spots. Staff notes that this change, from an inspection from a moving aircraft, to an inspection by people on the ground, is a significant improvement in AmerenIP's practices as long as inspection frequency does not change.

AmerenIP moved its visual inspection cycle for sub-transmission circuits from a two-year to a five-year repeating cycle. In response to a Staff data request, AmerenIP promised to perform the sub-transmission circuit inspection on a four-year repeating cycle as suggested by Liberty recommendation VI 3(B) and provided in the June 10, 2010 Liberty quarterly report to the Commission¹. AmerenIP also moved its visual circuit inspection cycle from four years to five years for the initial phase only due to unexpectedly high numbers of violations.

During 2009, Staff inspected five circuits that AmerenIP listed among its worst performing circuits in its 2009 revised annual reliability report. AmerenIP provided circuit maps to aid Staff during circuit inspections. Some of those maps were incomplete and others were inaccurate. Staff noted and reported reliability problems when inspecting those circuits, and reported its findings to AmerenIP. AmerenIP's response indicated that AmerenIP had already corrected some of those findings, and is scheduled to correct others. Staff will follow up with AmerenIP to make sure that it corrected all Staff findings.

¹ Liberty Consulting Group was hired by the Commission in 2007 to investigate Ameren's preparedness and restoration of its plans and facilities after storms in the summer and early winter of 2006 caused lengthy service interruptions.

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2. Introduction

Beginning in the year 1999 and at least every three years thereafter, 83 Illinois Administrative Code Part 411.140(a) requires the Commission to assess the annual electric reliability report of each jurisdictional entity and evaluate its reliability performance. Code Part 411.140(a)(2) states that the Commission evaluation shall:

- A) Assess the jurisdictional entity's historical performance relative to established reliability targets.
- B) Identify trends in the jurisdictional entity's reliability performance.
- C) Evaluate the jurisdictional entity's plan to maintain or improve reliability.
- D) Include specific identification, assessment, and recommendations pertaining to any potential reliability problems and risks that the Commission has identified because of its evaluation.
- E) Include a review of the jurisdictional entity's implementation of its plan for the previous reporting period.

This report provides Staff's assessment of 2009 revised annual reliability report filed by Illinois Power Company d/b/a AmerenIP ("AmerenIP") and Staff's evaluation of AmerenIP's reliability performance for calendar year 2009. This report is organized to cover all of the above listed requirements.

3. AmerenIP's 2009 Customer Base and Service Territory

In 2009, AmerenIP provided electric service to 625,143 customers in Illinois. AmerenIP's electric service territory covers 15,000 square miles. Most of AmerenIP's customer base is located in rural areas and small towns throughout Illinois. Major communities served by AmerenIP include Decatur, Belleville, Bloomington-Normal, Champaign-Urbana, Centralia, Galesburg, Granite City, Hillsboro, Jacksonville, LaSalle, Maryville, and Mt.Vernon.

4. AmerenIP's Electrical Distribution System

AmerenIP's electric distribution system consists of approximately 87% overhead conductor and 13% underground conductor. At the end of 2009, AmerenIP's distribution system included 926 circuits with approximately 63% 12 KV circuits and approximately 37% 4 KV circuits.

Subsection 411.120(b)(3)(G) requires the utilities to report on the age of its distribution facilities. AmerenIP estimates that the average age of its distribution equipment range from 12.2 years (for underground conductor and devices) to 26.3 years (for structures and improvements). AmerenIP estimates an average age of 15.4 years for poles, towers, and fixtures, 18.7 years for line transformers, 16.8 years for overhead conductors and devices, 17.0 years for underground conduit, 17.2 years for services overhead, 17.6 years for station equipment, and 16.0 years for underground services. The remaining average distribution equipment lives (remaining accounting lives) range from 10.8 years (for underground conductor and devices) to 34.4 years (for substation equipment). AmerenIP estimates an average remaining life of 15.6 years for poles and fixtures, 24.3 years for line transformers, 33.7 years for structures and improvements, 18.2 years for overhead conductor and devices, 16.0 years for conduit, 13.8 years for services overhead, and 15.0 years for underground services.

See Tables 22 and 28 (pages 45 and 48) in AmerenIP's 2009 revised annual reliability report for more details.

5. Assessment of AmerenIP's 2009 Revised Reliability Report

Section 16-125 of the Public Utilities Act and the Commission's electric reliability rules in 83 Illinois Administrative Code, 411.120(b), require each non-exempt jurisdictional entity to file an annual electric reliability report for the previous calendar year, by June 1 of the current year. AmerenIP filed its annual electric reliability report for 2009 on May 28, 2010. Staff noted that AmerenIP's annual electric reliability report did not comply with 83 Ill Adm. Code 411.120 (b)(3) in two areas. AmerenIP agreed with Staff's findings and filed a revised version of its annual electric reliability report for calendar year 2009 on July 9, 2010. AmerenIP's revised 2009 annual electric reliability report contains the information required by Code Part 411.120(b)(3).

6. AmerenIP’s Historical Performance Relative to Established Reliability Targets

Code Part 411.140(b)(4)(A-C) requires each jurisdictional entity (“utility”) to strive to provide electric service to its customers that complies with the targets listed in table 1. These targets state explicitly the maximum number of controllable interruptions and the maximum controllable interruption duration in each of the last three consecutive years that a utility must strive not to exceed on a per customer basis. Beginning in June 10, 2001, Code Part 411.120(b)(3)(L) requires each utility to provide a list of every customer who experienced interruptions in excess of the service reliability targets, identified by a unique number assigned by the utility and not the customer’s name or account number. In addition, the list should include the number of interruptions and interruption duration experienced by each customer in each of the three preceding years, and the number of consecutive years in which each customer has experienced interruptions in excess of the service reliability targets.

In April 2004, AmerenIP, along with all other regulated Illinois electric utilities, agreed to report on all interruptions (controllable and uncontrollable) as defined in Code Part 411.20 in relation to the service reliability targets for the reporting periods of 2003 through 2007. Also, AmerenIP, along with all other regulated Illinois electric utilities, agreed to include the specific actions, if any, that the utility plans or has taken to address the customer reliability concerns. In January 2008, the electric utilities agreed to extend the agreement to 2012. The customer service reliability’ targets are listed in table 1.

Table 1
CUSTOMER SERVICE RELIABILITY TARGETS

Immediate Primary Source of Service Operation Voltage	Maximum Number of Interruptions in Each of The Last Three Consecutive Years (Per Customer)	Maximum Hours of Total Interruptions in Each of The Last Three Consecutive Years (Per Customer)
69kV or Above	3	9
Between 15kV & 69kV	4	12
15kV or Below	6	18

According to AmerenIP's 2009 revised annual reliability report, the number of customers that exceeded the service reliability targets in each of the three preceding years is listed in table 2.

Table 2
NUMBER OF CUSTOMERS WHO EXCEEDED THE SERVICE RELIABILITY TARGETS AS REPORTED IN AmerenIP 2009-REVISED RELIABILITY REPORT

Immediate Primary Source of Service Operation Voltage	Number of Customers Who had Interruptions in Each of The Last Three Consecutive Years Greater than The Service Reliability Targets	Number of Customers Who had Interruption Duration in Each of The Last Three Consecutive Years Greater than The Service Reliability Targets
69kV or Above	0	0
Between 15kV & 69kV	0	0
15kV or Below	9	730

Table 3 is a numerical summary of AmerenIP's 2009 reliability target violations, sorted by the number of consecutive years, as reported in AmerenIP's supplemental report.

Table 3
NUMERICAL SUMMARY OF AmerenIP'S 2009 SUPPLEMENTAL REPORT (AMERENIP CUSTOMERS WHO EXCEEDED RELIABILITY TARGETS)

Consecutive Years	AmerenIP Customers Who Exceeded Frequency Targets	AmerenIP Customers Who Exceeded Duration Targets
3	9	651
4	0	73
5	0	6
6	0	0

AmerenIP reported that 739 of its customers exceeded the reliability targets in 2009. Of the 739 total customers, AmerenIP reported that nine customers experienced more than six interruptions and 651 customers experienced more than eighteen hours of total interruption duration in each of the last three consecutive years. In addition, 73 customers experienced more than eighteen hours of total interruption duration in each of the last four consecutive years, and six customers experienced more than eighteen hours of total interruption duration in each of the last five consecutive years.

Table 4 shows a year-by-year comparison of the total numbers of AmerenIP customers who exceeded the service reliability targets.

Table 4
TOTAL AmerenIP CUSTOMERS EXCEEDING RELIABILITY TARGETS BY YEAR

Year	Number of Customers	Prior Year Number of Customers as a % of 2009 Customers Exceeding Targets
2009	739	100%
2008	850	115%
2007	397	54%
2006	5,356	725%
2005	1,539	208%
2004	369	50%
2003	160	22%

The comparison between the number of customers who exceeded the service reliability targets in the past seven years shows:

- The number of customers who exceeded the service reliability targets went down by 13% from 850 in 2008 to 739 in 2009.
- The number of customers who exceeded the service reliability targets is still much higher than the 397 customers who exceeded the reliability targets in 2007, the 369 customers who exceeded those targets in 2004, and the 160 customers who exceeded those targets in 2003.

The decrease in the number of customers who exceeded the service reliability targets during 2009 compared to 2008 is a good sign; AmerenIP should continue to strive to reduce this number.

In 2009, AmerenIP had the second highest number of customers who exceeded the reliability targets (739 customers) compared to AmerenCIPS (355 customers), AmerenCILCO (588 customers), Mt. Carmel (three customers), MidAmerican (2,143 customers), and ComEd (182 customers).

AmerenIP’s 2009 revised reliability report contains a supplemental report that includes a unique number for every customer who exceeded frequency or duration targets, number of consecutive years, the cause of the interruption, the action taken, and the action planned. AmerenIP reported that storms caused most of the customer interruptions during 2009. The actions taken and planned by AmerenIP seem reasonable.

7. Analysis of AmerenIP’s Year 2009 Reliability Performance

A. Statistical Reliability Data

SAIFI²: System Average Interruption Frequency Index = Total # of Customer Interruptions / Total # of Customers Served

Table 5 shows 2009 SAIFI for each of the reporting Illinois utilities

Table 5 - 2009 SAIFI for Illinois Utilities

Utility	SAIFI 2009
MidAmerican	2.51
Mt.Carmel	2.32
AmerenCIPS	1.51
AmerenCILCO	1.37
ComEd	1.01
AmerenIP	.99

In 2009, AmerenIP’s SAIFI was 0.99, about 43% below the average SAIFI (1.74) reported by the other five utilities and the lowest of six reporting utilities.

² SAIFI indicates the average interruption frequency for all customers (customers who had and customers who had not interruptions) on a utility electric system during a specific year.

CAIDI³: Customer Average Interruption Duration Index = Sum of all Interruption Durations / Total # of Customer Interruptions.

Table 6 shows 2009 CAIDI for each of the reporting Illinois utilities.

Table 6 - 2009 CAIDI for Illinois Utilities

Utility	CAIDI 2009
AmerenCIPS	462
AmerenCILCO	197
AmerenIP	187
ComEd	112
MidAmerican	105.5
Mt. Carmel	75.9

In 2009, AmerenIP’s CAIDI was 187 minutes, the third highest of six reporting utilities and 3.5 minutes below the average CAIDI (190.5) reported by the other five utilities.

CAIFI⁴: Customer Average Interruption Frequency Index = Total # of Customer Interruptions / Total # of Customer Affected.

Table 7 shows 2009 CAIFI for each of the reporting Illinois utilities.

Table 7 - 2009 CAIFI for Illinois Utilities

Utility	CAIFI 2009
MidAmerican	3.01
Mt. Carmel	2.36
AmerenCIPS	2.13
AmerenCILCO	1.85
ComEd	1.84
AmerenIP	1.6

In 2009, AmerenIP’s CAIFI average CAIFI (2.24) utilities and the lowest of six

was 1.6 about 29% below the reported by the other five reporting utilities.

Overall, AmerenIP’s reliability compared to the Illinois utility

indices seem acceptable average. However,

AmerenIP’s 2009 CAIDI is leaning toward the high side of the spectrum. AmerenIP should find ways to reduce its CAIDI For example, AmerenIP may install fault indicators, where appropriate, to reduce its outage response time, which in turn should

³ CAIDI indicates the average interruption duration for customers who had one or more interruptions during a specific year.

⁴ CAIFI indicates the average interruption frequency for customers who had interruptions.

reduce the outage duration and CAIDI. AmerenIP should continue to strive to improve its performance and reduce its reliability indices.

To comply with Section 411.130, AmerenIP classified and reported on the cause of each interruption using the cause categories and interruption code. AmerenIP reported that approximately 26% of customer interruptions (approximately 27.9% of customer minutes interrupted) in 2009 were related to overhead equipment, 8.2% (approximately 15.8% of customer minutes interrupted) to trees, 11.9% to substation equipment, 9.2% to animal, 18.5% to intentional, 7.2 % to weather, and 1.7 to transmission. The subtotal of the above categories is around 82.7% of total customer interruptions. Comparing 2008 to 2009 cause of interruptions, Staff found an increase in interruptions related to weather, transmission and jurisdictional. Staff encourages AmerenIP to find ways to reduce customer interruptions.

Figures 1 and 2 provide a summary of 2009 interruptions by cause category in terms of customer interruptions (“CI”) and customer minutes interruptions (“CMI”).

See Table 3 (attachment A) for more details.

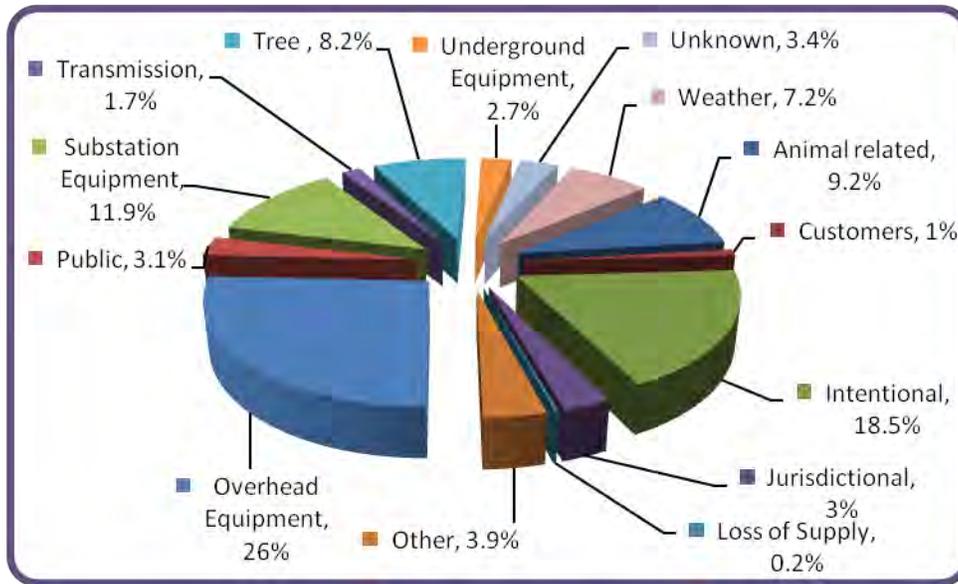


Figure 1: 2009 - Percentage of CI By Cause Category

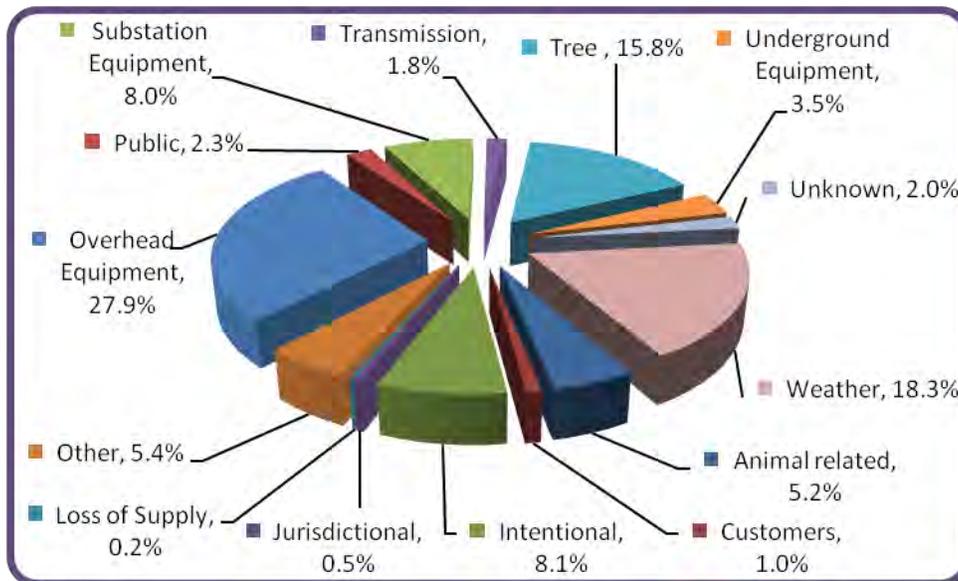


Figure 2: 2009 - Percentage of CMI By Cause Category

B. Worst Performing Circuits

AmerenIP complied with Subsection 411.120(b)(3)(I)&(J) by providing tables that show the worst performing circuits (“WPC”) for 2009, what caused a circuit to be a worst performer, the history of each circuit, and any action taken or planned to improve the performance of each WPC. Table 8 shows AmerenIP’s WPCs for the 2009 calendar year. The bolded values in the SAIFI, CAIFI, and CAIDI columns indicate the indices that caused a circuit to be worst performer.

Table 8
AmerenIP CIRCUITS WITH HIGHEST SAIFI, CAIFI, & CAIDI
WPC – CALENDAR YEAR 2009

Circuit	Substation	SAIFI	CAIFI	CAIDI
J01118	Abingdon	1.01	1.39	1661
J68402	Bloomington Washington Street	2.88	2.88	115
K74166	Champaign Mattis Avenue	3.28	3.28*	211
L00134	Decatur Greenswitch Road	.25	1.24	1615
L59922	Du Quoin	.03	1.00	995
L59923	Du Quoin	3.41	3.41*	385
L59929	Du Quoin	2.88	2.88	272
L63936	Du Quoin Fairside	3.39	3.39*	245
M09143	Eldorado	2.10	2.10	1231
M09144	Eldorado	2.88	2.88*	731
M09175	Eldorado	1.44	1.44	1487
M41112	Galesburg North Seminary	.67	1.07	1250
P47125	Monmouth	.09	1.45	1490
Q06144	North Champaign	1.17	3.00	153
Q14392	North Ottawa	3.44	3.44*	332
Q18242	O’Fallon	.36	3.28	118
Q28141	Old Shawneetown	3.16	3.16*	833
Q32171	Oquawka Rural	.81	2.17	984
Q75145	Ridgeway	1.18	1.19	1198
Q75146	Ridgeway	3.08	3.08*	522
R04413	South Edwardsville	3.44	3.44*	106
R05115	South Farnham	.48	1.98	990
R71286	Valmeyer Rt. 156	.23	3.39	111

Notes:

Du Quoin Circuit L59922 was also a worst CAIDI performer in 2008⁵.

Monmouth Circuit P47125 was also a worst CAIDI performer in 2007.

Oquawka Circuit Q32171 was also a worst CAIDI performer in 2007.

South Edwardsville R04413 was also a worst SAIFI and CAIFI performer in 2006.

“*” AmerenIP reported that it changed CAIFI to equal SAIFI value because indices are based upon end-of-year customer counts which can vary significantly due to circuit reconfiguration.

See Tables 37-38 (pages 60-61) in AmerenIP’s 2009 revised annual reliability report for more details

C. Circuit Inspections

AmerenIP indicates on page 16 of its 2009 revised reliability report that visual circuit inspection of distribution circuits is performed on a five-year cycle for the initial implementation phase which concludes on December 31, 2011, but will return to a four-year repeating cycle⁶. In addition, AmerenIP indicates on page 17 of its 2009 revised reliability report that emergency violations are corrected immediately. If the findings are not an emergency, AmerenIP corrects them within 90 days of notification, if involving an NESC issue (except overhead guys or down guys in good condition, which have 24 months to repair for this year’s inspection results) and all other reported issues should be corrected within twelve months following the completion of the inspection. AmerenIP provided visual inspection reports to some of its 2009 WPCs in response to a Staff data request. AmerenIP listed many findings that were noted during those circuit inspections. For example, AmerenIP noted decayed/deteriorated crossarms, down guys without ground or insulation, bad insulator placement on down guys and overhead guys. AmerenIP’s findings also included missing guy guards, wooden pins going through cross arms, decayed/deteriorated pole tops, inadequate clearance for primary wires, vines up to primary or natural wires, equipment without animal guards,

⁵ AmerenIP’s 2009 revised reliability report (page 61) indicates that the CAIDI index of circuit L59922 in 2008 was 33 minutes; however, AmerenIP’s response to Staff data request ENG 1.3 indicates that the CAIDI index of circuit L59922 in 2008 was 1220 minutes. The later number is correct as confirmed by AmerenIP.

⁶ Staff found many National Electrical Safety Code (NESC) violations during 2007 circuit inspection. Staff and Ameren developed an October 31, 2007 NESC corrective action plan to timely identify and correct all NESC violations. On July 10, 2009, Ameren amended its October 31, 2007 NESC corrective action plan when it extended the cycle length of the visual circuit inspection program by one year, from four years to five years, for the initial implementation phase due to unexpected large number of violations.

blown/broken/missing arresters, bent and loose steel pins, low riser standoff brackets, primary riser not grounded, low pole steps, and coiled jumpers to arresters.

Staff inspected five circuits that AmerenIP reported among its WPCs in its 2009 revised annual reliability report: Circuit R71286 (Valmeyer Rt. 156 Substation), Circuit M41112 (Galesburg North Seminary Substation), Circuit R05115 (Galesburg South Farnham Substation), Circuit K74166 (Champaign Mattis Ave Substation), and Circuit L00-134 (Decatur Greenswitch Rd. Substation). This Section will provide some details about the inspected circuits and Staff's findings. The findings are not represented as capturing all of the potential reliability problems that may exist on the circuits that Staff inspected. In many cases, there were portions of the circuits that Staff did not inspect. Staff's findings do not necessarily belong to the circuits that Staff intended to inspect; some of the findings might belong to another circuit served by the inspected substations. Circuit identification is provided underneath each photo below, and if the circuit identification is not known, the address is provided without circuit identification. Staff reported the findings to AmerenIP and asked AmerenIP to provide plans and work schedules to correct each identified item. AmerenIP's response indicates that AmerenIP corrected some of Staff's findings and established work schedules to correct others.

**Circuit R71286 – Valmeyer Rt. 156 Substation – Belleville – 2009 WPC (12 kV):
(SAIFI = .23; CAIDI = 111; CAIFI = 3.39)**

This Circuit was one of the 2009 WPCs from a CAIFI perspective. During 2009, Circuit R71286's CAIFI was much higher than AmerenIP's 2009 CAIFI of 1.6. Circuit R71286 is a 12 kV rural circuit that serves 731 customers. During 2009, Circuit R71286 had 166 interruptions. AmerenIP reported that 49 interruptions were due to weather, 48 to trees, 26 to animal, 18 to overhead equipment, 18 to other causes, 5 to unknown causes, and 2 to underground malfunction. In a response to a Staff data request, AmerenIP responded that it completed all work identified during the 2008 visual inspection of circuit R71286 before August 8, 2009. AmerenIP reported that it completed a circuit-wide maintenance trimming in February 2006 at a cost of \$ 68,583. AmerenIP also reported that it completed a mid-cycle maintenance trimming (mid-cycle patrol) in 2008. On May 11, 2010, Staff inspected Circuit R71286. AmerenIP provided circuit maps to aid Staff during circuit inspection. Those maps were not complete or accurate. For example, circuit R71286 maps do not include some road and street names like Boehne Dr. In another case, AmerenIP listed Trout Camp Rd. as Camp Rd; this made it difficult for Staff to find the road using the GPS and wasted Staff's time. AmerenIP must provide accurate maps to aid Staff during circuit inspections. Staff noted some reliability problems (see photos 1-6) such as a substation transformer without animal guards, woodpecker holes in poles, trees close to the primary, a deteriorated pole top, and a loose pole-top pin. In addition, Staff noted deteriorated poles that AmerenIP marked

with red ribbons as a sign of rejection during a circuit inspection. Staff also noted some transformers without animal guards. AmerenIP corrected some of Staff's findings and provided a schedule to correct others.

Photo No. 1: Substation Transformer without Animal Guards

Circuit R71286 Located at Valmeyer
Rt 156 Substation, North of IL RT
156

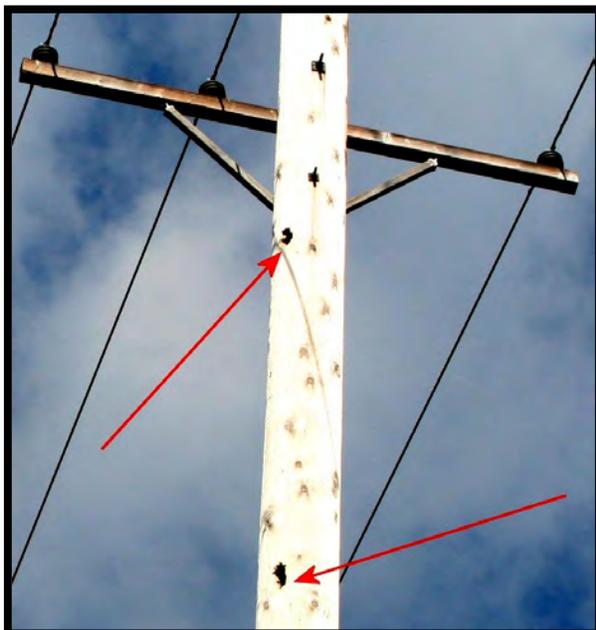
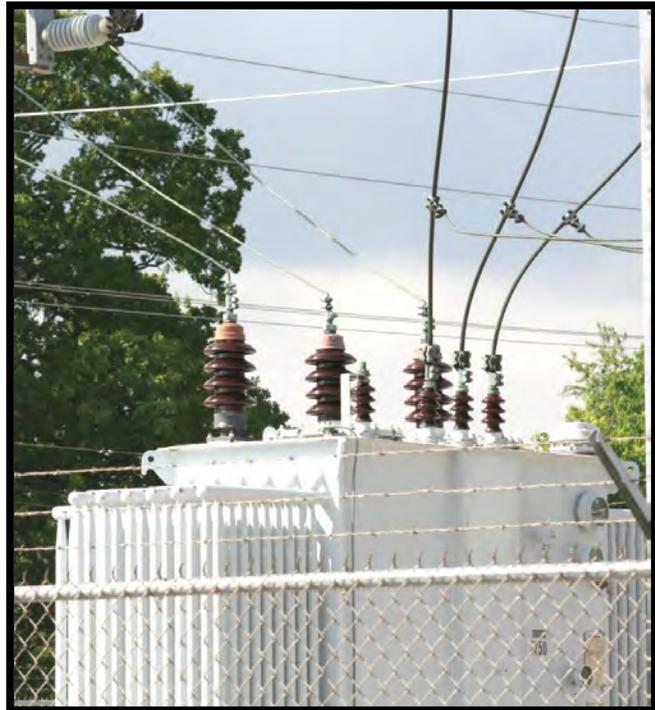


Photo No. 2: Woodpecker Holes in a Pole

Circuit R71286 – Pole No. 2315406

Photo No. 3: Trees Close to the Primary

Circuit R71286 – Pole No. 2874634 on IL RT 156



Photo No. 4: Deteriorated Pole Top

Circuit R71286 – Located at Deer Hill Rd - Pole No. 2875074

Photo No. 5: Woodpecker Holes in a Pole and Loose Pole-Top Pin

Circuit R71286 – Located in front of the intersection of Deer Hill Rd and Trout Camp Rd-Pole No. 2906220

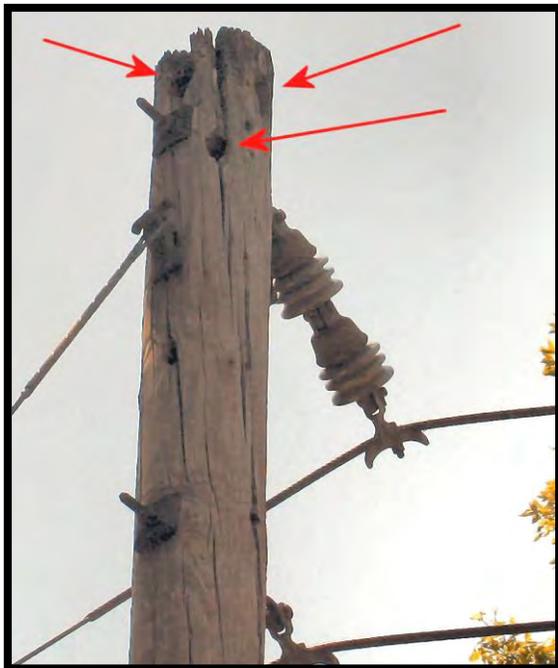


Photo No. 6: Woodpecker Holes in a Pole

Circuit R71286 – Pole No. 2891985

Circuit M41112 – Galesburg N Seminary Substation – 2009 WPC – (12 kV): (SAIFI = .67; CAIDI = 1250; CAIFI = 1.07)

This circuit was one of the 2009 WPCs from a CAIDI perspective. During 2009, Circuit M41-112's CAIDI was much higher than AmerenIP's 2009 CAIDI of 187. Circuit M41-112 is a 12 kV urban circuit that serves 1281 customers. During 2009, Circuit M41-112 had 855 interruptions (1,062,786 minutes of interruption duration). AmerenIP reported that 464 interruptions (1,011,984 minutes) were due to trees, 343 (43,447 minutes) to overhead equipment, 23 (5,727 minutes) to underground malfunction, 15 (945 minutes) to Animal, 3 (326 minutes) to public, and 7 (357 minutes) to other causes. AmerenIP did not inspect Circuit M41-112 as part of the AmerenIP visual circuit inspection program yet. AmerenIP reported that it completed a circuit-wide maintenance trim in March 2009 at a cost of \$ 91,096. AmerenIP plans to perform a mid-cycle patrol in 2011.

On May 25, 2010, Staff inspected circuit M41-112. Staff noted some reliability problems (see photos 7 to 19) such as a large gap in the substation gate, debris on the barbed wires of the substation, rusted substation transformers, a tree growing inside the substation through the fence, bad insulator placement on down guys, down guys without grounding or insulators, missing cotter pin in the lower connection of a guy insulator, ungrounded metal riser, less than 8 feet between lowest two stand-off brackets of metal risers, deteriorated pole top, service drop over roofs with inadequate clearance, secondary lines running through or in contact with trees, leaning pole, and leaning pole top pins. AmerenIP corrected some of Staff's findings and provided a schedule to correct others.

Photo No. 7: Large gap in the substation gate

Circuit M41-112: Located at 2347 N Seminary St





Photo No. 8: Rusted substation transformers

Circuit M41-112: Located at 2347 N Seminary St

Photo No. 9: Debris on the barbed wire above the substation fence

Circuit M41-112: Located at 2347 N Seminary St



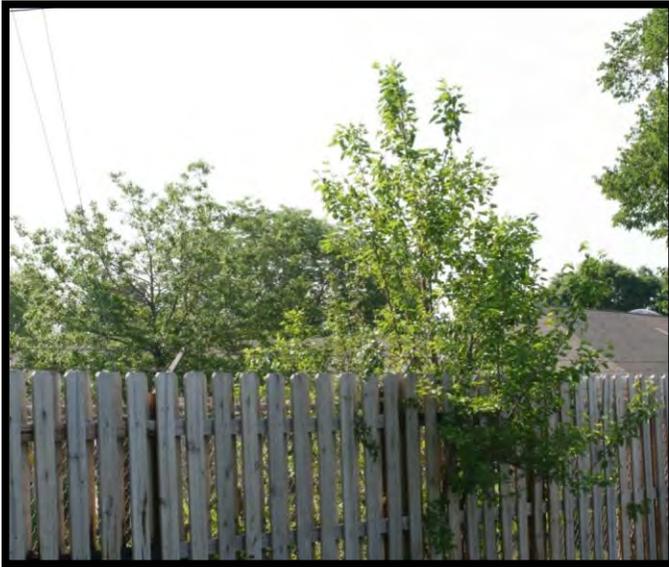


Photo No. 10: A tree growing from inside the substation through the substation fence

Circuit M41-112: Located at 2347 N Seminary St

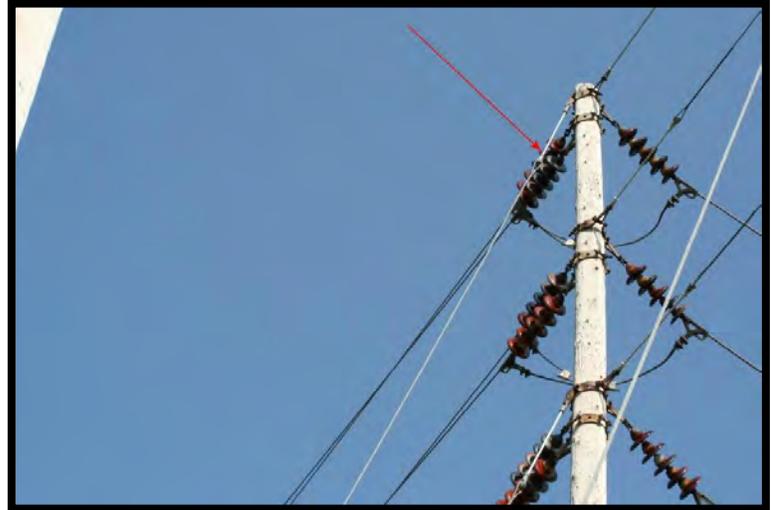


Photo No. 11: Bad insulator placement on a down guy (the insulator should be below the level of the lowest energized conductor when the guy is loose)

Circuit M41-112: Located at Carl Sandburg Dr. outside the Substation Fence

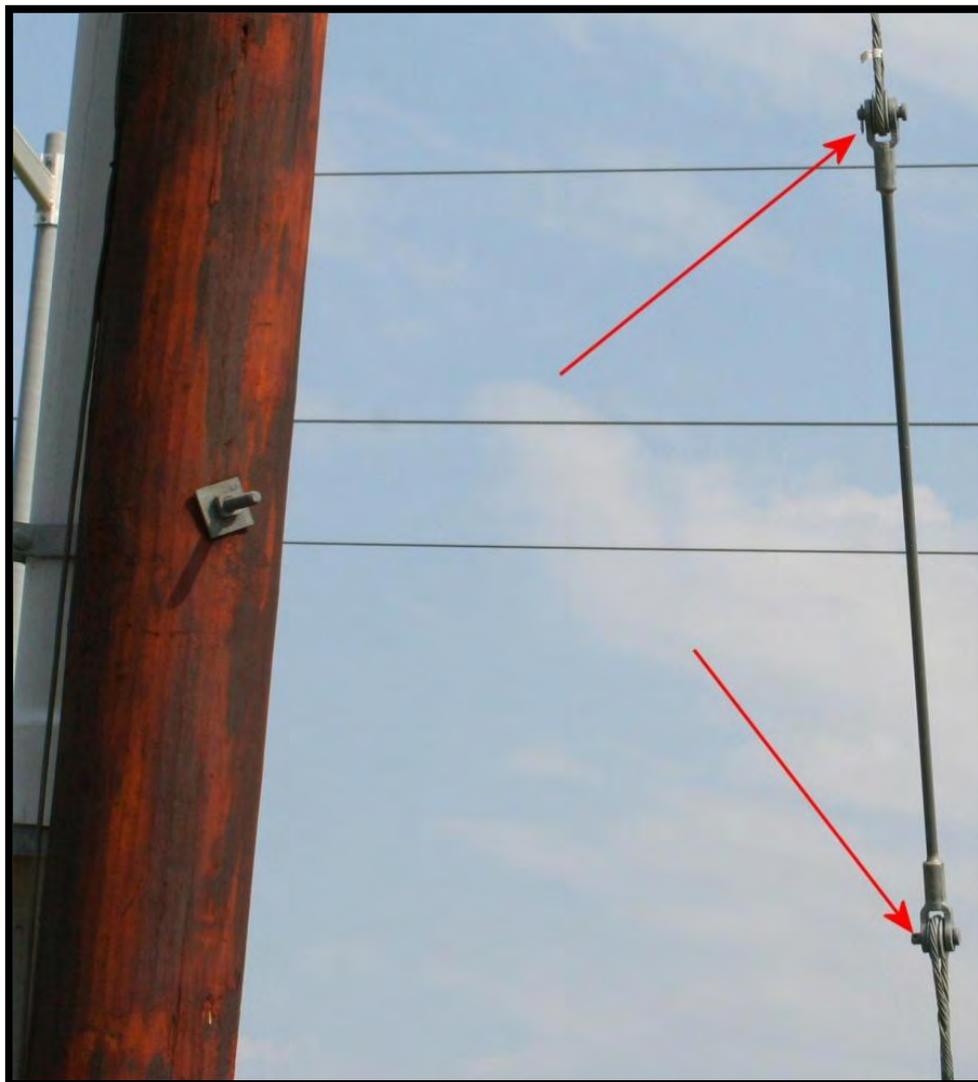


Photo No. 12: Missing Cotter pin in the lower connection of guy insulator

Circuit M41-112: Located on a The South Side in a Tap off Carl Sandburg Dr

Photo No. 13: An ungrounded metal riser next to a school with Less than 8 feet between lowest two stand-off brackets and a down guy with improper insulator placement

Circuit M41-112: Located on The South Side in a Tap off Carl Sandburg Dr



Photo No. 14: A Deteriorated Pole Top

Circuit M41-112: Located in Front of 907 Lane Ave



Photo No. 15: Service drop over a roof with inadequate clearance

Circuit M41-112: Located on 907 Lane Ave

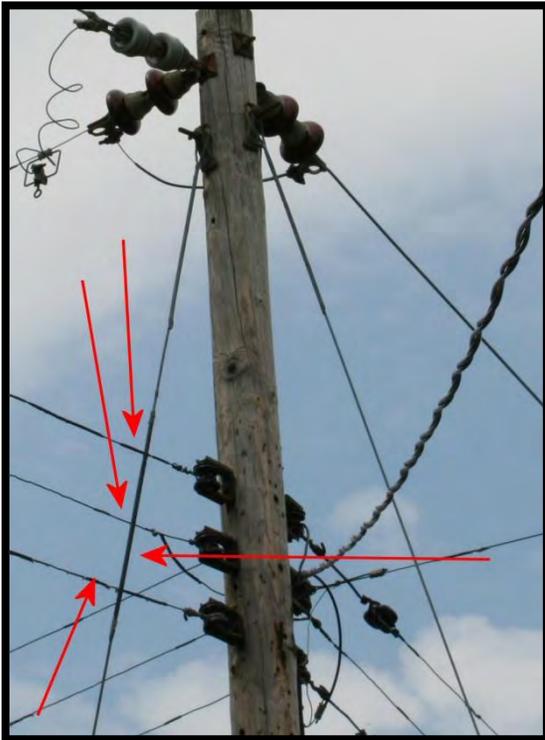


Photo No. 16: A down guy W/O grounding or insulator, contacting the secondary line (three wires). There is a hose on the guy wire to keep the guy wire from being energized (inappropriate insulation)

Circuit M41-112: Located in the Intersection of Dayton St and Willard St

Photo No. 17: Leaning Pole

Circuit M41-112: Located in Front of 1187 Brown Ave. near the intersection of Brown Ave. and Fremont



Photo No. 18: Leaning Pole-Top Pin

Circuit M41-112: Located near 1608 Morton Ave

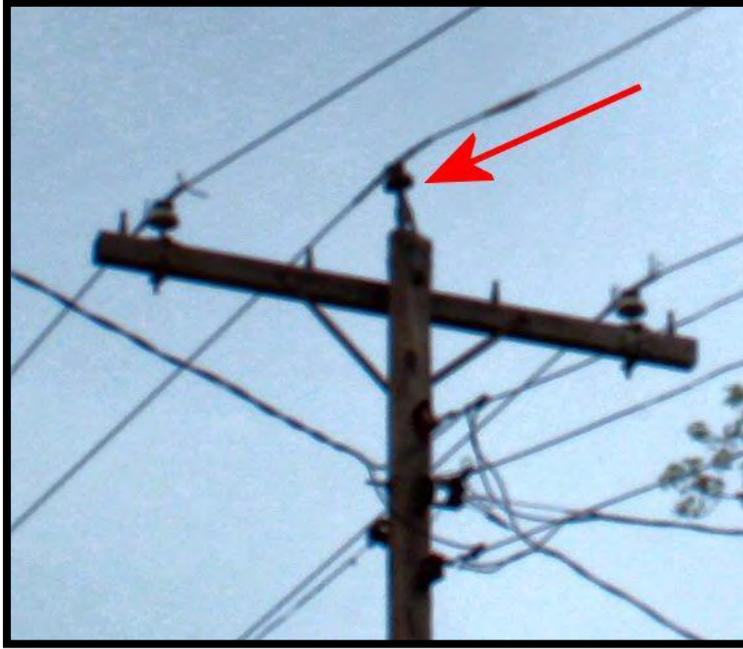


Photo No. 19: Leaning Pole-Top Pin

Circuit M41-112: Located near 1116 Harrison St

**Circuit R05115 – Galesburg, South Farnham Substation – 2009 WPC (12 kV):
(SAIFI = .48; CAIDI = 990; CAIFI =1.98)**

This circuit was one of the 2009 WPCs from a CAIDI perspective. During 2009, Circuit R05115's CAIDI was much higher than AmerenIP's 2009 CAIDI of 187. Circuit R05115 is a 12 kV rural circuit that serves 914 customers. During 2009, Circuit R05115 had 443 interruptions (439,059 minutes of interruption duration). AmerenIP reported that 198 interruptions (25,268 minutes) were due to overhead equipment, 142 (118,152 minutes) to trees, 89 (290,325 minutes) to other causes, 7 (567 minutes) to public, 3 (4,346 minutes) to weather, 2 (68 minutes) to animal, 1 (203 minutes) to underground malfunction, and 1 (130 minutes) to unknown. AmerenIP reported that it completed the visual inspection of Circuit R05115 on March 19, 2010. AmerenIP reported that it completed a circuit-wide maintenance trimming in February 2008 at a cost of \$ 46,263. AmerenIP plans to perform a mid-cycle patrol in 2010. On May 25, 2010, Staff inspected Circuit R05115. Staff noted reliability problems that are consistent with AmerenIP's circuit inspection report, such as coiled wires to arresters, ungrounded

risers, down guys not grounded or insulated, leaning pole top pins, and deteriorated crossarms. In addition, Staff noted some reliability and safety problems that were not detected by AmerenIP's visual circuit inspections, such as inadequate fence grounding, vegetation around the corner of the substation's fence, a climbable metal riser, substation transformer without animal guards on the high voltage bushing, and broken substation gates (examples, photos 20 and 21). AmerenIP corrected some of Staff findings and provided a schedule to correct others.



Photo No. 20: Missing ground wire from the substation fence in the left photo compared to the right photo

Circuit R05-115: Located at 1245 S Farnham St.

Photo No. 21: Broken substation gate

Circuit R05-115: Located at 1245 S Farnham St., S Farnham St Substation



Circuit K74166 – Champaign Mattis Avenue Substation 2009 WPC – (12 kV):
(SAIFI = 3.28; CAIFI = 3.28; CAIDI = 211)

This circuit was one of the 2009 worst performer circuits from a SAIFI and CAIFI perspective. During 2009, Circuit K74166's SAIFI was much higher than AmerenIP's 2009 SAIFI index of .99, and the circuit's CAIFI was much higher AmerenIP's CAIFI of 1.60. Circuit K74166 had 4,022 interruptions. AmerenIP reported that 1,787 interruptions were due to overhead equipment, 876 to public, 539 to trees, 519 to weather, 142 to unknown, 84 to animal, and 75 to underground malfunction. AmerenIP reported that it inspected Circuit K74166 as part of AmerenIP's 2010 visual circuit inspection program and was working on correcting issues found during this inspection. AmerenIP reported that it completed a circuit-wide maintenance trimming in March of 2009 at a cost of \$120,571. AmerenIP plans to perform a mid-cycle patrol in 2011. On September 14, 2010, Staff inspected Circuit K74166. Staff noted reliability problems (see photos 22-31) such as, down guy with bad insulator placement, outer down guy with bad insulator placement, split pole top, split/damaged pole top, unwrapped guy wire tie, leaning pole with equipment, trees close to a high voltage spacer cable, broken spacer on a spacer cable, loose pole top pin, leaning pole with equipment, and trees close to the primary. AmerenIP corrected some of Staff's findings and provided a schedule to correct others.



Photo 22: Down guys with bad insulator placement

Circuit K74-166: Pole No. 2208302 – near Mattis Substation

Photo 23: Split Pole Top

Circuit K74-166: Pole No. 2208301 – near Mattis Substation





Photo 24: Split/damaged pole top

Circuit K74-166: Pole No.
2208305 – near Mattis Substation

Photo 25: Unwrapped guy wire tie

Circuit K74-166: Pole No. 2208305 – near
Mattis Substation





Photo 26: Leaning pole with equipment

Circuit K74166: Across from the Mattis Substation and the Real Road



Photo 27: Trees close to the high voltage spacer cable

Circuit K74166: Next to pole No. 2208340



Photo 28: Broken spacer on a spacer cable (right)

Circuit K74166: Next to pole No. 2208340



Photo 29: Loose pole top pin

Circuit K74166: Behind 1318 Hedge Rd

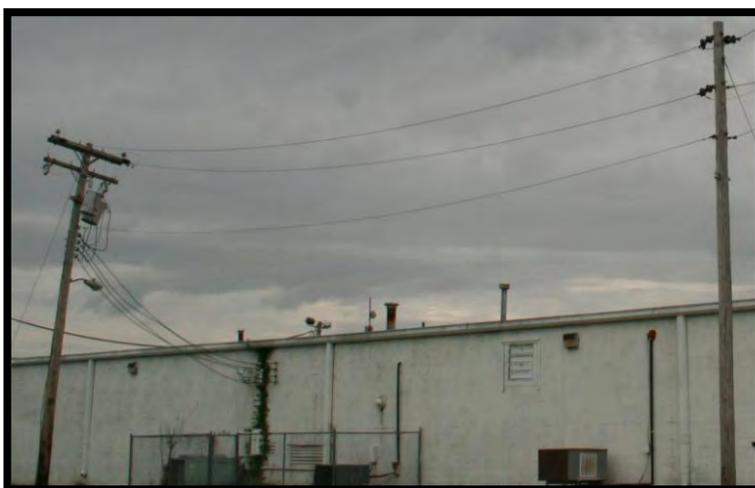


Photo 30: Leaning pole with equipment

Circuit K74166: Pole Number 2225111



Photo 31: Trees close to the primary

Circuit K74166: Between the back yards of 1507 and 1505 on Summit Ridge Dr

Circuit L00134 – Decatur Greenswitch Rd. Substation – 2009 WPC – (12 kV):
(SAIFI = .25; CAIFI = 1.24; CAIDI = 1615)

This circuit was one of the 2009 WPCs from a CAIDI perspective. During 2009, Circuit L00134's CAIDI was much higher than AmerenIP's 2009 CAIDI of 187. Circuit L00134 is 12kV rural circuit that serves 336 customers. During 2009, Circuit L00134 had 77 interruptions. AmerenIP reported that 38 interruptions were due to underground malfunction, 22 to public, 16 to overhead equipment, and 1 to weather. AmerenIP reported that it inspected Circuit L00134 as part of AmerenIP's 2010 visual circuit inspection program. AmerenIP reported that it completed a circuit-wide maintenance trimming on June of 2009 at a cost of \$42,957. AmerenIP plans to perform a mid-cycle patrol in 2011. On September 14, 2010, Staff inspected Circuit L00134. Staff noted reliability and safety problems (see photos 32-35) such as primary riser not grounded, low primary riser stand-off bracket, and loose pole top pins. AmerenIP corrected all of Staff's findings as it indicated in a response to Staff findings.



Photo 32: Primary riser not grounded and low riser stand-off bracket (less than 8 feet between the lowest two brackets)

Circuit L00134: In front of Greenswitch Rd. Substation

Photo 33: Low primary riser stand-off bracket

Circuit L00134: In front of Greenswitch Rd. Substation, next to Woods Apt



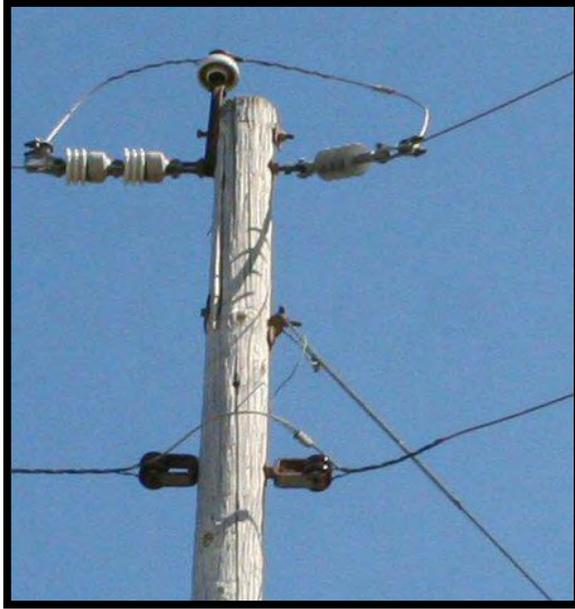


Photo 34: Loose pole top pin

Circuit L00134: Pole Number 3347373



Photo 35: Loose pole top pin

Circuit L00134: Pole Number 3360796 on Sawyer Rd

8. Trends in AmerenIP's Reliability Performance

This section provides bar charts for reliability and worst-circuit indices reported by all Illinois utilities for the past nine years and comments on AmerenIP's trend for each reliability index. In addition, this section provides a summary of customer interruptions for the past nine years.

Figure 3 below is a chart showing SAIFI values reported by Illinois utilities since 2001.

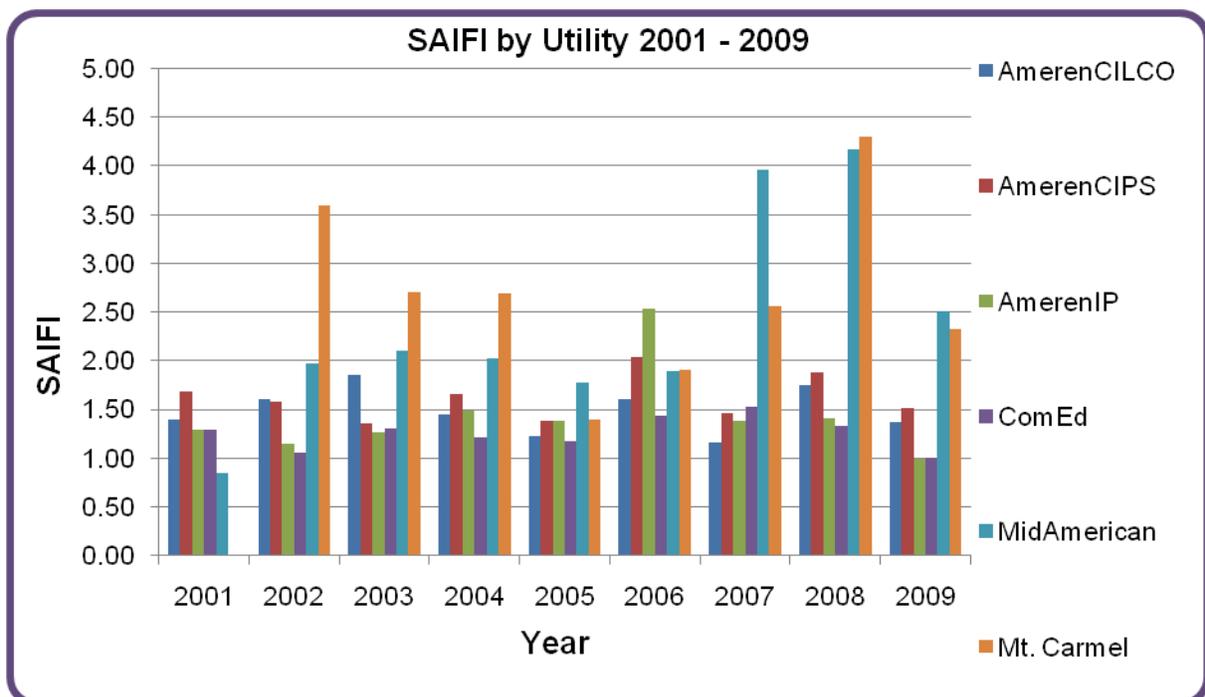


Figure 3

- In 2005, AmerenIP's and AmerenCIPS' SAIFI was 1.38, about 1% below the SAIFI average (1.39) reported by the other four utilities.
- In 2006, AmerenIP's SAIFI was 2.53, about 43% above the SAIFI average (1.77) reported by the other five utilities.
- In 2007, AmerenIP's SAIFI was 1.38, about 35% below the SAIFI average (2.13) reported by the other five utilities.
- In 2008, AmerenIP's SAIFI was 1.41, about 47% below the SAIFI average (2.69) reported by the other five utilities.

- In 2009 AmerenIP's SAIFI was 0.99, about 43% below the SAIFI average (1.74) reported by the other five utilities.

Figure 4 below is a chart showing worst-circuit SAIFI values reported by Illinois utilities for the past nine years.

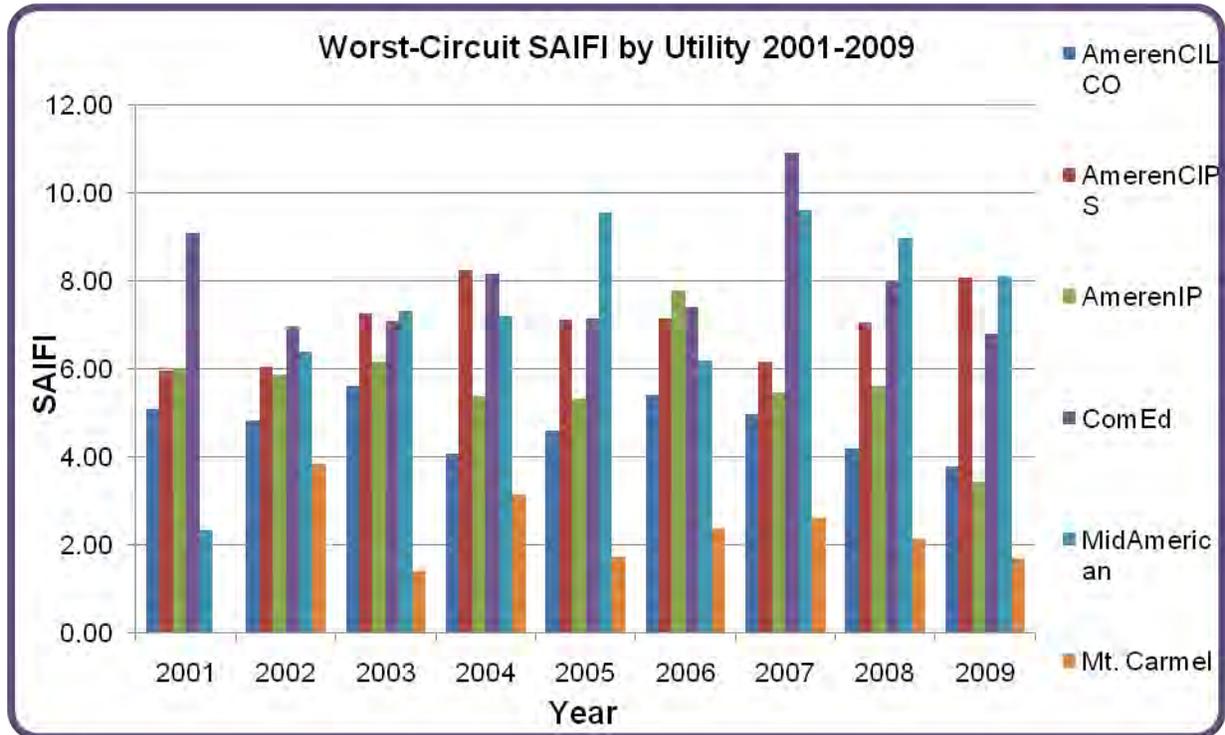


Figure 4

- In 2005, AmerenIP's worst-circuit SAIFI was 5.30, third lowest of six reporting utilities.
- In 2006, AmerenIP's worst-circuit SAIFI was 7.77, the highest of six reporting utilities.
- In 2007, AmerenIP's worst-circuit SAIFI was 5.47, third lowest of six reporting utilities.
- In 2008, AmerenIP's worst-circuit SAIFI was 5.60, third lowest of six reporting utilities.
- In 2009, AmerenIP's worst-circuit SAIFI was 3.44, second lowest of six reporting utilities.

Figure 5 below is a chart showing CAIDI values reported by Illinois utilities since 2001.

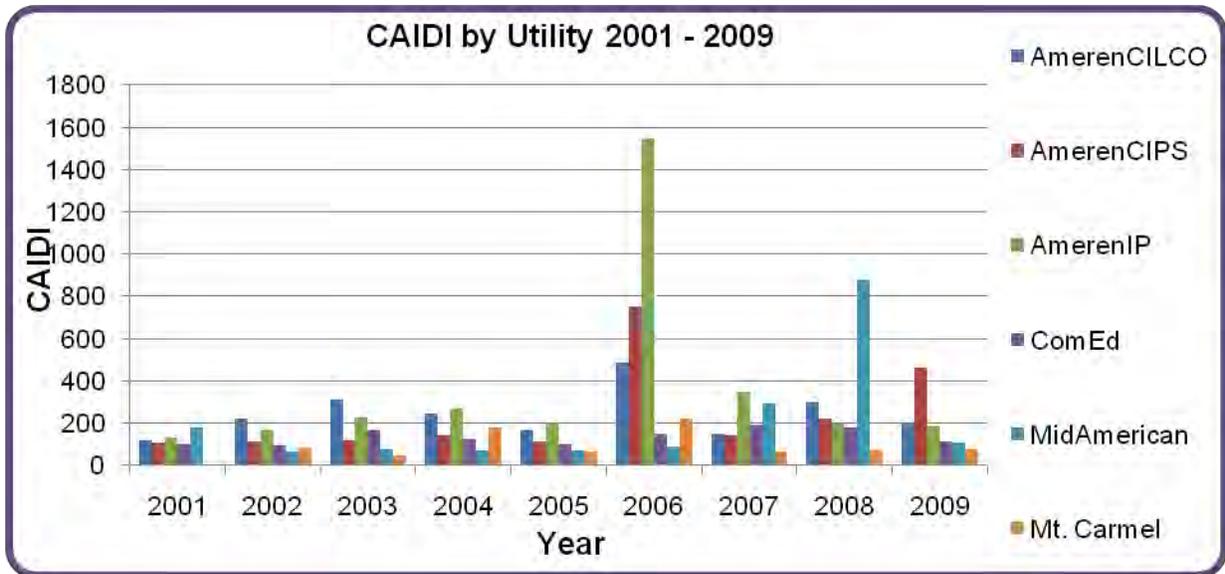


Figure 5

- In 2005, AmerenIP's CAIDI was 196 minutes, the highest of six reporting utilities.
- In 2006, AmerenIP's CAIDI was 1,545 minutes, the highest of six reporting utilities.
- In 2007, AmerenIP's CAIDI was 346 minutes, the highest of six reporting utilities.
- In 2008, AmerenIP's CAIDI was 198 minutes, the 3rd lowest of six reporting utilities.
- In 2009, AmerenIP's CAIDI was 187 minutes, the 3rd highest of six reporting utilities.

Figure 6 below is a chart showing worst-circuit CAIDI values reported by Illinois utilities for the past nine years.

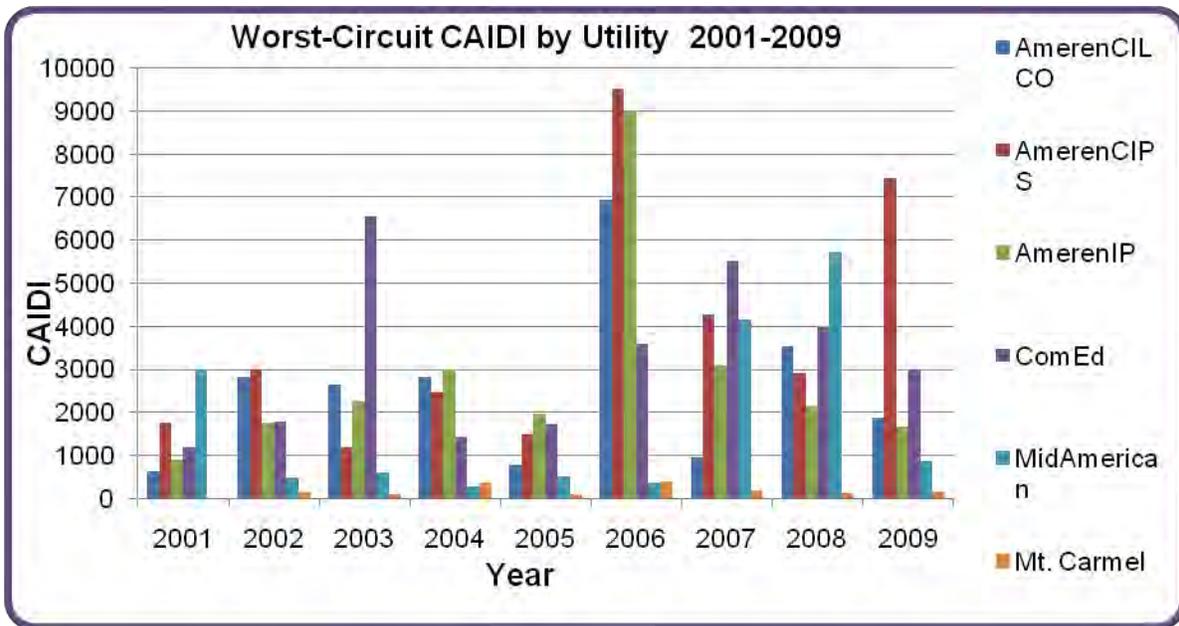


Figure 6

- In 2005, AmerenIP’s worst-circuit CAIDI was 1,968 minutes, the highest of six reporting utilities.
- In 2006, AmerenIP’s worst-circuit CAIDI was 8,999 minutes, second highest of six reporting utilities.
- In 2007, AmerenIP’s worst-circuit CAIDI was 3,086 minutes, third lowest of six reporting utilities.
- In 2008, AmerenIP’s worst-circuit CAIDI was 2,154 minutes, second lowest of six reporting utilities.
- In 2009, AmerenIP’s worst-circuit CAIDI was 1,661 minutes, third lowest of six reporting utilities.

Figure 7 below is a chart showing CAIFI values reported by Illinois utilities since 2001

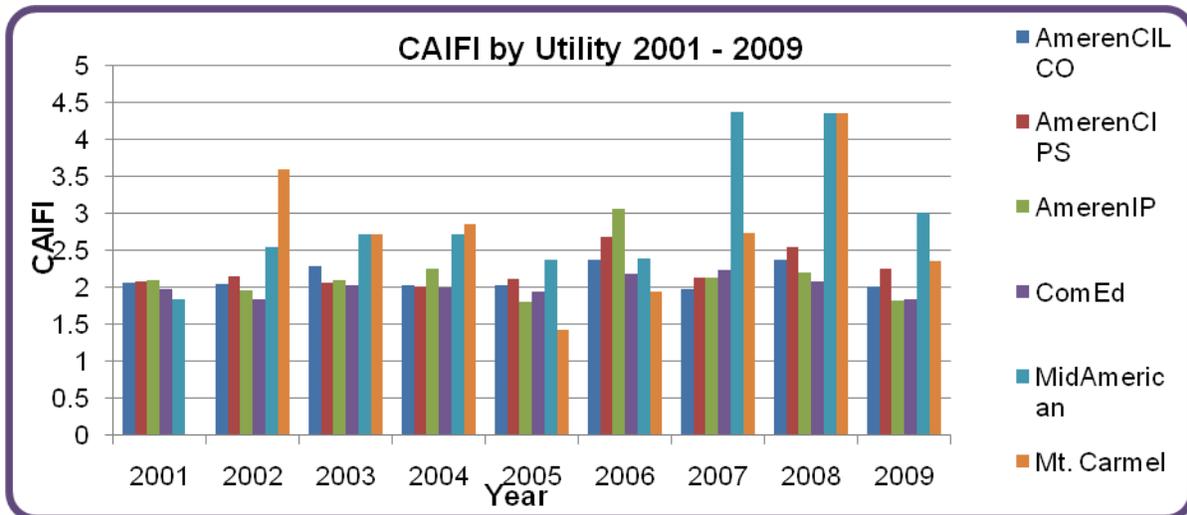


Figure 7

- In 2005, AmerenIP's CAIFI was 1.81, the second lowest of six reporting utilities.
- In 2006, AmerenIP's CAIFI was 3.07, the highest of six reporting utilities.
- In 2007, AmerenIP's and AmerenCIPS' CAIFI was 2.13, the second and third lowest of six reporting utilities.
- In 2008, AmerenIP's CAIFI was 2.2, the second lowest of six reporting utilities.
- In 2009, AmerenIP's CAIFI was 1.6, the lowest of six reporting utilities.

Figure 8 below is a chart showing worst-circuit CAIFI values reported by Illinois utilities for the past nine years.

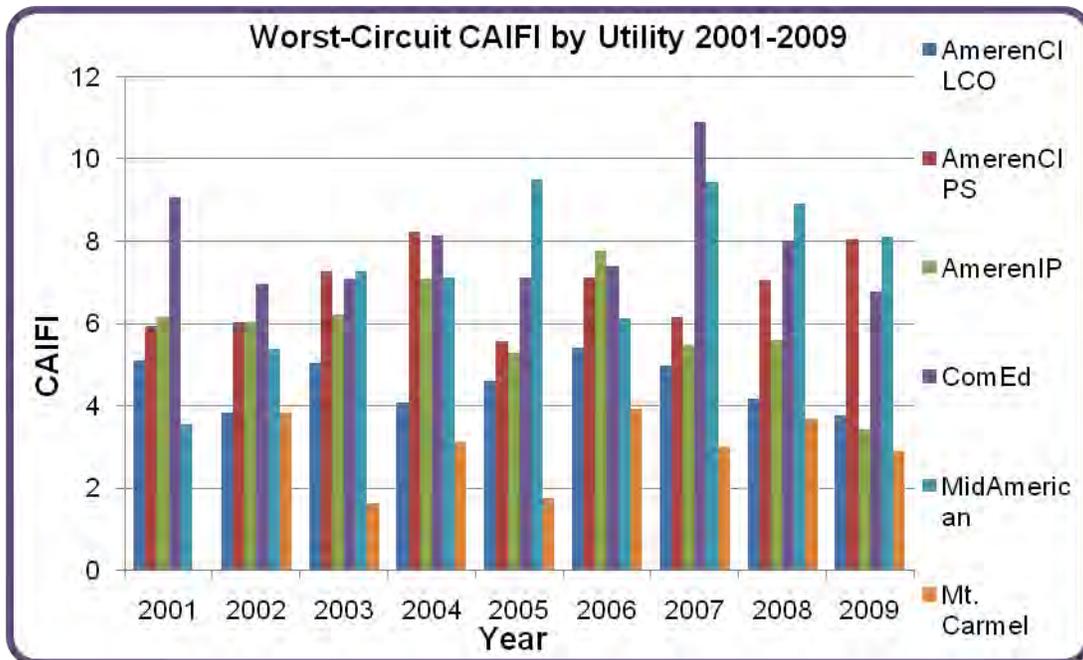


Figure 8

- In 2005, AmerenIP's worst-circuit CAIFI was 5.30, third lowest of six reporting utilities.
- In 2006, AmerenIP's worst-circuit CAIFI was 7.77, the highest of six reporting utilities.
- In 2007, AmerenIP's worst-circuit CAIFI was 5.36, third lowest of six reporting utilities.
- In 2008, AmerenIP's worst-circuit CAIFI was 5.60, third lowest of six reporting utilities.
- In 2009, AmerenIP's worst-circuit CAIFI was 3.44, second lowest of six reporting utilities.

In summary, AmerenIP's reliability indices for 2009 compared to 2008 indicate that AmerenIP's customers experienced fewer (SAIFI) and shorter (CAIDI) interruptions during 2009. In addition, those customers who experienced interruptions experienced fewer interruptions (CAIFI) in 2009 than in 2008. AmerenIP reported the actions taken to correct worst performing circuits. AmerenIP's corrective actions seem reasonable.

Customer Interruptions

Table 7 summarizes the number and percentage of AmerenIP customers who either did or did not experience interruptions for years 2000 to 2009.

Year	Total Customers	Zero Inter.	%	At Least One Interruption and Less than or Equal to Three Interruptions	%	At Least One Interruption and Less than or Equal to Six Interruptions	%	At Least One Interruption and Less than or Equal to Nine Interruptions	%	Greater than or Equal to Ten Interruptions	%
2000	588,288	196,680	33.43	308,514	52.44	379,515	64.51	389,175	66.15	2,433	0.41
2001	589,568	228,055	38.68	312,905	53.07	357,881	60.70	361,325	61.29	188	0.03
2002	592,741	245,633	41.44	306,700	51.74	344,377	58.10	346,885	58.52	223	0.04
2003	596,892	234,320	39.26	310,567	52.03	358,099	59.99	362,314	60.70	258	0.04
2004	600,585	204,181	34.00	328,192	54.65	388,691	64.72	396,075	65.95	329	0.05
2005	615,272	148,920	24.20	393,342	63.93	459,241	74.64	466,099	75.75	253	0.04
2006	618,912	90,513	14.62	339,552	54.86	480,468	77.63	521,417	84.25	6,982	1.13
2007	622,980	191,786	30.79	352,219	56.54	420,224	67.45	429,530	68.95	1,664	0.27
2008	624,536	195,898	31.37	347,358	55.62	411,739	65.93	425,515	68.13	3,123	0.50
2009	625,143	235,807	37.72	345,122	55.21	387,487	61.98	389,310	62.28	26	0.004

Table 7

The percentage of AmerenIP customers with no interruptions increased from 30.79% in 2007 and 31.37% in 2008 to 37.72% in 2009. Yet, the percentage of AmerenIP customers with no interruptions is still below the 2002 level of 41.44 %. The percentage of AmerenIP customers who experienced at least one interruption and less than or equal to three interruptions, at least one interruption and less than or equal to six interruptions, at least one interruption and less than or equal to nine interruptions, and greater than or equal to ten interruptions decreased in 2009 compared to 2008.

Figure 9 below is a chart showing AmerenIP customers who experienced no interruptions, at least one interruption and less than or equal to three interruptions, at least one interruption and less than or equal to six interruptions, and at least one interruption and less than or equal to nine interruptions from 2000 through 2009.

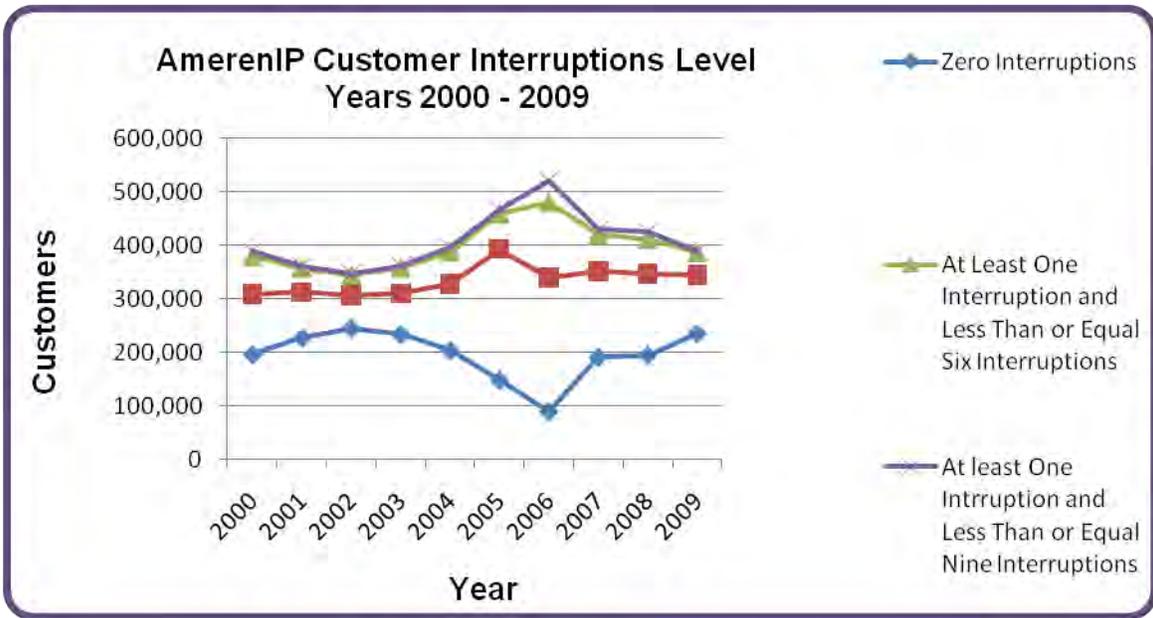


Figure 9

Figure 10 below is a chart showing AmerenIP customers who experienced ten or more interruptions from 2000 through 2009.

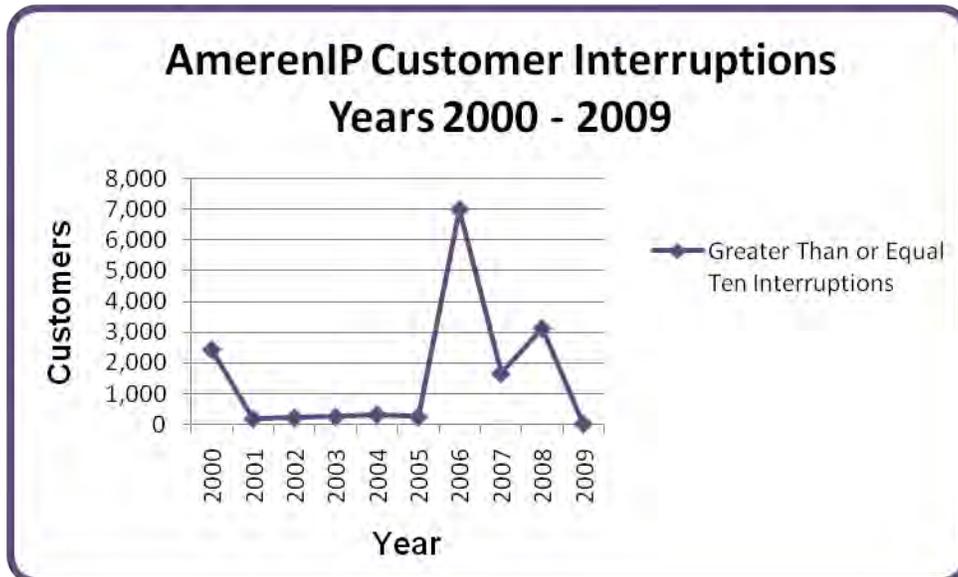


Figure 10

The percentage of AmerenIP customers with ten or more interruptions in 2009 is the lowest in the past ten years. Staff is pleased to see the number of customers with interruptions decreased during 2009. AmerenIP should continue striving to decrease electric service interruptions.

9. AmerenIP's Plan to Maintain or Improve Reliability

This section summarizes 2009 accomplishments and 2010 plans to maintain or improve reliability as described in AmerenIP's revised annual reliability report. In addition, this section summarizes AmerenIP's planned capital and O&M expenditures for transmission and distribution, reliability-related work for the next four years, and distribution tree trimming expenditures for the next three years. Finally, this section includes Staff comments about whether AmerenIP's list of actions taken or planned for each of WPC is reasonable.

2009 Reliability Accomplishments and 2010 Reliability Plans as Described in AmerenIP's Annual Reliability Report to Maintain or Improve Reliability

- **Tap Fusing Program:** AmerenIP reported that it has achieved maximum benefit from the Tap Fusing Program because of its prior success of identifying un-fused taps and will continue to address tap fusing when it discovers un-fused taps during other engineering initiatives. AmerenIP completed work on 84 tap fusing projects in 2009, and will complete an additional 25 tap fusing projects in 2010 as reported in its 2009 revised reliability report.
- **Storms and Weather:** AmerenIP reported that it continued to employ the graphical analysis procedure based on available weather data and outage density plots as part of the forensic investigation to determine weather-caused outages during 2009. AmerenIP reported that it used the above procedure to ensure that the cause code of weather was only used if weather data exceeded the NESC design criteria. AmerenIP reported that four severe weather events exceeded the NESC design criteria during 2009.
- **Substation and Relay Maintenance:** AmerenIP reported that substation maintenance is performed based on diagnostic test results, continuous equipment monitoring, or is scheduled on periodic intervals. AmerenIP reported that it takes the appropriate corrective actions to correct any deficiencies discovered by those tests and other equipment monitoring. AmerenIP reported that major maintenance activities are set at longer intervals than minor

maintenance; major maintenance activities require equipment to be out of service. AmerenIP's root cause analysis study of substation outages found that, in addition to animals, lightning arrester failures and substation breakers that trip too slowly upon fault conditions caused a number of customer outages. In response to this analysis, AmerenIP overhauled 89 breaker mechanisms during 2009. In addition, AmerenIP replaced 52 sets of lightning arresters during 2009 as it reported in its revised 2009 reliability report. Finally, AmerenIP reported that it recognized that protective relays are equally important to well-maintained substation equipment. AmerenIP reported that it performs periodic tests of all electromechanical relays, both transmission and distribution, on a three-year cycle. On the other hand, AmerenIP reported that it tests solid state relays that have much lower probability of having setting shift out of tolerance on a six-year cycle. During 2009, AmerenIP tested a total of 374 transmission relays, and 1,134 distribution relays, completed 9 transmission and 35 distribution substation load checks, and completed 7 transmission and 30 distribution substation DC trip tests. AmerenIP reported that it completed 96% of the substation maintenance projects scheduled to be completed in 2009. In addition, AmerenIP completed 98% of protective relay tests scheduled to be completed in 2009. AmerenIP reported that it will continue its substation and relay maintenance programs in 2010.

- **Capacity Planning:** AmerenIP reported that ongoing system planning studies are performed to help ensure the integrity of transmission and distribution system. In 2009, AmerenIP completed work on 17 different projects that were identified by planning studies (AmerenIP 2009 revised reliability report, pages 12-13). AmerenIP reported that it plans to perform work on 32 different projects that were identified by planning studies (AmerenIP 2009 revised reliability report, pages 13-16).
- **Infrared Aerial Patrols:** AmerenIP reported that during 2009, AmerenIP patrolled 11 sub-transmission circuits. Over the roughly 50 miles of line investigated, one hot spot was found and corrective action was taken. AmerenIP reported that Circuits will no longer be inspected from the air, but inspectors will walk pole to pole to test for hot spots. Staff notes that this change from an inspection from a moving aircraft, to an inspection by people on the ground is a significant improvement in AmerenIP's practices, as long as the frequency of inspections does not change.
- **Forestry Overhead Damage Report:** AmerenIP reported that forestry personnel continue to identify and report overhead equipment deficiencies found while performing tree trimming-related activities.
- **NESC Compliance:** In 2007, Ameren agreed to correct NESC violations in its territories in a timely manner as specified in the NESC Corrective Action Plan

between Ameren and Staff. AmerenIP continued to identify and correct NESC violation during 2009 as reported in its 2009 revised reliability report. During 2009, Ameren amended its 2007 agreement with Staff (addendum 2) to extend the time allowed to complete repairs of down guy and overhead guy issues⁷ from 12 months to 24 months. In addition, the addendum extends the cycle length of Ameren visual circuit inspections by 1 year from 4 years to 5 years, for the initial implementation phase, due to unexpectedly high numbers of NESC guy violations. AmerenIP reported that it will continue to correct NESC violations in 2010 as required by its 2007 NESC agreement, with Staff, and its amendments.

- **Device Inspection Program:** The Device Inspection Program at AmerenIP utilizes the Circuit and Device Inspection System to track both the devices requiring inspection and the results of those inspections. During 2009, Ameren inspected 9,252 devices. Ameren generated 422 repairs, and completed 341 out of those 422 repairs. Ameren did not report how many of the aforementioned repairs belong to AmerenIP; the aforementioned repairs belong to all Ameren companies.
- **Vegetation Management:** AmerenIP still maintains a four-year trim schedule and a mid-cycle patrol program. In addition, Ameren performed prescriptive trimming in 2009 to identify tree-related outage information that exceeded a SAIFI threshold level of 0.23. AmerenIP reported that AmerenIP removed any remaining overhanging branches from the previous cycle as well as any trees along the three-phase backbone on the aforementioned high-SAIFI circuits. During 2009, AmerenIP used the prescriptive trimming program on 17 of its feeders. Due to storms and wet weather during 2009, AmerenIP trimmed only 92% of the circuit miles originally planned to be trimmed as reported in AmerenIP's 2009 revised reliability report. AmerenIP also reported that it performed mid-cycle trimming on 136 feeders during 2009. During 2009, AmerenIP removed approximately 61,300 trees. In 2010, AmerenIP has scheduled trimming for 277 circuits, totaling 4,977 miles.
- **Damage Prevention:** To maintain or improve reliability by reducing damages, AmerenIP takes proactive steps to minimize damage to underground facilities. This damage control program provides internal and external education on underground facility damage prevention as AmerenIP reported in its revised 2009 reliability report. For example, AmerenIP reported that it provides ongoing internal training with division personnel regarding changes in legislation and refresher training on safety and the damage prevention process. AmerenIP also

⁷ This applies only for a guy that is not bonded or not properly insulated and fully intact in good condition and not expected to fail during the next 5 years.

reported that it provides face-to-face presentations for external entities such as fire departments, schools, safety fairs, excavators, and apprentice groups.

- **Circuit Inspection Program:** AmerenIP's Circuit inspection program intends to solve the problems that might affect the electric system reliability, and public and worker safety. This program covers all distribution and sub-transmission circuits having voltages in the range of 2.4kV through 69kV. AmerenIP reported that tracking for circuit inspections, as well as necessary repair actions, is accomplished through various reporting from the Circuit and Device Inspection System. AmerenIP also reported that tree trimming personnel report overhead equipment deficiencies found while performing tree related work. In addition, AmerenIP reported that aerial patrols are performed as necessary at the direction of local supervision. The visual inspection of the distribution circuits is currently on a five-year cycle for the initial implementation phase, which ends on December 31, 2011, and will return to a four-year repeating cycle. The visual inspection of the sub-transmission program is now performed on a five-year repeating cycle. In 2010, AmerenIP reported that it started performing infrared inspection on its distribution circuits on their respective visual inspection cycle. Previously, AmerenIP performed aerial infrared inspections on its sub-transmission. The infrared is a very good tool to find problems in electric facilities that are normally not seen by the eye and could affect the electric reliability. In addition, AmerenIP reported that during 2010 AmerenIP added a thorough inspection of its sub-transmission towers to its circuit inspection program to correct any structural problems with those towers; this inspection is done on a five-year cycle as reported by AmerenIP. Table 5, page 18 of the 2009 AmerenIP revised reliability report summarizes AmerenIP 2009 circuit inspections and 2010 circuit inspection plans.
- **Animal Protection - Circuits:** AmerenIP reported in its 2009 revised reliability report that it installed 534 additional animal guards on 11 circuits during 2009. In 2010, AmerenIP will be reviewing 21 circuits to determine any needed corrective action. In 2010, Ameren made avian protection a priority. Ameren inspected facilities near state/federal wildlife areas. None of AmerenIP's circuits were identified for retrofitting with avian protection equipment.
- **Animal Protection - Substations:** In 2009 AmerenIP spent a total of \$484,000 to install electric animal fences in substations, as it reported in its 2009 revised reliability report. In addition, AmerenIP committed to continue to identify, analyze, and prioritize substation animal protection, in 2010, like those completed in 2009.
- **Multiple Device Interruptions:** AmerenIP reported that the objective of the Multiple Device Interruption Program is reducing Ameren's SAIFI index by identifying and fixing circuits and portions of circuits that are subject to frequent

outages. Because of this program, AmerenIP reported that Ameren initiated and implemented many projects including additional tap fusing, lightning arrester installation, animal guarding, and underground cable replacement. AmerenIP did not report the exact number of projects that it completed in AmerenIP territory during 2009.

- **Lightning Protection:** The objective of lightning protection initiatives and projects is to reduce the likelihood of customer outages due to lightning strikes, thereby reducing the company SAIFI index as reported by AmerenIP. AmerenIP reported that it completed one sub-transmission lightning protection upgrade project including the installation of lightning arresters. In addition, AmerenIP upgraded one distribution feeder to current design standards with the addition of lightning arresters and added lightning arresters to portions of feeders as a corrective action to some of AmerenIP's inspection findings as indicated in AmerenIP's revised 2009 reliability report. In 2009, AmerenIP started the lightning caused outage reduction program to identify and recommend circuits and feeders that would benefit from additional lightning protection. In 2010, two AmerenIP circuits were identified for additional lightning protection analysis.
- **Spacer Cable Projects:** According to AmerenIP, spacer cable is a coated cable that adds some level of additional protection and is particularly efficient in confined spaces such as narrow streets or passageways like alleys that have limited width availability. It is also used to reduce the electric lines exposure to trees in areas with high tree density. AmerenIP reported that it implemented and completed 15, Hendrix, spacer cable's maintenance projects in 2009. In 2010, AmerenIP will continue to identify, analyze, and prioritize spacer cable projects similar to those completed in 2009.
- **System Automation Opportunities:** System automation projects play a major role in AmerenIP's efforts to improve reliability as AmerenIP stated in its revised 2009 reliability report. AmerenIP classified system automation opportunities into two main categories automatic transfer and isolation schemes, and remote monitoring and device control. AmerenIP reported that it completed six automatic transfer operation projects in 2009 and placed them in service. In addition, AmerenIP completed 9 automatic sectionalizer schemes during 2009. In 2010, AmerenIP plans to complete one additional system automation project.
- **CAIDI Initiatives:** CAIDI is an abbreviation for Customer Average Interruption Duration Index. AmerenIP reported that Ameren is continuing to implement programs that will help to minimize outage durations. In 2009, AmerenIP implemented an outage quality assurance process to ensure the historical accuracy of the outage and customer records in its outage analysis system. AmerenIP added SCADA-enabled substation metering at 6 locations in 2009 to help dispatchers to remotely monitor the load and quickly make switching

decisions after outage. In addition, AmerenIP added circuit tie switches at 3 different locations in 2009 to allow the system load dispatcher greater flexibility when switching load after an outage occurs which can reduce customer outages. Moreover, AmerenIP relocated six different sets of line switches and fuses during 2009 to be accessible by truck; the relocation should shorten outage durations by allowing quicker access during switching operations. Finally, AmerenIP has enhanced the labeling of feeder and structure numbers on 35 sub-transmission circuits in 2009 to allow quicker and more accurate identification of structures needing repair after outages occur, which will reduce the outage durations. AmerenIP reported that it will continue to identify, analyze, and prioritize projects in 2010 like those addressed in 2009.

- **Underground Cable Fault Tracking:** Ameren initiated this program in November of 2009 to develop a consistent method across the Ameren companies to track repairs of faulted cable segments as reported in AmerenIP's 2009 revised reliability report. AmerenIP also reported that the targeted goal of this program is to have all routine repair/replacements completed within 30 days of cable failure.
- **Protective Device Coordination Program:** This program was initiated in 2009 to review all AmerenIP distribution circuits and correct any deficiencies within a five-year period. Any corrective work should be engineered and completed by the end of the year following the year it was reviewed as AmerenIP indicated in its 2009 revised reliability report. AmerenIP expects to enhance the reliability of its distribution system because proper protective device coordination plays an essential role in minimizing the number of customer outages during fault operations.
- **Line Switch Inspections:** In 2009, AmerenIP developed an electric operating procedure for conducting inspections of and correcting deficiencies on line air break switches to maintain a reliable electric distribution system. Ameren plans to perform 1,955 line switch inspections in 2010. Line air break switches are used for fault isolation and service restoration, which will increase system functionality, reduce outage durations, and enhance system reliability as reported by AmerenIP.
- **Reliability Action Plans:** AmerenIP reported that the reliability action plan is a tool used by Ameren to monitor and summarize the progress of reliability projects that should be completed in a given year. AmerenIP reported that in 2009, Ameren management reviewed the reliability action plans on a monthly basis.

Reliability Expenditures

Capital and O&M Expenditures

In its 2009 revised reliability report, AmerenIP reported its actual expenditures for the reported year and its budget information for the next four years. Tables 10 and 11 summarize budget information for years 2009-2013.

AmerenIP Actual and Planned Capital Expenditures in Current Dollars **For Years 2009-2013**

Categories	2009 Actual Capital Expenditures	2010 Planned Capital Expenditures	2011 Planned Capital Expenditures	2012 Planned Capital Expenditures	2013 Planned Capital Expenditures
TRANSMISSION	\$44,352,046	\$25,554,128	\$16,191,984	\$41,073,829	\$37,945,220
DISTRIBUTION	\$125,532,594	\$110,780,662	\$108,858,429	\$118,465,074	\$119,906,902

Table 10

AmerenIP Actual and Planned O&M Expenditures in Current Dollars **For Years 2009-2013**

Categories	2009 Actual O&M Expenditures	2010 Planned O&M Expenditures	2011 Planned O&M Expenditures	2012 Planned O&M Expenditures	2013 Planned O&M Expenditures
TRANSMISSION	\$ 5,521,941	\$5,957,137	\$6,130,543	\$6,530,531	\$6,661,142
DISTRIBUTION	\$ 87,283,030	\$94,462,646	\$99,276,825	\$105,049,420	\$107,150,408

Table 11

Compared to 2009 expenditures, AmerenIP is planning to decrease its distribution and transmission capital expenditures for the next four years. On the other hand, AmerenIP plans to increase its distribution and transmission O&M for the next four years.

Figure 11 shows AmerenIP's historical and planned distribution expenditures for years 2001 through 2013.

(See Table 1, Attachment A for more details.)

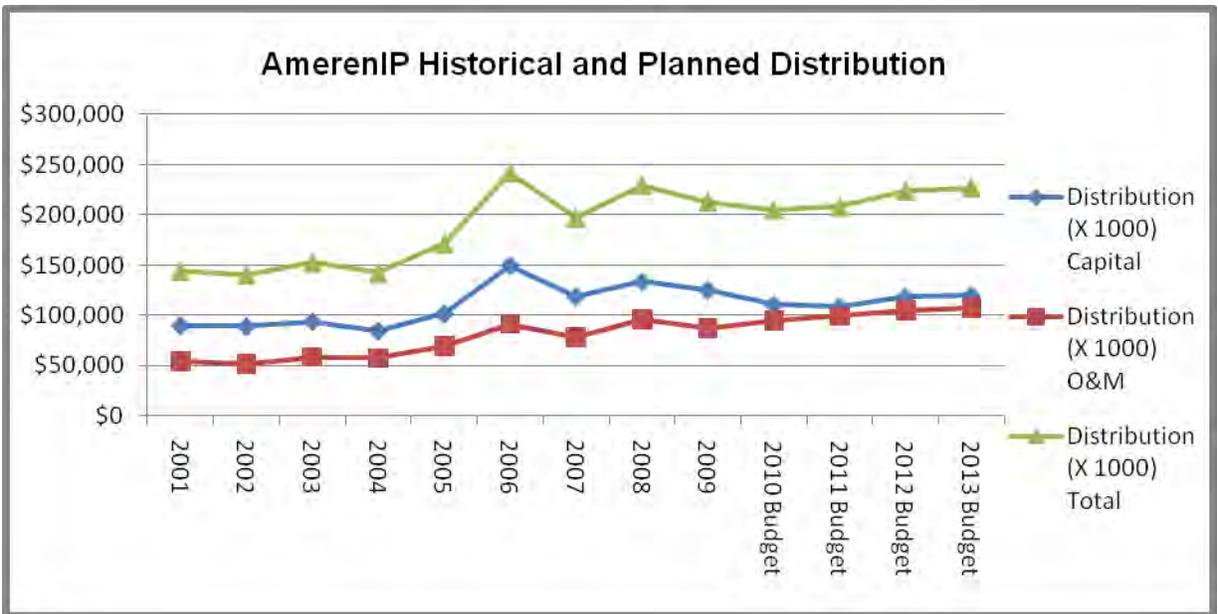


Figure 11

In 2006, AmerenIP's territory had very bad storms that required AmerenIP to increase its capital distribution spending as it appears in figure 11 above. The capital distribution spending seems to remain at an elevated level through 2009 compared to pre-2006 distribution capital spending. However, AmerenIP indicated in its 2009 revised annual reliability report that its revenue projections decreased significantly due to the rate case order issued on April 29, 2010 and corrected on May 6, 2010. Therefore, as reported by AmerenIP, AmerenIP decided to reduce its spending levels to be in line with the revenue requirement and related cash flow levels approved by ICC; it is clear from figure 11 above, that the reduction affected the budgeted distribution capital expenditure. AmerenIP added that AmerenIP will continue to focus efforts on providing safe and reliable service to meet regulatory requirements.

Distribution Tree Trimming Expenditures

AmerenIP's actual and budgeted distribution tree trimming expenditures (as responded to by AmerenIP to a Staff data request) are shown in Figure 12. (See Table 2 (Attachment A) for more details).

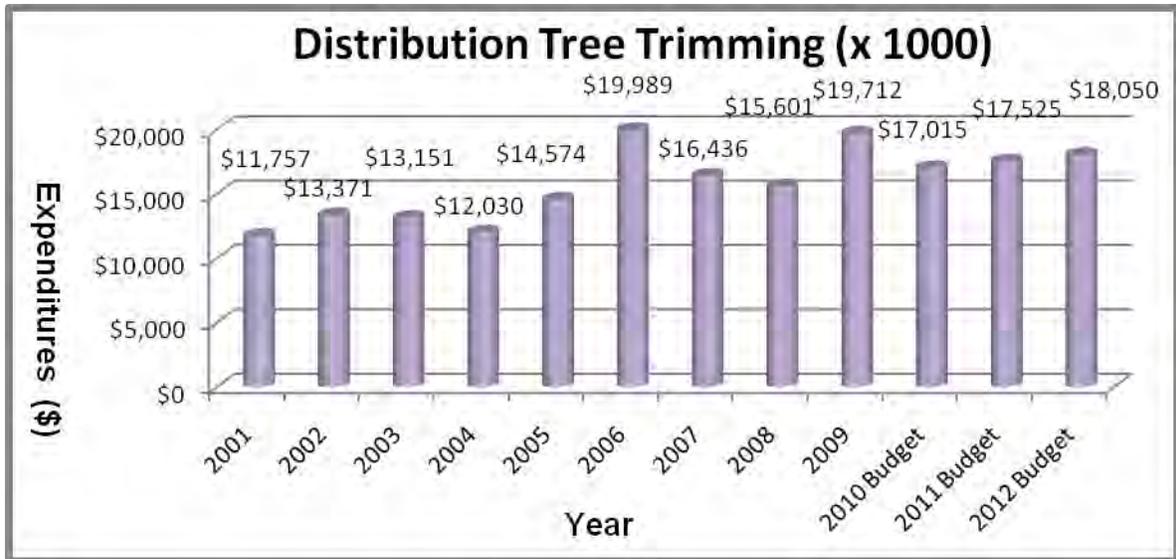


Figure 12

AmerenIP planned to reduce its distribution tree trimming expenditures in the years 2010 through 2012 compared to its actual distribution tree trimming expenditures in 2009. However, AmerenIP's 2008 tree trimming budget figures for 2009 distribution tree trimming expenditures was less than the actual distribution tree trimming expenditures for the year 2009 and was less than the planned distribution tree trimming expenditures for the years 2010 through 2012.

AmerenIP's List of Actions Taken or Planned for Each of the Worst Performing Circuit

AmerenIP reported interruption causes for all of its WPCs. AmerenIP also reported the actions taken and planned to correct or repair the WPCs. The actions that are taken and planned by AmerenIP to correct the WPCs seem reasonable.

10. Potential Reliability Problems and Risks

- AmerenIP planned to reduce its distribution tree trimming expenditures in the years 2010 through 2012 compared to its actual distribution tree trimming expenditures in 2009. It is not clear if the increase in the tree trimming spending during 2009 was due to underestimation of the tree trimming work load or to other reasons. In addition, AmerenIP reduced its tree trimming budget for years 2010-2011 in their 2009 tree trimming budget figures compared to their 2008 tree

trimming budget figures. It is not clear whether the budgeted tree trimming expenditure for years 2010-2011 will allow AmerenIP to maintain its scheduled tree trimming work and provide safe and reliable service to its customers.

- Comparing 2008 to 2009 causes of interruptions, Staff found an increase in interruptions related to jurisdictional, transmission, and weather.
- Compared to 2009 expenditures, AmerenIP is planning to decrease its distribution and transmission capital expenditures for the next four years.
- Compared to the other Illinois utilities, AmerenIP had the second highest number of customers who exceeded the reliability targets.
- AmerenIP reported that sub-transmission circuits will no longer be inspected from the air (Infrared Aerial Patrols)⁸, but inspectors will walk pole to pole to test for hot spots.
- As indicated in a Staff data request response, AmerenIP moved its visual inspection cycle for sub-transmission circuit inspection from a two-year to a five-year repeating cycle, due to the rate case order issued on April 29, 2010 and corrected on May 6, 2010, to mitigate a projected reduction in its revenue. AmerenIP also promised to change the repeating cycle for its sub-transmission circuit inspection to a four-year repeating cycle to comply with Liberty's recommendation VI 3(B) provided in the June 10, 2010 Liberty quarterly report to the Commission.
- AmerenIP moved its visual circuit inspection cycle from four years to five years for the initial phase only due to unexpected high number of violations.

11. Review of AmerenIP's Implementation Plan for the Previous Reporting Period

- AmerenIP reported its completed and planned work on 2008's worst performing circuits. For example, AmerenIP replaced poles and crossarms, installed animal guards, corrected riser bracket violations, and installed lighting arresters on 2008's worst performing circuits as applicable. The actions taken or planned by AmerenIP to correct 2008's worst performing circuits seem reasonable.

⁸ Infrared Aerial Patrols are used to determine which pieces of sub-transmission equipment are currently operating at higher than desired temperatures, so mitigation efforts can be planned and scheduled to repair or replace equipment before it fails.

- AmerenIP decreased its 2009 capital expenditures and 2009 O&M expenditures for distribution compared to its original budget plan listed in its 2008 reliability report, as shown in figure 13 below

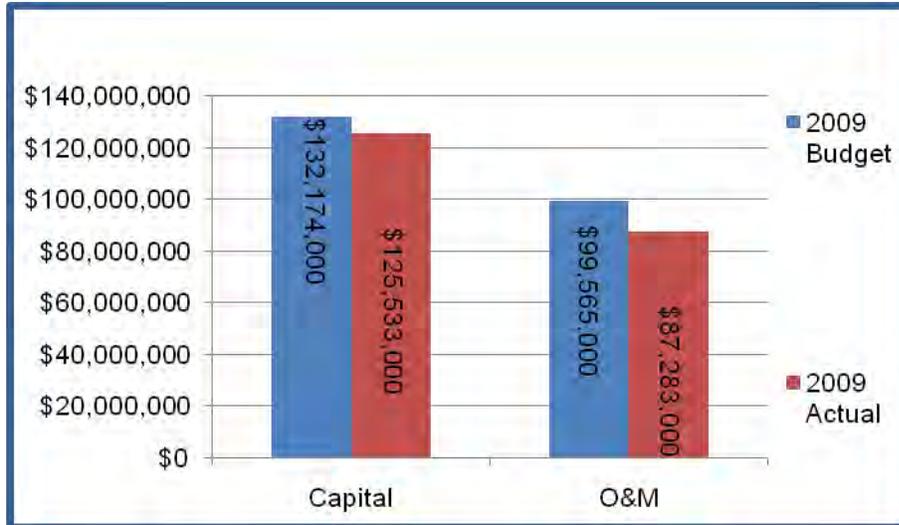


Figure 13: Budgeted and Actual 2009 Distribution Capital and O&M Expenditures

- AmerenIP increased its distribution tree trimming expenditures in 2009 compared to its 2009 budgeted tree-trimming expenditures, as shown in figure 14 below.

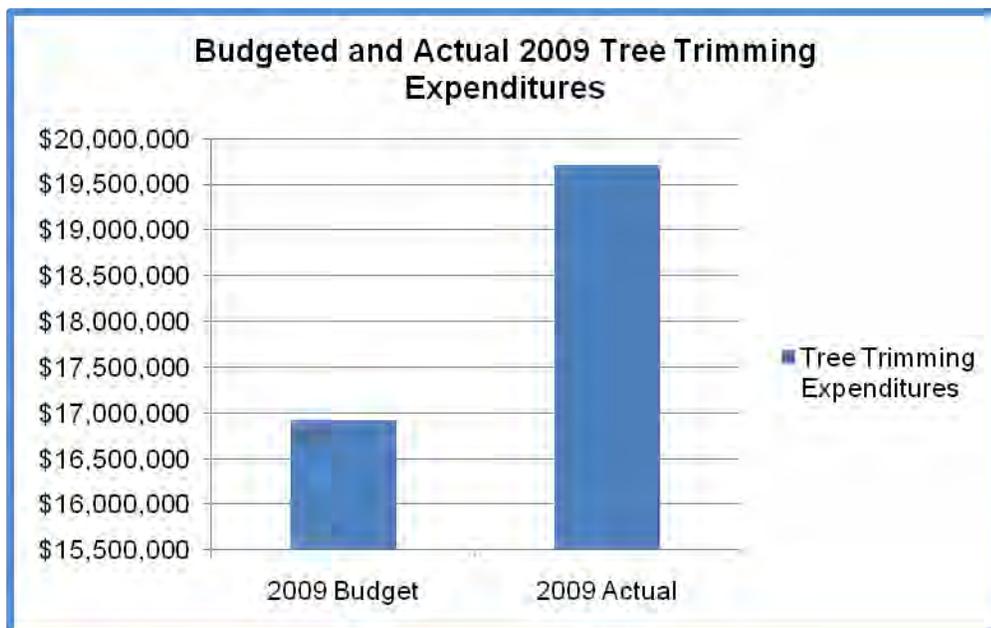
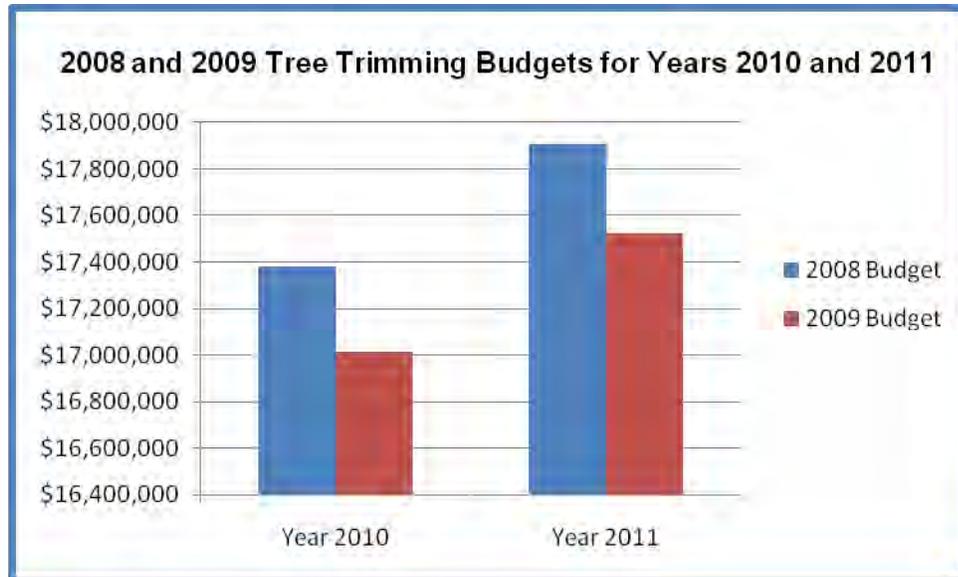


Figure 14

- AmerenIP reduced its tree trimming budget for years 2010-2011 in 2009 compared to its 2008 tree trimming budget figures, as shown in figure 15 below.



12. Summary of Recommendations

- Comparing 2008 to 2009 causes of interruptions, Staff found an increase in interruptions related to weather, transmission, and jurisdictional. Staff encourages AmerenIP to find ways to reduce customer interruptions.
- Compared to 2009 expenditures, AmerenIP is planning to decrease its distribution and transmission capital expenditures for the next four years. On the other hand, AmerenIP plans to increase its distribution and transmission O&M for the next four years. AmerenIP decreased 2009 capital expenditures and 2009 O&M expenditures for distribution compared to its original budget plan listed in its 2008 reliability report. In addition, AmerenIP reduced its tree trimming budget for years 2010-2011 in their 2009 tree trimming budget figures compared to its 2008 tree trimming budget figures. AmerenIP indicated in its 2009 revised annual reliability report that its revenue projections decreased significantly due to the rate case order issued on April 29, 2010 and corrected on May 6, 2010. Therefore, as reported by AmerenIP, Ameren decided to reduce its spending levels to be in line with the revenue requirement and related cash flow levels approved by the ICC. The findings that AmerenIP reported in its circuit

inspection reports and Staff findings during circuit inspections suggest that AmerenIP's current spending level is not adequate. AmerenIP should maintain a spending level that allows it to provide safe and reliable services to its customers.

- The decrease in the number of AmerenIP's customers who exceeded the reliability targets for the electric service interruptions during 2009 compared to 2008 is a good sign; however, compared to the other Illinois utilities, AmerenIP had the second highest number of customers who exceeded the reliability targets. AmerenIP should strive to reduce the number of customers who exceeded the reliability target for the number and duration of service interruptions.
- AmerenIP reported that sub-transmission circuits will no longer be inspected from the air (Infrared Aerial Patrols), but inspectors will walk pole to pole to test for hot spots. Staff notes that this change, from inspections from a moving aircraft to inspections by people on the ground, is a significant improvement in AmerenIP's practices as long as the frequency of inspections does not change.
- AmerenIP moved its visual inspection cycle for sub-transmission circuit inspections from two-year to a five-year repeating cycle. In response to a Staff data request, AmerenIP promised to perform the sub-transmission circuit inspection on a four-year repeating cycle as suggested by Liberty's recommendation VI 3(B) in its June 10, 2010 quarterly report to the Commission. Staff encourages AmerenIP to reevaluate the length of its inspection cycle for the sub-transmission circuit inspections to make sure that this length will not cause any reliability or safety problems or sacrifices.

Attachment A

Table1: AmerenIP (Distribution) Capital and O&M Expenditures

Year	Distribution (x1,000)		
	Capital	O&M	Total
2001	\$89,952	\$54,549	\$144,501
2002	\$89,083	\$51,542	\$140,625
2003	\$94,100	\$58,656	\$152,756
2004	\$84,816	\$57,612	\$142,428
2005	\$101,962	\$69,535	\$171,497
2006	\$149,836	\$91,498	\$241,334
2007	\$119,026	\$78,167	\$197,193
2008	\$133,637	\$95,745	\$229,382
2009	\$125,533 ⁹	\$87,283 ¹⁰	\$212,816
2010 Budget	\$110,781	\$94,463	\$205,244
2011 Budget	\$108,858	\$99,277	\$208,135
2012 Budget	\$118,465	\$105,049	\$223,514
2013 Budget	\$119,907	\$107,150	\$227,057

⁹ In 2009, AmerenIP spent less than its planned distribution capital expenditures of approximately \$ 132,174,000.

¹⁰ In 2009, AmerenIP spent less than its planned distribution O&M expenditures of approximately \$ 99,565,000.

Table 2: AmerenIP (Distribution) Tree Trimming Expenditures

Year	Distribution Tree Trimming (x1,000)
2001	\$11,757
2002	\$13,371
2003	\$13,151
2004	\$12,030
2005	\$14,574
2006	\$19,989
2007	\$16,436
2008	\$15,601 ¹¹
2009	\$19,712 ¹²
2010 Budget	\$17,015 ¹³
2011 Budget	\$17,525 ¹⁴
2012 Budget	\$18,050

¹¹ AmerenIP indicated in response to a Staff data request that 2008 actual expenditures were adjusted from the previously reported value (\$ 16,764,000) to remove internal labor costs that were inadvertently included in last year's AmerenIP response to a Staff data request.

¹² Out of the \$19,712,000, AmerenIP spent \$18,914,000 to fund regular tree trimming operations and the rest of the tree trimming expenditures during 2009 were part of AmerenIP's response to storm(s).

¹³ Last year AmerenIP estimated the 2010 budget to be 17,382,000

¹⁴ Last year AmerenIP estimated the 2011 budget to be 17,907,000

Table 3: AmerenIP 2009' Interruptions by Cause Category

Cause Category	Customers Interrupted (C I)	% C I	Customers Minutes Interrupted (CMI)	% C M I	Events	% Events
Animal Related	70,970	9.2%	6,683,954	5.22%	2,394	11.32%
Customers	7,679	1.0%	1,263,787	0.99%	172	0.81%
Intentional	142,816	18.5%	10,411,797	8.14%	4,609	21.80%
Jurisdictional	23,337	3.0%	656,062	0.51%	88	0.42%
Loss of Supply	1,649	0.2%	241,135	0.19%	139	0.66%
Other	30,052	3.9%	6,868,117	5.37%	2,512	11.88%
Overhead Equipment	200,559	26.0%	35,647,616	27.86%	4,836	22.88%
Public	24,314	3.1%	2,944,931	2.30%	418	1.98%
Substation Equipment	91,951	11.9%	10,260,858	8.02%	78	0.37%
Transmission	13,101	1.7%	2,267,287	1.77%	25	0.12%
Tree - Contact	19,777	2.6%	4,879,258	3.81%	836	3.95%
Tree - Broken	43,677	5.6%	15,376,288	12.02%	1,276	6.04%
Underground Equipment	20,998	2.7%	4,497,417	3.52%	1,157	5.47%
Unknown	26,253	3.4%	2,568,882	2.01%	1,075	5.09%
Weather	56,008	7.2%	23,371,501	18.27%	1525	7.21%
TOTAL	773,141	100.00%	127,938,890	100.00%	21,140	100.00%

Attachment B

Summary of Distribution Circuit Field Inspections by ICC Staff

Summary of Distribution Circuit Field Inspection by ICC Staff			
Utility:	AmerenIP	Date:	5/11/2010
Circuit:	R71286 (Valmeyer)	Inspectors:	Mona Elsaid and Greg Rockrohr
Map No.	Item Description	Photo(s)	Location
3	Substation Transformer without Animal Guards	1	RT 156 Substation, North of IL RT 156
7	Woodpecker Holes in a Pole	2	Pole No. 2315406
7	Trees Close to the Primary	3	Pole No. 2874634
	Deteriorated Pole Top	4	Deer Hill Rd - Pole No. 2875074
18	Woodpecker Holes in a Pole and Loose Pole-Top Pin	5	In front of the intersection sign of Deer Hill Rd and Trout Camp Rd- Pole No. 2906220
	Woodpecker Holes in a Pole	6	Pole No. 2891985
19	Deteriorated poles marked with red ribbons		Near 7066 Deer Hill Rd

Summary of Distribution Circuit Field Inspection by ICC Staff			
Utility:	AmerenIP	Date:	5/25/2010
Circuit:	M41-112 (Galesburg)	Inspectors:	Mona Elsaid and Greg Rockrohr
Map No.	Item Description	Photo(s)	Location
2	Large gap in the substation gate	7	2347 N Seminary St
2	Rusted substation transformers	8	2347 N Seminary St
2	Debris on the barbed wire above the substation fence	9	2347 N Seminary St
2	A tree growing from inside the substation through the substation fence	10	2347 N Seminary St
2	Bad insulator placement on a down guy (the insulator should be below the level of the lowest energized conductor when the guy is loose)	11	Carl Sandburg Dr. outside the Substation Fence
2	Missing Cotter pin in the lower connection of guy insulator	12	In a Tap off Carl Sandburg Dr (south)
2	An ungrounded metal riser next to a school with Less than 8 feet between lowest 2 stand-off brackets and a down guy with improper insulator placement	13	In a Tap off Carl Sandburg Dr (south)
2	A Deteriorated Pole Top	14	In Front of 907 Lane Ave
2	Service drop over a roof with inadequate clearance (NESC)	15	907 Lane Ave

Summary of Distribution Circuit Field Inspection by ICC Staff			
Utility:	AmerenIP	Date:	5/25/2010
Circuit:	M41-112 (Galesburg)	Inspectors:	Mona Elsaid and Greg Rockrohr
Map No.	Item Description	Photo(s)	Location
1	A down guy W/O grounding or insulator, contacting the secondary line; there appeared to be a hose on the guy wire to keep the guy wire from being energized (inappropriate insulation) (NESC)	16	Intersection of Dayton St and Willard St.
1	Bare open-wire secondary running through trees		Intersection of Dayton St and Willard St.
1	Secondary line in contact with trees		1624 Florence Ave
1	Leaning Pole	17	Intersection of Brown Ave. and Fremont
1	Leaning Pole-Top Pin	18	Near 1608 Morton Ave.
4	Leaning Pole-Top Pin	19	Near 1116 Harrison St.

Summary of Distribution Circuit Field Inspection by ICC Staff			
Utility:	AmerenIP	Date:	5/25/2010
Circuit:	R05-115 (Galesburg)	Inspectors:	Mona Elsaid and Greg Rockrohr
Map No.	Item Description	Photo(s)	Location
18	Missing ground wire from the substation fence in the left photo.	20	1245 S Farnham St.
18	Broken substation gate	21	1245 S Farnham St., S Farnham St substation

Summary of Distribution Circuit Field Inspection by ICC Staff			
Utility:	AmerenIP	Date:	9/14/2010
Circuit:	K74-166 (Champaign)	Inspectors:	Mona Elsaid and Greg Rockrohr
Map No.	Item Description	Photo(s)	Location
	Down guys with bad insulator placement	22	Pole No. 2208302 - near Mattis Substation
	Split pole top	23	Pole No. 2208301 - near Mattis Substation
2	Split/damaged pole top	24	Pole No. 2208305 - near Mattis Substation
2	Unwrapped guy wire tie	25	Pole No. 2208305 - near Mattis Substation
2	Leaning pole with equipment	26	Across from Mattis Substation and the real road
4	Trees close to the high voltage spacer cable	27	Next to pole No. 2208340
4	Broken spacer on a spacer cable	28	Next to pole No. 2208340
	Loose pole top pin	29	Behind 1318 Hedge Rd.
	Leaning pole with equipment	30	Pole No. 2225111
1	Trees close to the primary	31	Summit Ridge Dr., Between the back yards of 1507 and 1505

Summary of Distribution Circuit Field Inspection by ICC Staff			
Utility:	AmerenIP	Date:	9/14/2010
Circuit:	L00-134 (Decatur)	Inspectors:	Mona Elsaid and Greg Rockrohr
Map No.	Item Description	Photo(s)	Location
4	Primary riser not grounded and low riser standoff bracket	32	In front of Greenwich Rd. Substation
4	Low primary riser standoff bracket	33	In front of Greenwich Rd. Substation; next to Woods Apt.
	Loose pole top pin	34	Off Hickory Point Rd Pole No. 3347373
1	Loose pole top pin	35	Sawyer Rd., Pole No. 3360796
	Low primary riser standoff bracket	No Photo	Next to Greenwich Rd. Substation, pole No. 3360822