

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

LOUISVILLE GAS AND ELECTRIC COMPANY)	CASE NO. 2016-00202
_____)	
)	
ALLEGED FAILURE TO COMPLY WITH KRS 278.042)	
)	

ORDER

Louisville Gas and Electric Company ("LG&E"), a Kentucky corporation and part of PPL Corporation, engages in the distribution of gas and electricity to the public for compensation and is a utility subject to Commission jurisdiction.

KRS 278.042 requires the Commission to ensure that each electric utility constructs and maintains its plant and facilities in accordance with accepted engineering practices as set forth in the Commission's administrative regulations and orders and the most recent edition of the National Electrical Safety Code ("NESC").

KRS 278.030 requires every utility to furnish adequate, efficient, and reasonable service. KRS 278.260 permits the Commission, upon its own motion, to investigate any act or practice of a utility that affects or is related to the service of a utility. KRS 278.280(1) further permits the Commission, after conducting such investigation and finding that a practice is unreasonable, unsafe, improper, or inadequate, to determine the reasonable, safe, proper, or adequate practice or methods to be observed and to fix the same by Order.

Pursuant to KRS 278.280(2), which directs the Commission to prescribe rules and regulations for the performance of service by utilities, the Commission has promulgated Administrative Regulation 807 KAR 5:006, Section 25, which requires all utilities to adopt and execute a safety program. 807 KAR 5:006, Section 25(1), requires each utility to establish a safety manual with written guidelines for safe working practices and procedures to be followed by utility employees. Here, LG&E has adopted the LG&E Health and Safety Manual ("LG&E Safety Manual").

Commission Staff submitted to the Commission an Accident Investigation Staff Report dated April 19, 2016 ("Staff Report"), attached hereto as an Appendix. The Staff Report alleges that on March 31, 2016, an LG&E crew was responding to an outage near the intersection of Frankfort Avenue and Crestmoor Avenue in Louisville, Kentucky. The crew replaced an aluminum cross arm on a pole, added new hardware, and was in the process of re-energizing when Mr. Edds, an LG&E technician, made contact with an adjacent phase conductor while attempting to install and tighten a hot line clamp above one of the cutouts with a screwdriver. When the screwdriver Mr. Edds was using made contact with the energized phase conductor in the primary supply spacer-cable, it created an arc that inflicted first and second-degree burns to Mr. Edds's face. Mr. Edds was treated and released from a hospital the same day.

According to LG&E, the incident occurred at approximately 11:01 a.m. and was immediately discovered by the utility. Commission Staff received notice of the incident at approximately 12:48 p.m. the same day and investigated the incident the morning of April 1, 2016. Thereafter, the Commission investigator prepared the Staff Report, which opined that the LG&E employee involved in this accident (Mr. Edds) did not meet

certain requirements of the NESC and LG&E Safety Manual.¹ The Staff Report alleges that an insulated hot stick should have been used to tighten the clamp, rather than the uninsulated metal screwdriver employed by Mr. Edds.² The Staff Report further states:

The energized spacer cable circuit had been covered with rubber protective equipment during the process of replacing the cross arm and other hardware. The rubber protective equipment was removed during the process of re-energizing and this left all of the energized phase conductors in the spacer cable circuit with the potential of contact. A phase to phase contact was made through the exposed metal in the shaft of the screwdriver.³

Based on Commission Staff's investigation of the incident as set forth in the Staff Report and the information provided by LG&E in its seven-day summary report ("LG&E Summary Report") (Attachment A to the Staff Report), Commission Staff alleges that LG&E has violated multiple provisions of the NESC, the LG&E Safety Manual, and KRS 278.042, which requires an electric utility to construct and maintain its plant and facilities in accordance with accepted engineering practices as set forth in the Commission's administrative regulations and orders and in the most recent edition of the NESC. In the Staff Report, Commission Staff alleges that LG&E violated multiple provisions of the NESC and the LG&E Safety Manual. In addition to the alleged violations cited in the Staff Report, the Commission finds that prima facie evidence exists that LG&E has violated additional NESC and

¹ Staff Report at 3.

² *Id.*

³ *Id.*

LG&E Safety Manual provisions, all as described below. The eight NESC and five LG&E Safety Manual alleged violations can be structured into three areas:

1. Failure to observe proper safety procedure on the job site to ensure the safety of all individuals involved.

- a. NESC, Part 4, Section 42, Rule 420.C.4 – Work Rules for the Operation of Electric Supply and Communications Lines and Equipment – General Rules for Employees – General – Safeguarding Oneself and Others – Employees who work on or in the vicinity of energized lines shall consider all of the effects of their actions, taking into account their own safety as well as the safety of other employees on the job site, or on some other part of the affected electric system, the property of others, and the public in general.
- b. NESC, Part 4, Section 42, Rule 421.A.1 – Work Rules for the Operation of Electric Supply and Communications Lines and Equipment – General Rules for Employees – General Operating Routines – Duties of a First-level Supervisor or Person in Charge. This individual shall adopt such precautions as are within the individual's authority to prevent accidents.
- c. NESC, Part 4, Section 42, Rule 421.A.2 – Work Rules for the Operation of Electric Supply and Communications Lines and Equipment – General Rules for Employees – General Operating Routines – Duties of a First-level Supervisor or Person in Charge. This individual shall see that the safety rules and operating procedures are observed by the employees under the direction of this individual.
- d. LG&E Safety Manual, A.3.1 – General Rules – Supervisor's Responsibility for Safety – Supervisors shall be responsible for the safety of the employees working under their direction and for the safety of the general public in connection with their work. The authority and responsibility for the action necessary to prevent accidents is an integral part of the supervisors' job.

2. Failure to wear proper personal protective equipment (“PPE”) and properly utilize tools.

- a. NESC, Part 4, Section 42, Rule 420.H – Work Rules for the Operation of Electric Supply and Communications Lines and Equipment – General Rules for Employees – General – Tools and Protective Equipment – Employees shall use the personal protective equipment, the protective devices and the special tools provided for their work. Before starting work, these devices and tools shall be carefully inspected to make sure that they are in good condition.
- b. NESC, Part 4, Section 44, Rule 441.A.1.a, .b, and .c – Work Rules for the Operation of Electric Supply and Communications Lines and Equipment – Additional Rules for Supply Employees – Energized Conductors or Parts – Minimum Approach Distance to Energized Lines or Parts – General – Employees shall not approach or bring any conductive object within the minimum approach distance listed in Table 441-1 or Table 441-4 or distances as determined by an engineering analysis to exposed parts unless one of the following is met: a. The line or part is de-energized and grounded per Rule 444D; b. The employee is insulated from the energized line or part. Electrical protective equipment insulated for the voltage involved, such as tools, rubber gloves, or rubber gloves with sleeves, shall be considered effective insulation for the employee from energized line or part being worked on; c. The energized line or part is insulated from the employee and from any other line or part at a different voltage.
- c. NESC Part 4, Section 44, Rule 443.A.2 – Work Rules for the Operation of Electric Supply and Communications Lines and Equipment – Additional Rules for Supply Employees – Work on Energized Lines and Equipment – General Requirements – Employees shall not place dependence for their safety on the covering (nonrated insulation) of wires. All precautions (see Section 44) for working on energized parts shall be observed.
- d. LG&E Safety Manual, A.13.1 – General Rules – Personal Protective and Lifesaving Equipment – Employees shall use the personal protective equipment, protective devices and special tools provided for their work. Before starting work,

the employee shall inspect these items to be sure that they are in safe operating condition.

LG&E Safety Manual, A.24.4 – General Rules – Tools – Tools should be used for only the purposes for which they have been designed, manufactured and approved.

3. Failure to observe the required minimum approach distance to energized lines or parts without appropriate protective measures.

- a. NESC, Part 4, Section 42, Rule 420.C.5 – Work Rules for the Operation of Electric Supply and Communication Lines and Equipment – General Rules for Employees – General – Safeguarding Oneself and Others – No employee shall approach or bring any conductive object, without a suitable insulating handle, closer to any exposed energized part than allowed by Rule 432 (communication) or Rule 441 (supply), as applicable.
- b. NESC, Part 4, Section 44, Rule 441.A.1 – minimum approach distance listed in Table 441-1, For 0.72 voltage in kilovolts for phase to ground is two feet, two inches.
- c. LG&E Safety Manual, D.1.8. – Distribution – Electrical Work Practices – No employee may approach or take any conductive object without an insulated handle closer to exposed energized parts than the clearances set forth in Tables D-1, D-2, D-3 and D-4, unless:
 - a. The employee is insulated from the energized part.
 - b. The energized part is insulated from the employee and any other conductive object at a different potential.
 - c. The employee is insulated from any other conductive object, as during live-line work.– Minimum approach distance listed in Table D-1 for 0.72 nominal voltage in kilovolts for phase to ground is two feet, two inches.
- d. LG&E Safety Manual, D.2.2 – Distribution – Flexible and Rigid Insulation Protective Equipment (Rubber, Fiber, Synthetics, Etc.) – Whenever any part of an employee's body may touch a conductor, or if an employee is to handle a conductive device or tool within the minimum working and clear hot-stick distance, he/she shall cover, with insulating protective equipment, the conductor, conductive device or tool within reach of any part of the body except that part of the conductor or equipment on which he/she is working.

Based on its review of the Staff Report and LG&E Summary Report, and being otherwise sufficiently advised, the Commission finds that prima facie evidence exists that LG&E has failed to comply with KRS 278.042 and the most recent edition of the NESC, and the LG&E Safety Manual. The Commission further finds that a formal investigation into the incident that is the subject matter of the Staff Report should be conducted and that this investigation should also examine the adequacy, safety, and reasonableness of LG&E's practices related to the construction, installation and repair of electric facilities.

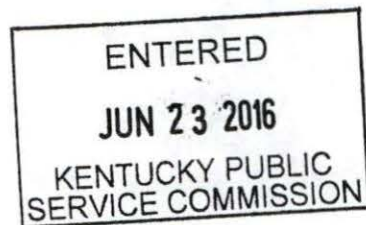
The Commission, on its own motion, **HEREBY ORDERS** that:

1. LG&E shall submit to the Commission a written response to the allegations contained in the Staff Report within 20 days of the date of this Order.
2. LG&E shall appear on August 9, 2016, at 9:00 a.m., Eastern Daylight Time ("EDT"), in Hearing Room 1 of the Commission's offices at 211 Sower Blvd. in Frankfort, Kentucky, for the purpose of presenting evidence concerning the alleged violations of KRS 278.042, the most recent edition of the NESC, and the LG&E Safety Manual, and showing cause why it should not be subject to the penalties prescribed in KRS 278.990(1) for these alleged violations.
3. The August 9, 2016 hearing shall be recorded by videotape only.
4. The Staff Report in the Appendix to this Order is made a part of the record in this case.
5. At the scheduled hearing in this matter, LG&E shall also present evidence on the adequacy, safety, and reasonableness of its practices related to the construction,

installation, and repair of electric facilities as they relate to the facts of this case, and whether such practices require revision as related to this incident.

6. Any request for an informal conference with Commission Staff to discuss the issues in this case shall be set forth in writing and filed with the Commission within 20 days of the date of this Order.

By the Commission



ATTEST:


Acting Executive Director

Case No. 2016-00202

APPENDIX

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE
COMMISSION IN CASE NO. 2016-00202 DATED **JUN 23 2016**



Matthew G. Bevin
Governor

Daniel E. Logsdon Jr.
Vice Chairman

Charles G. Snavelly
Secretary
Energy and Environment Cabinet

Commonwealth of Kentucky
**Public Service
Commission**
211 Sower Blvd.
P.O. Box 615
Frankfort, Kentucky 40602-
0615
Telephone: (502) 564-3940

ACCIDENT INVESTIGATION STAFF REPORT

Report Date: April 19, 2016

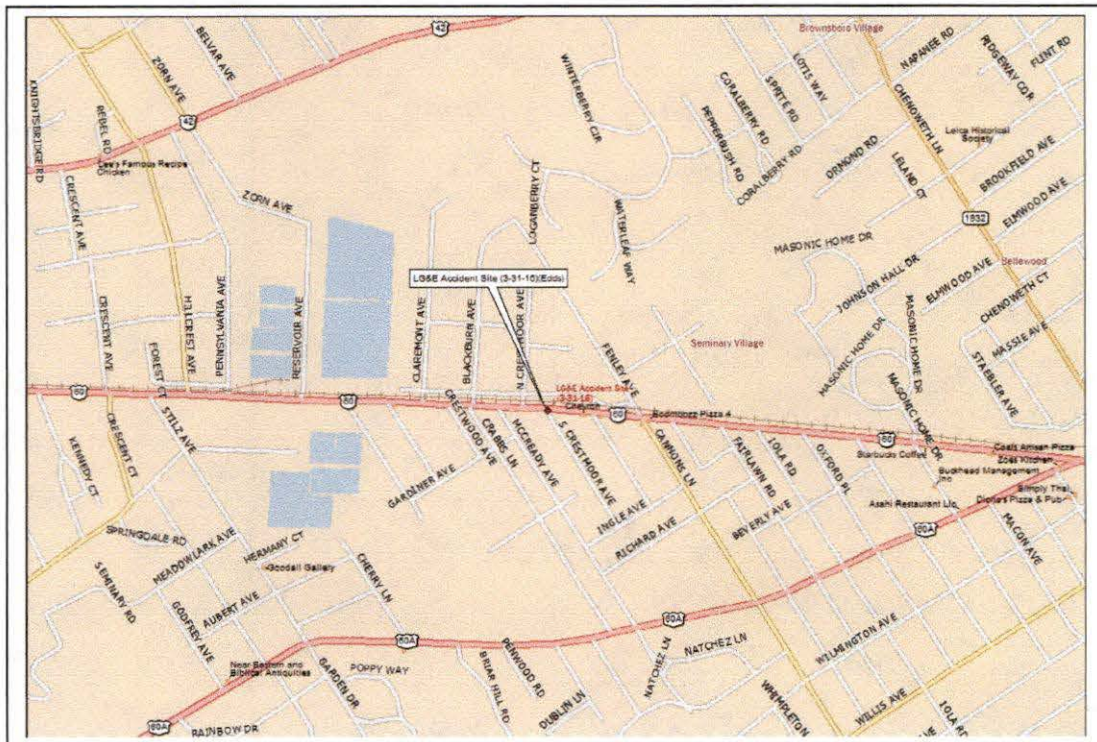
Accident Date: March 31, 2016

Serving Utility: Louisville Gas and Electric

Accident Location: Frankfort Ave. at Crestmoor Ave, Louisville, Kentucky

Accident Victim: Brent "Cody" Edds

PSC Investigator: Steve Kingsolver





Matthew G. Bevin
Governor

Daniel E. Logsdon Jr.
Vice Chairman

Charles G. Snavely
Secretary
Energy and Environment Cabinet

Commonwealth of Kentucky
**Public Service
Commission**
211 Sower Blvd.
P.O. Box 615
Frankfort, Kentucky 40602-
0615
Telephone: (502) 564-3940

Kentucky Public Service Commission Electric Branch Electric Utility Accident Investigation Report

Utility: Louisville Gas and Electric (LG&E)

Reported By: Greg Lindsey, Manager Electrical Technical Training

Accident Occurred: March 31, 2016, Approximately 11:01 AM

Utility Discovered: March 31, 2016, Approximately 11:01 AM

PSC Notified: March 31, 2016, Approximately 12:48 PM

PSC On-Site Investigation: April 1, 2016, Approximately 9:00 AM

Utility Summary Report Received: April 7, 2016

Type of Accident: Employee

Accident Location: Intersection of Frankfort Ave. and Crestmoor Ave.
Louisville, Kentucky

Accident Description:

An LG&E crew was responding to an outage report on Thursday, March 31, 2016. The crew was replacing an aluminum cross arm on a pole located at Frankfort Ave. and Crestmoor Ave. in Louisville, Ky. They had completed the replacement of the cross arm and adding new hardware and were in the process of re-energizing when the victim, Brent Cody Edds, was attempting to install and tighten a hot line clamp above one of the cutouts. The energized primary circuit that was being worked on is called a spacer cable circuit that puts the energized phase conductors much closer to each other (approximately 8" apart) than standard circuit construction. The energized phase conductors in spacer cable are normally insulated. The victim was using a screwdriver put through the ring on the end of the energized hot line clamp to tighten it on "A" phase of the circuit. While this was taking place, the tip of the screwdriver made contact with a spot on "C" phase that had been skinned (insulation removed) in the past and had insulation reinstalled. The action of the

screwdriver contacting both energized phase conductors caused an arc and this caused 1st and 2nd degree burns to the victims face. The 2 burn marks on the screwdriver are approximately 6.5" apart. The metal shaft of the screwdriver is approximately 7.5" long. There is an insulated hot stick that should have been used to tighten the hot line clamp.

The energized spacer cable circuit had been covered with rubber protective equipment during the process of replacing the cross arm and other hardware. The rubber protective equipment was removed during the process of re-energizing and this left all of the energized phase conductors in the spacer cable circuit with the potential of contact. A phase to phase contact was made through the exposed metal in the shaft of the screwdriver.

Victim:	Name:	Title:	Employer:
	Brent "Cody" Edds	Line Tech B	LG&E

Witnesses:	Name:	Title:	Employer:
	Gary Stratman	Line Tech A	LG&E
	Casey Cox	Line Tech C	LG&E
	Tom Malloy	Lead Line Tech	LG&E
	Matt Hardesty	Line Tech A	LG&E
	James Hancock	Line Tech A	LG&E
	Ronald Miles	Crew Leader	LG&E

Information From:	Name:	Position:	Employer:
	Greg Lindsey	Manager, Electric Training	LG&E
	Brian Claypool	Technical Training	LG&E
	Steve Denning	Group Leader	LG&E
	Tom Malloy	Foreman	LG&E
	P.L. Breeding	Vice President	IBEW

Temp & Weather: 65° and Rain

FINDINGS:

It is the investigator's opinion that the LG&E employee involved in this accident did not meet the following requirements set forth in the National Electrical Safety Code (NESC) and LG&E Safety Manual.

RELEVANT CODES, STATUTES, REGULATIONS, OR SAFETY MANUAL ISSUES THAT ARE PERTINENT TO THE INVESTIGATION

278.042 Service adequacy and safety standards for electric utilities
National Electrical Safety Code

(1) For the purposes of this section, "NESC" means the National Electrical Safety Code as published by the Institute of Electrical and Electronics Engineers, Inc.

(2) Except as otherwise provided by law, the commission shall, in enforcing service adequacy and safety standards for electric utilities, ensure that each electric utility constructs and maintains its plant and facilities in accordance with accepted engineering practices as set forth in the commission's administrative regulations and orders and in the most recent edition of the NESC.

Effective: June 24, 2003

History: Created 2003 Ky. Acts Ch. 84, sec. 1, Effective June 24, 2003.

2012 National Electric Safety Code:

See 2012 NESC Code to view each rule in its entirety.

#1.

National Electrical Safety Code

Part 4: Work Rules for the Operation of Electric Supply and Communications Lines and Equipment

Section 42: General Rules for Employees

#420: General

C: Safeguarding Oneself and Others

#4: Employees who work on or in the vicinity of energized lines shall consider all of the effects of their actions, taking into account their own safety as well as the safety of other employees on the job site, or on some other part of the affected electric system, the property of others, and the public in general.

(P-269)

2.

National Electrical Safety Code

Part 4: Work Rules for the Operation of Electric Supply and Communications Lines and Equipment

Section 42: General rules for employees

#420: General

H: Tools and protective equipment

Employees shall use the personal protective equipment, the protective devices, and the special tools provided for their work. Before starting work, these devices and tools shall be carefully inspected to make sure they are in good condition.

(Page 270)

3.

National Electrical Safety Code

Part 4: Work Rules for the Operation of Electric Supply and Communications Lines and Equipment

Section 42: General Rules for Employees

#421: General Operating Routines

A: Duties of a first-line Supervisor or person in charge
This individual shall:

1. Adopt such precautions as are within the individual's authority to prevent accidents.
 2. See that all safety rules and operating procedures are observed by employees under the direction of this individual.
-

4.

National Electrical Safety Code

Part 4: Work Rules for the Operation of Electric Supply and Communications Lines and Equipment

Section 44 Additional rules for supply employees

441. Energized Conductors or Parts

Employees shall not approach (within the reach or extended reach), or knowingly permit others to approach, any exposed ungrounded part normally energized except as permitted by this rule.

A. Minimum Approach Distance to Live Parts

1. General

Employees shall not approach or bring any conductive object within the minimum approach distance listed in Table 441-1 or Table 441-4 or distances as determined by an engineering analysis to exposed parts unless one of the following is met:

- a. The line or part is de-energized and grounded per Rule 444D.
- b. The employee is insulated from the energized line or part. Electrical protective equipment insulated for the voltage involved, such as tools, gloves, rubber gloves, or rubber gloves with sleeves, shall be considered effective insulation for the employee from the energized part being worked on.
- c. The energized line or part is insulated from the employee and from any other line or part at a different voltage.

5.

National Electrical Safety Code

Part 4: Work Rules for the Operation of Electric Supply and Communications Lines and Equipment

Section 44: Additional rules for supply employees

#443: Work on energized lines and equipment

A. General requirements

2. Employees shall not place dependence for their safety on covering (nonrated insulation) of wires. All precautions (See Section 44) for working on energized parts shall be observed.

807 KAR 5:006. General rules.

RELATES TO: KRS 65.810, 74, 96.934, 220.510, 278, 49 C.F.R. Part 192, 49 U.S.C. 60105

STATUTORY AUTHORITY: KRS 278.230, 278.280(2), 49 C.F.R. 192

NECESSITY, FUNCTION, AND CONFORMITY: KRS 278.230(3) requires every utility to file with the commission reports, schedules, and other information that the commission requires. KRS 278.280(2) requires the commission to promulgate an administrative regulation for the performance of a service or the furnishing of a commodity by a utility. This administrative regulation establishes requirements that apply to electric, gas, water, sewage, and telephone utilities.

807 KAR 5:006 General Rules

Section 25: Safety Program

Section 25: Safety Program: Each utility shall adopt and execute a safety program, appropriate to the size and type of its operations. At a minimum, the safety program shall:

(1) Establish a safety manual with written guidelines for safe working practices and procedures to be followed by utility employees.

(2) Instruct employees in safe methods of performing their work. For electric utilities, this is to include the standards established in 807 KAR 5:041, Section 3.

(3) Instruct employees who, in the course of their work, are subject to the hazard of electrical shock, asphyxiation or drowning, in accepted methods of artificial respiration.

LG&E Safety Manual:

(See LG&E Safety Manual to view each rule in its entirety.)

#1.

A. General Rules

A.13 Personal Protective and Lifesaving Equipment

A.13.1 Employees shall use the personal protective equipment, protective devices and special tools provided for their work. Before starting work, the employee shall inspect these items to be sure that they are in safe operating condition.

2.

A. General Rules

A.24 Tools

A.24.4 Tools should be used for only the purposes for which they have been designed, manufactured and approved.

3.

D. Distribution

D.2 Flexible and Rigid Insulation Protective Equipment
(Rubber, Fiber, Synthetics, Etc.)

D.2.2 Whenever any part of an employee's body may touch a conductor, or if an employee is to handle a conductive device or tool within the minimum working and clear hot-stick distance, he/she shall cover, with insulating protective equipment, the conductor, conductive device or tool within reach of any part of the body except that part of the conductor or equipment on which he/she is working.

Investigated By:

Name:

Steve Kingsolver

Company:

KPSC

Signed:

Steve Kingsolver

Date:

4-19-16

Attachments:

- A. LG&E Accident Summary Report
- B. KPSC Photographs of Accident Site
- C. KPSC Map of Accident Site
- D. Accident Notification Information

Attachment A

LG&E Accident Summary Report

Eng



PPL companies

RECEIVED

APR 07 2016

PUBLIC SERVICE
COMMISSION

April 6, 2016

Steven R. Kingsolver
Investigator - Electric Branch
Kentucky Public Service Commission
211 Sower Blvd.
P.O. Box 615
Frankfort, KY 40602

LG&E and KU Energy, LLC
Corporate Law
220 W. Main Street
Louisville, Kentucky 40202
www.lge-ku.com

Jay Warren
Senior Corporate Attorney
T 502-627-3203
F 502-627-3367
Jay.Warren@lge-ku.com

Re: Report No. 16-ED-E-004

Dear Mr. Kingsolver:

I am forwarding the enclosed Investigation Report prepared by Greg Lindsay regarding the above referenced electric contact incident. Louisville Gas and Electric Company is providing this report to the KPSC in accordance within the applicable seven-day reporting requirement. Please return a file stamped copy of the report in the envelope provided.

Should you need additional information concerning this incident, please contact me at (502) 627-3203.

Sincerely,

Jay Warren

Enclosures

KPSC INVESTIGATION REPORT

LG&E Employee Injury

Type of Report

16-ED-E-004

Report Number

Lindsey & Claypool

Investigator

March 31, 2016

Date of Incident

Location: 3300 Frankfort Ave
Louisville, Kentucky

Incident Summary

On Thursday March 31, 2016 at 11:01 a.m. an LG&E electric construction crew was replacing an aluminum arm on a pole located near the intersection of Frankfort Avenue and Crestmoor Avenue in Louisville, Kentucky. Employee Brett "Cody" Edds was tightening a hot line clamp on the 'A' phase when his screwdriver came into contact with the 'C' phase, causing a phase-to-phase fault. As a result of the fault, the circuit HC1290 opened at the substation. The circuit previously had been placed under caution (one fault lockout) at the substation by the crew performing the work.

Mr. Edds was transported to Jewish Hospital in Louisville, Kentucky by members of the crew. Mr. Edds sustained first and second degree facial burns. He was treated and released to return to work without restrictions.

Greg Lindsey, Manager Electrical Technical Training and Public Safety, notified the PSC by phone at approximately 12:48 p.m. after learning the employee received medical treatment at the hospital.

Incident Investigation

Name of injured: Brent Cody Edds
Location of incident: 3300 Frankfort Ave
Time of incident: 11:01a.m.

LG&E construction crew was dispatched to a "part light call" (partial outage investigation) to help Line Techs A Matt Hardesty and Line Tech C Casey Cox change out a set of aluminum short arms and switches feeding a bank of transformers. The short arms were replaced with a new cross arm on the pole located near the intersection of Frankfort Avenue and Crestmoor Avenue in Louisville, KY. The LG&E crew consisted of Lead Line Tech Tom Malloy, Crew Line Tech A Gary Stratman and Line Tech A Jim Hancock, Line Tech B Cody

Edds, and Lead Construction and Maintenance Mechanic Ron Miles. As the crew worked to change the arm and were replacing the hot line clamps, Mr. Edds placed the A-phase clamp and was tightening it with a screwdriver when his screwdriver contacted the A and C-phase conductor and locked circuit HC 1290 out under caution.

The following Circuits are on the pole: 6629 69KV, HC 1432, and HC 1290.

Injuries sustained:

Mr. Edds was diagnosed with facial burns, was treated and released to return to work.

Employee Information:

Name: Brett Cody Edds

Job Title: Line Tech B

Classification at hire: Line Tech C

Experience:

- Southeast Linemen College (December 2011)
- Elliot (April 2012-2015, B Lineman)
- LG&E (March 2015 – Present)

Enclosures:

- Breaker Operations Checklist
- Pre-job Briefing – 3230 Frankfort Avenue
- 3200 Frankfort Avenue Job Briefing
- HC1290 Circuit Map
- HC1432 Circuit Map
- Witness Statements
- Frankfort Avenue Event Report

Date of Report: April 6, 2016

END OF REPORT

Outage #	Type	Actual Out	Actual In	Device	Station	#Ops	Target1	Target2	Target3	Target4	PBC	CBC	Phase	Company	Owner	Created By
11477-2016	BREAKER	03/31/2016 10:28	03/31/2016 11:38	MT-345KV TR 7	Middletown 345									LGE	LGE	E002800
11453-2016	BREAKER	03/31/2016 15:34	03/31/2016 15:34	SEL_COP124182 B PHASE	Middletown 345	1	06-Instantaneous Over Current B	06-Instantaneous Over Current G	None-None	None-None				LGE	LGE	E002800
11477-2016	BREAKER	03/31/2016 10:28	03/31/2016 11:38	MT-453B-TR 5 TIE	Middletown 345									LGE	LGE	E002800
11477-2016	BREAKER	03/31/2016 10:28	03/31/2016 11:38	MT-4541-TR 7 TIE	Middletown 345									LGE	LGE	E002800
11477-2016	BREAKER	03/31/2016 10:28	03/31/2016 11:38	MT-345KV TR 4B	Middletown 345									LGE	LGE	E002800
11477-2016	BREAKER	03/31/2016 10:28	03/31/2016 11:38	MT-345KV TR 3B	Middletown 345									LGE	LGE	E002800
11477-2016	BREAKER	03/31/2016 10:28	03/31/2016 11:38	MT-345KV TR 4A	Middletown 345									LGE	LGE	E002800
11477-2016	BREAKER	03/31/2016 10:28	03/31/2016 11:38	MT-345KV TR 3A	Middletown 345									LGE	LGE	E002800
11487-2016	BREAKER	03/31/2016 15:25	03/31/2016 15:25	ET-1423	Ethel	1	04-Time Over Current G	06-Instantaneous Over Current A	06-Instantaneous Over Current B	None-None				LGE	LGE	E002800
11452-2016	BREAKER	03/31/2016 15:35	03/31/2016 15:35	FM-1256	Fairmount	1	06-Instantaneous Over Current B	07-Instantaneous Over Current C	None-None	None-None				LGE	LGE	E002800
11449-2016	BREAKER	03/31/2016 15:35	03/31/2016 15:35	FM-1256	Fairmount	1	06-Instantaneous Over Current B	07-Instantaneous Over Current C	None-None	None-None				LGE	LGE	E002800
11471-2016	BREAKER	03/31/2016 21:55	03/31/2016 21:55	FV-1134	Fern Valley	1	05-Instantaneous Over Current A	06-Instantaneous Over Current B	None-None	None-None				LGE	LGE	E002800
11445-2016	BREAKER	03/31/2016 15:18	03/31/2016 15:18	SW-1184	Stewart	1	05-Instantaneous Over Current B	07-Instantaneous Over Current C	None-None	None-None				LGE	LGE	E002800
11468-2016	BREAKER	03/31/2016 15:16	03/31/2016 15:16	TE-1245	Terry	1	07-Instantaneous Over Current C	None-None	None-None	None-None				LGE	LGE	E002800
11465-2016	BREAKER	03/31/2016 15:22	03/31/2016 16:16	FV-1472	Fern Valley	2	05-Instantaneous Over Current A	06-Instantaneous Over Current B	07-Instantaneous Over Current C	08-Instantaneous Over Current G				LGE	LGE	E002800
11462-2016	BREAKER	03/31/2016 15:22	03/31/2016 15:22	FV-1472	Fern Valley	2	04-Time Over Current G	None-None	None-None	None-None				LGE	LGE	E002800
11480-2016	BREAKER	03/31/2016 15:22	03/31/2016 16:16	FV-1477	Fern Valley	2	05-Instantaneous Over Current A	06-Instantaneous Over Current B	07-Instantaneous Over Current C	08-Instantaneous Over Current G				LGE	LGE	E002800
11437-2016	BREAKER	03/31/2016 07:48	03/31/2016 07:48	WT-1155	Watterson	1	05-Instantaneous Over Current A	06-Instantaneous Over Current B	None-None	None-None				LGE	LGE	E002800
11438-2016	BREAKER	03/31/2016 10:01	03/31/2016 10:08	HC-1290	Holmes	1	05-Instantaneous Over Current A	07-Instantaneous Over Current C	None-None	None-None				LGE	LGE	E002800
11455-2016	BREAKER	03/31/2016 15:32	03/31/2016 15:32	HB-1145	Hurstbourne	1								LGE	LGE	E002800
11465-2016	BREAKER	03/31/2016 15:16	03/31/2016 15:16	IN-1291	International	1	05-Instantaneous Over Current A	06-Instantaneous Over Current B	07-Instantaneous Over Current C	None-None				LGE	LGE	E002800
11451-2016	BREAKER	03/31/2016 15:25	03/31/2016 15:38	CS-1261	Conestoga	3	02-Time Over Current B	None-None	None-None	None-None				LGE	LGE	E002800
11450-2016	BREAKER	03/31/2016 15:38	03/31/2016 15:38	EW-1240	Eastwood West	1	07-Instantaneous Over Current C							LGE	LGE	E002800
11449-2016	BREAKER	03/31/2016 15:31	03/31/2016 15:31	HK-1241	Harrods Creek	1	05-Instantaneous Over Current A	None-None	None-None	None-None				LGE	LGE	E002800
11454-2016	BREAKER	03/31/2016 15:33	03/31/2016 15:33	HK-1243	Harrods Creek	1	05-Instantaneous Over Current A	None-None	None-None	None-None				LGE	LGE	E002800
11446-2016	BREAKER	03/31/2016 15:21	03/31/2016 15:21	AL-1441	Alapocas	1	04-Time Over Current G	None-None	None-None	None-None				LGE	LGE	E002800
11435-2016	BREAKER	03/31/2016 06:24		NA-1264	Nachand	3	05-Instantaneous Over Current A	06-Instantaneous Over Current B	None-None	None-None				LGE	LGE	E003456
11436-2016	BREAKER	03/31/2016 07:34	03/31/2016 07:53	NA-1266	Nachand	3	05-Instantaneous Over Current A	07-Instantaneous Over Current C	10-Hi Set Instantaneous A	12-Hi Set Instantaneous C				LGE	LGE	E003456
11433-2016	BREAKER	03/31/2016 01:49	03/31/2016 02:12	BR-1186	Breckenridge	3	01-03	05-Instantaneous Over Current A	06-Instantaneous Over Current B	07-Instantaneous Over Current C				LGE	LGE	E009254
11458-2016	BREAKER	03/31/2016 15:29	03/31/2016 15:29	BR-1354	Breckenridge	2	02-Time Over Current B	04-Time Over Current G	None-None	None-None				LGE	LGE	E002800
11447-2016	BREAKER	03/31/2016 15:29	03/31/2016 15:29	BR-1354	Breckenridge	2	02-Time Over Current B	04-Time Over Current G	None-None	None-None				LGE	LGE	E002800
11461-2016	BREAKER	03/31/2016 15:23	03/31/2016 15:23	C-1342	Canal	3	04-Time Over Current G	None-None	None-None	None-None				LGE	LGE	E002800
11459-2016	BREAKER	03/31/2016 15:24	03/31/2016 15:25	CL-1226	Clifton	2	02-Time Over Current B	05-Instantaneous Over Current A	06-Instantaneous Over Current B	07-Instantaneous Over Current C				LGE	LGE	E002800
11468-2016	BREAKER	03/31/2016 15:15	03/31/2016 15:15	PL-1271	Pleasure Ridge	1	07-Instantaneous Over Current C	None-None	None-None	None-None				LGE	LGE	E002800
11464-2016	BREAKER	03/31/2016 15:17	03/31/2016 15:17	PL-1272	Pleasure Ridge	1	07-Instantaneous Over Current C	None-None	None-None	None-None				LGE	LGE	E002800
11463-2016	BREAKER	03/31/2016 15:17	03/31/2016 15:17	PL-1272	Pleasure Ridge	1	07-Instantaneous Over Current C	None-None	None-None	None-None				LGE	LGE	E002800
11467-2016	BREAKER	03/31/2016 15:16	03/31/2016 15:16	PL-1274	Pleasure Ridge	1	06-Instantaneous Over Current B	07-Instantaneous Over Current C	None-None	None-None				LGE	LGE	E002800
11458-2016	BREAKER	03/31/2016 15:25	03/31/2016 15:25	DA-1239	Dahlia	1	06-Instantaneous Over Current B	None-None	None-None	None-None				LGE	LGE	E002800
11456-2016	BREAKER	03/31/2016 15:29	03/31/2016 15:29	BR-1354	Breckenridge	2	02-Time Over Current B	04-Time Over Current G	None-None	None-None				LGE	LGE	E002800
11447-2016	BREAKER	03/31/2016 15:29	03/31/2016 15:29	BR-1354	Breckenridge	2	02-Time Over Current B	04-Time Over Current G	None-None	None-None				LGE	LGE	E002800

Pre-job briefing



Date 3-31-16 Job # 1949480
 Location 3200 Frankfort Ave.
 Circuit # HC1290 Voltage 7200 Circuit on "One-Shot" Yes No
 Conducted by M. Hardisty Foreman/person in charge M. Hardisty
 Nearest medical facility Swish Emergency contact # 911

Part I — Provide work overview discussed with the crew:

Replace old ne short switcharms with new wooden switch arm.

Part II — List recognized hazards and preventions discussed with the crew:

Rain, public, etc

Discussion topic guide (check all that apply)

- | | |
|--|---|
| <input checked="" type="checkbox"/> Work procedures involved | <input checked="" type="checkbox"/> Cover-up required |
| <input checked="" type="checkbox"/> Bucket or line truck placement | <input checked="" type="checkbox"/> Assignment of work tasks |
| <input checked="" type="checkbox"/> Material handling and rigging | <input checked="" type="checkbox"/> Traffic control requirements |
| <input checked="" type="checkbox"/> Special precautions needed | <input checked="" type="checkbox"/> Public safety precautions |
| <input checked="" type="checkbox"/> Energy source controls (cut-outs, switches, reclosers, grounds, generator backfeed, "open points") | <input type="checkbox"/> Utility locates (marked/unmarked) |
| <input type="checkbox"/> Grounding (when necessary) | <input checked="" type="checkbox"/> Environmental issues |
| <input checked="" type="checkbox"/> Personal protective equipment (PPE) | <input type="checkbox"/> Identify other work groups in area |
| <input checked="" type="checkbox"/> Observer responsibilities | <input checked="" type="checkbox"/> Conditions that may change during the day |
| <input checked="" type="checkbox"/> Interruptions and distractions | <input type="checkbox"/> Confined-space entry procedures |
| <input checked="" type="checkbox"/> Echo protocol | <input checked="" type="checkbox"/> Minimum approach distance |
| | <input type="checkbox"/> Excavation and trench hazards |

Additional comments and suggestions: _____

Each of the following crew members has been included in this discussion involving the potential risks of the works at this location and understands the necessary precautions to ensure the safety of everyone involved:

Signature	Employee #	Signature	Employee #
<u>Miguel Armenta</u>	<u>2016</u>	<u>Chris</u>	<u>27944</u>
<u>Gary Strain</u>	<u>2961</u>	<u>Tom Malloy</u>	<u>3807</u>
<u>Butch</u>	<u>27940</u>		
<u>J. Hancock</u>	<u>10714</u>	<u>Ron</u>	<u>3801</u>

WR/EVENT # 1948480

DATE 3/31/2016 9:44:09 AM

Location 3230 FRANKFORT AVE.

Voltage DISTRIBUTION

Clearance N

Circuit HC 1290

Conducted By 3807 MALLOY

DESCRIPTION OF WORK

REPLACE SWITCH ARM.

HAZARDS ASSOCIATED WITH JOB

WORK PROCEDURES INVOLVED

ANY SPECIAL PRECAUTIONS INVOLVED

ALL ENERGY SOURCE CONTROLS

PERSONAL PROTECTIVE EQUIPMENT REQUIRED

SUBSTATION WORK REQUIRED THE FOLLOWING ITEMS TO BE COVERED

LOCATION OF ENERGIZED EQUIPMENT

LIMITS OF ANY DE-ENERGIZED WORK AREA

COMMENTS

ATTENDEES		
E002961	LGE	3/31/2016 9:48:56 AM
E003804	LGE	3/31/2016 9:48:56 AM
E003807	LGE	3/31/2016 9:48:56 AM
E010714	LGE	3/31/2016 9:48:56 AM
E026165	LGE	3/31/2016 9:48:56 AM
E027940	LGE	3/31/2016 9:48:56 AM
E027944	LGE	3/31/2016 9:48:56 AM



LG&E Asset Information (502) 627-3011

Plotted 09/21/2015 by Justice, Joey

Corresponds to: HILLCREST #1K1290



ACCIDENT WITNESS STATEMENT

Employee:

Brett Edds

Employee Job Title:

B Class Line Tech

Location of accident:

3300 Frankfort Ave.

Date of accident:

3/31/2016

Statement:

I was assisting in changing out a switch arm. We mounted the arm and were hooking up the top side of the switches. I hooked up BØ switch and put on the riser for AØ switch. I then tried to tighten up the hot line clamp using a screw driver then there was a bright yellow flash followed by black and then I could hear my coworkers asking if I was ok. I then boomed down.

Signature of Witness:



Date:



ACCIDENT WITNESS STATEMENT

Employee:

Gary Stratman

Employee Job Title:

Lineman A Class

Location of accident:

3300 Frankfort Ave.

Date of accident:

3/31/2016

Statement:

We were changing out the Old Aluminum Brackets with 8 ft. Arm. & I was coming down in the bucket to get the 714 doors & I had my back to the men in the bucket & heard a loud boom. I looked up and saw Bret Edds shaking.

Signature of Witness:

Date:

Gary Stratman

04-06-16

ACCIDENT WITNESS STATEMENT

Employee:

Casey Cox

Employee Job Title:

Lineman C

Location of accident:

3300 Frankfort Ave.

Date of accident:

3/31/2016

Statement:

At the time of the incident I was in the bucket working on the other side of the pole removing coverup when Cody Edds was making up the last connection. I heard and saw a flash and load bang I yelled over at Cody and asked if he was ok after I heard him say he was ok and was moving around I came down to the ground.

Signature of Witness:

Date:



4-5-16

ACCIDENT WITNESS STATEMENT

Employee:

Tom Malloy

Employee Job Title:

Lead Line Tech.

Location of accident:

3300 Frankfort Ave.

Date of accident:

3/31/2016

Statement:

At the time of the incident I was watching Mr. Edds work. My positioning was not the best. I was below & behind him. I did see the flash, heard the boom and then saw smoke – all in front of him. At that time I had all buckets return to the ground.

Signature of Witness:

Date:

Tom Malloy

04-05-16

ACCIDENT WITNESS STATEMENT

Employee:

Matt Hardesty

Employee Job Title:

Class A Line Tech

Location of accident:

3300 Frankfort Ave.

Date of accident:

3/31/2016

Statement:

When it happened I was heading to truck to call dispatch to close bank.
After I was only concerned with everyone's safety and getting the lights back on.

Signature of Witness:



Date:

4-5-16

ACCIDENT WITNESS STATEMENT

Employee:

James Hancock

Employee Job Title:

A-Class Lineman LG&E

Location of accident:

3300 Frankfort Ave.

Date of accident:

3/31/2016

Statement:

At time of accident I was handing to Gary Stratman fuse doors, I heard boom, looked up, asked if everyone is ok.

Signature of Witness:

Date:

James Hancock

4-5-16

ACCIDENT WITNESS STATEMENT

Employee:

Ronald Miles E003804

Employee Job Title:

Construction & Maintenance Crew Leader - Pole Crew

Location of accident:

3300 Frankfort Ave.

Date of accident:

3/31/2016

Statement:

At the time of flash, I was walking over to see what Gary Stratman needed.

Signature of Witness:

Date:

Ronald Miles

4-5-16

Event #
Device

Switching Plan #
Zone

Job Actions | Completion Actions | Equipment Failure

Event Began
Est # of Cust Out

Event Restored
Meter #
Reading

Details

System	<input type="text" value="Overhead"/>	Cause	<input type="text" value="Equipment Failure"/>
Type	<input type="text" value="Transformer"/>	Interrupting Device	<input type="text" value="Transformer Fuse"/>
Equipment Affected	<input type="text" value="Crossarm/Conductor Support"/>	Weather	<input type="text" value="Rain/Snow/Fog"/>
Job Code	<input type="text" value="--"/>	Remedy	<input type="text" value="Completed/Restored"/>

Event Note

Exclude This Event

Operabons Event Note

cutouts and old metal switch arms broke down. Replaced with new wooden switch arm.

Operabons Event Note History

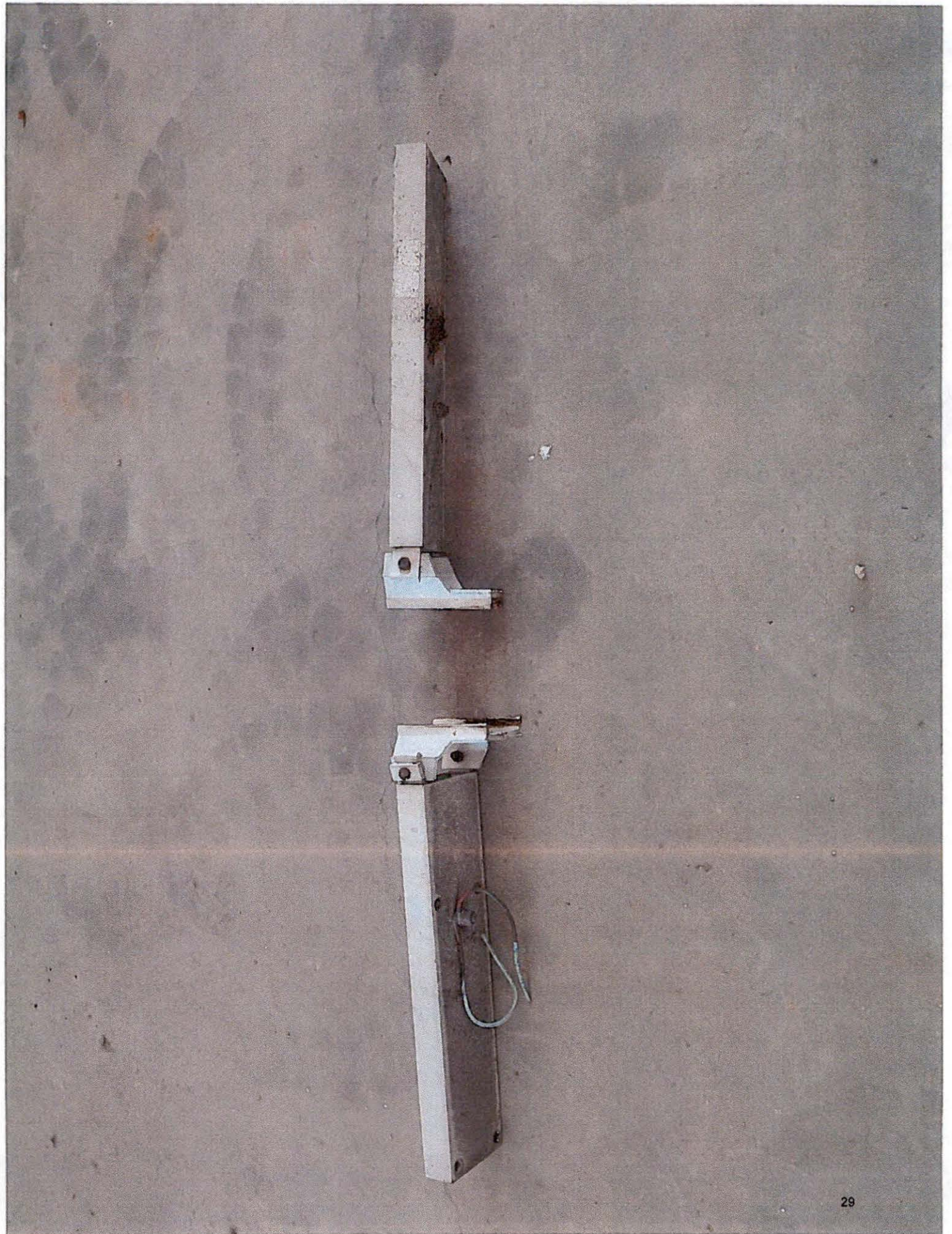
Note	Date	Crew
cutouts and old metal switch arms broke down. Replaced with new wooden switch arm.	2016/03/31 11:28:14	335_Matthew_Ha.
Completed as Assist.	2016/03/31 11:40:37	331c_Jim_Hancock
Completed as Assist.	2016/03/31 12:02:57	331_Tom_Malloy

Post-Completion Edit Log

Who	Date	Reason	Field	Previous Value
e010360	03/31/16 12:12	Initial completion		











TO WRITE ON THIS LABEL USE AN INDELIBLE, PERMANENT INK MARKER,
PEN OR PENCIL THAT WILL NOT FADE IN DIRECT SUNLIGHT

ANNUAL VEHICLE INSPECTION LABEL NO. **34254344**

COMPLETED: MONTH 25 YEAR 2015

A RECORD OF THIS VEHICLE'S ANNUAL VEHICLE INSPECTION REPORT IS
MAINTAINED AT: MOTOR CARRIER OTHER ENTITY

Global Rental
COMPANY / NAME

Business Center Pkwy STE 250
STREET

Birmingham AL 35242
CITY, STATE, ZIP CODE

57-35274595
TELEPHONE MOTOR CARRIER IDENTIFICATION NUMBER

CERTIFICATION: THIS VEHICLE HAS PASSED AN INSPECTION IN ACCORDANCE
WITH 49CFR 396.17 THROUGH 396.23.

VEHICLE IDENTIFICATION: IF THE VEHICLE IS NOT READILY, CLEARLY, AND
PERMANENTLY MARKED, CHECK ONE AND COMPLETE.

FLEET UNIT NUMBER LICENSE / REGISTRATION NUMBER

VEHICLE IDENTIFICATION NUMBER OTHER

3C7WRNALIEG594797

© Copyright 1990 and Published by J. J. KELLER & ASSOCIATES, INC., Neenah, WI 54957-0368

49-BN (Rev. 5/95)

Altec.
877-GO ALTEC

MILES _____ DIELECTRIC TEST
HOURS _____ CHASSIS SERV.

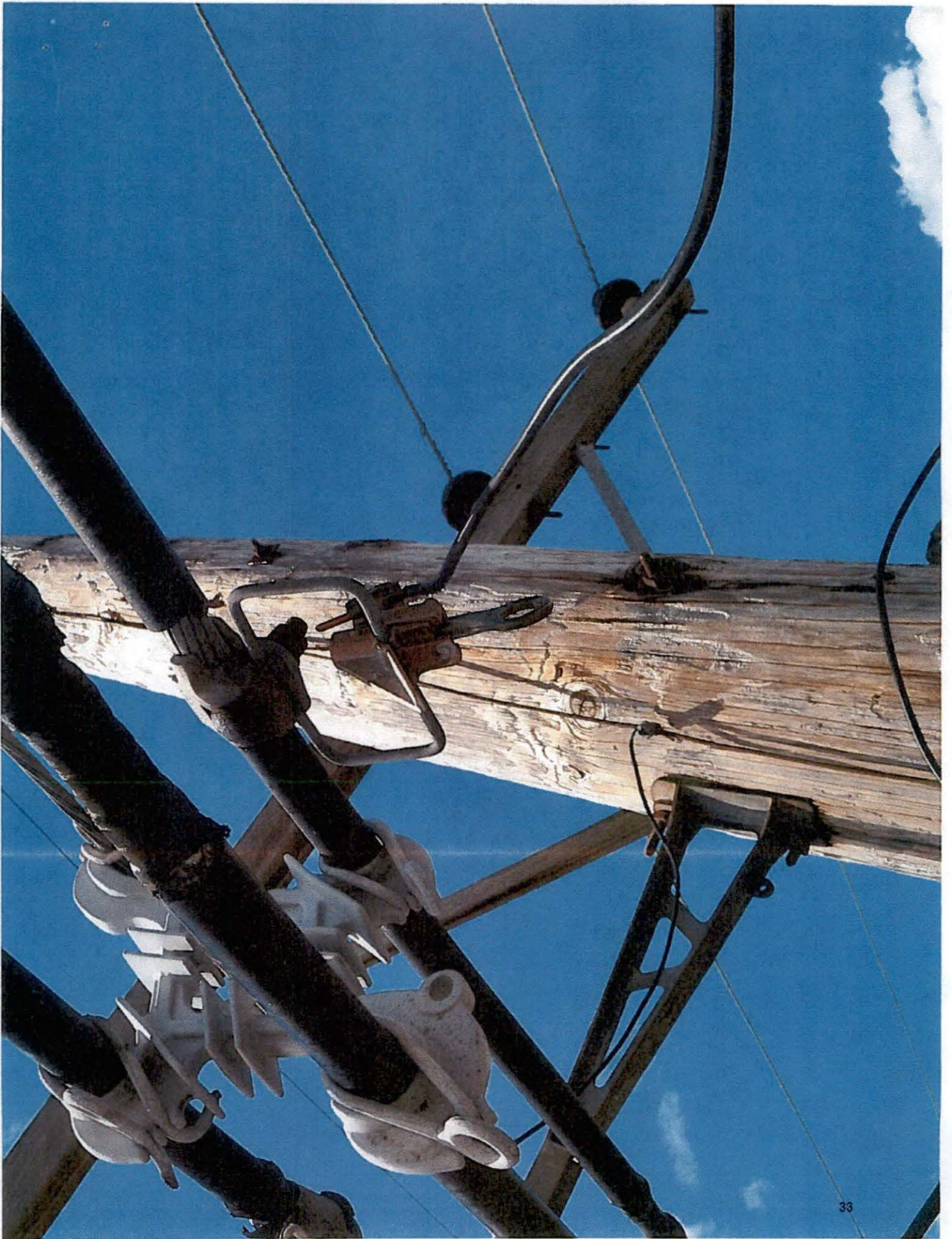
SERVICE REQ. #

MONTH

YEAR

PM INSP.

	J	F	M	A	●	J	J	A	S	O	N	D	2013	2014	2015	2016
PM INTERVAL	1		4		6	12	24	36								
	J	F	M	A	●	J	J	A	S	O	N	D	2013	2014	2015	2016
	J	F	M	A	M	J	J	A	S	O	N	D	2013	2014	2015	2016



Rg
Left

TYPE I
7000V AC

EXP
MAY 06 2015



Attachment B

KPSC Photographs of Accident Site



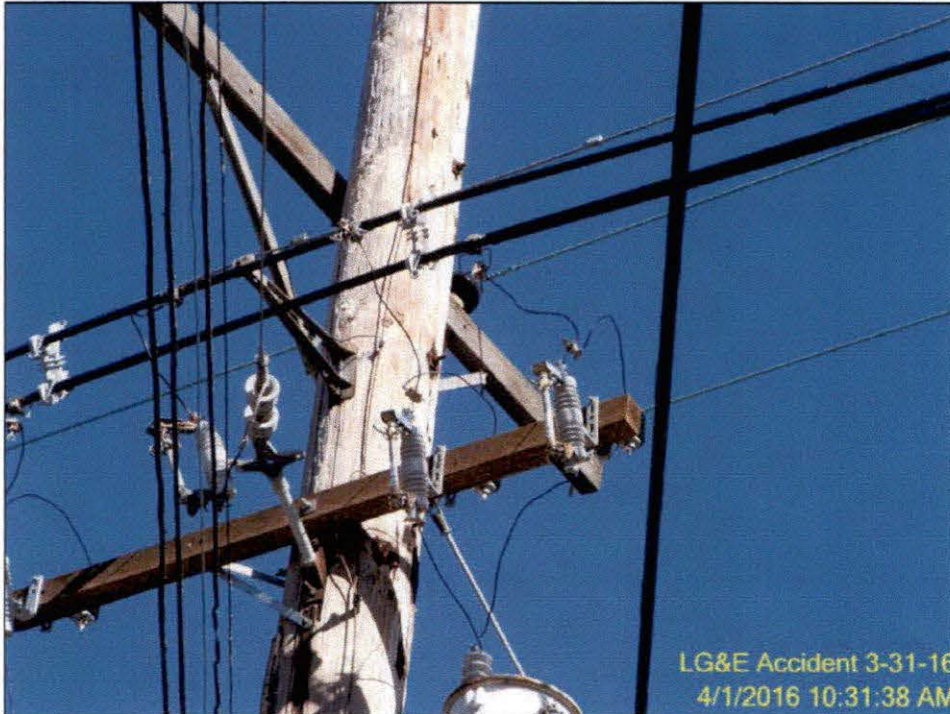
#1



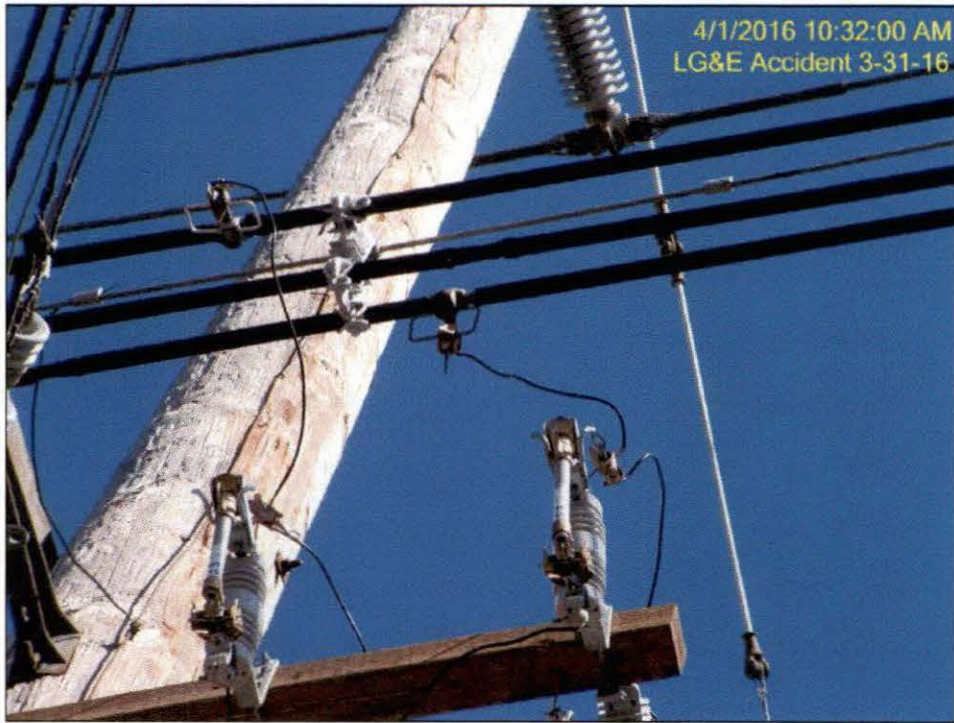
#2



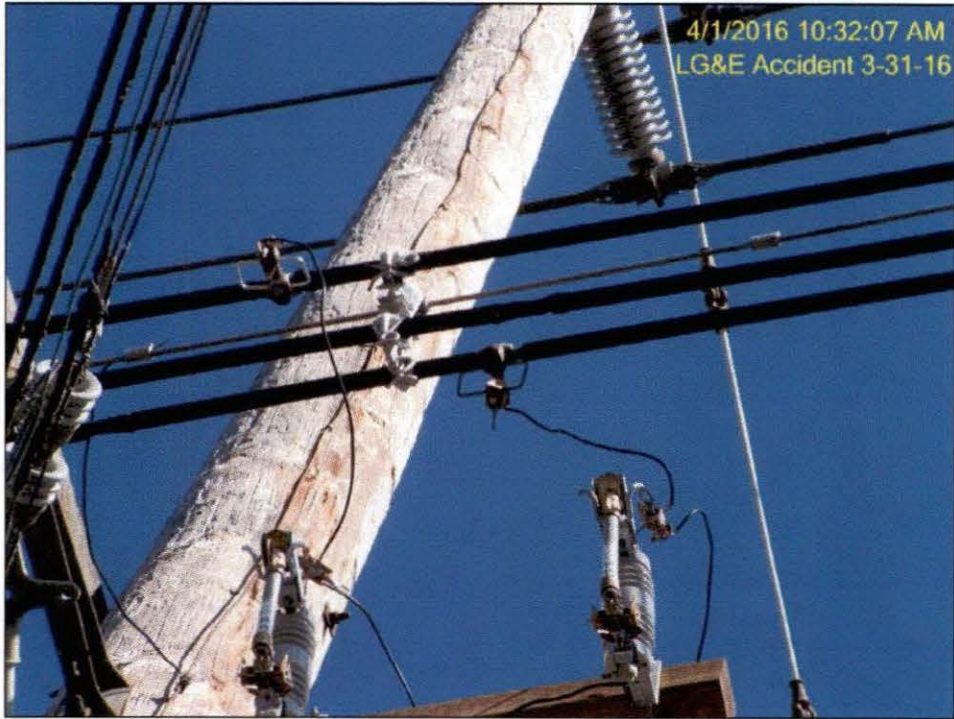
#3



#4



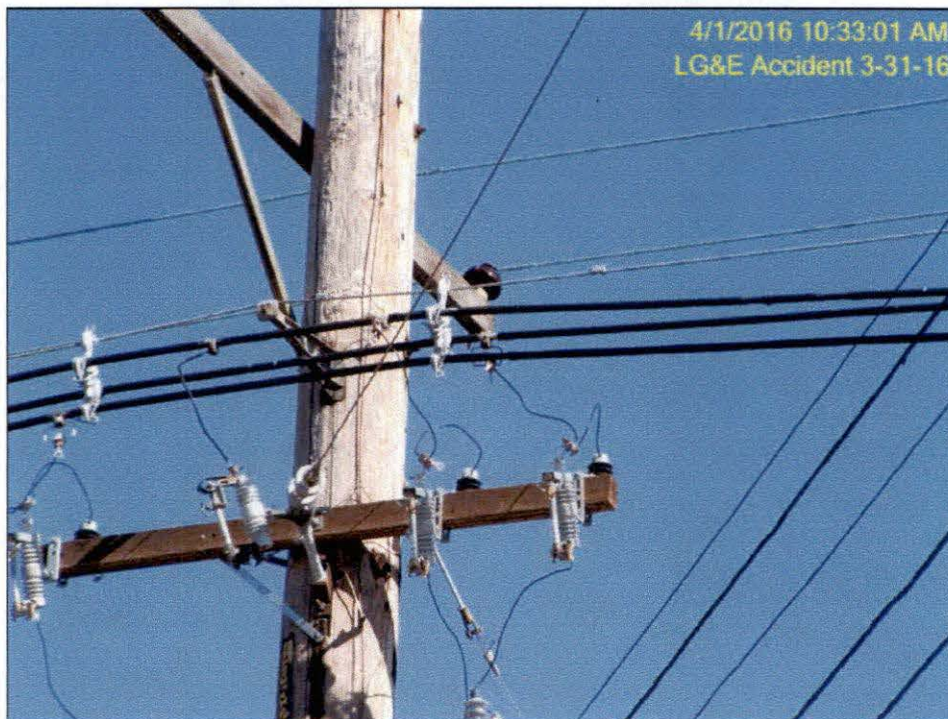
#5



#6



#7



#8

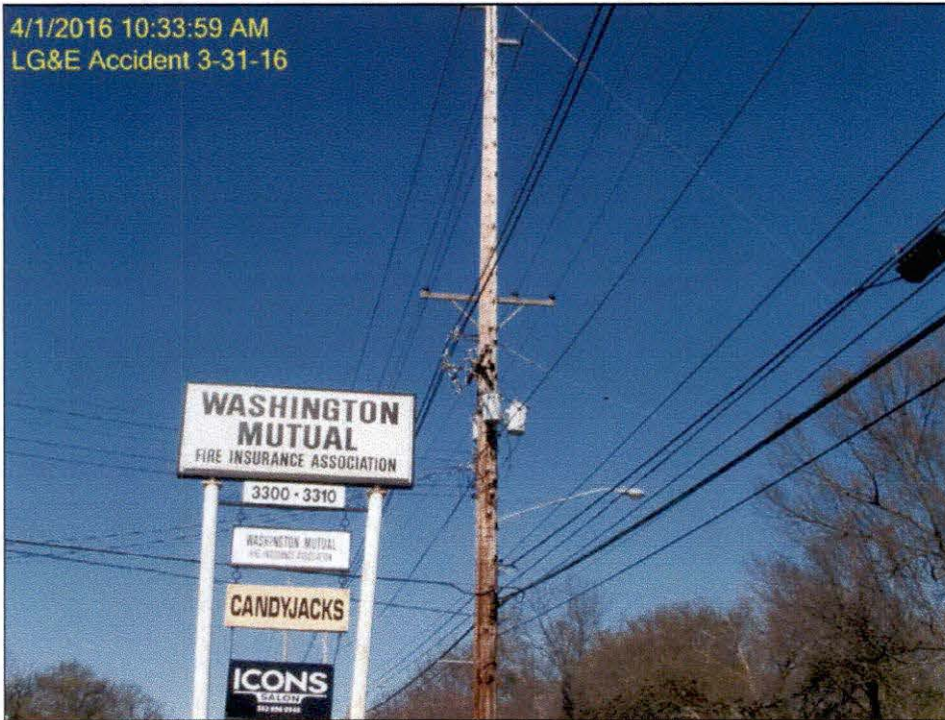


#9



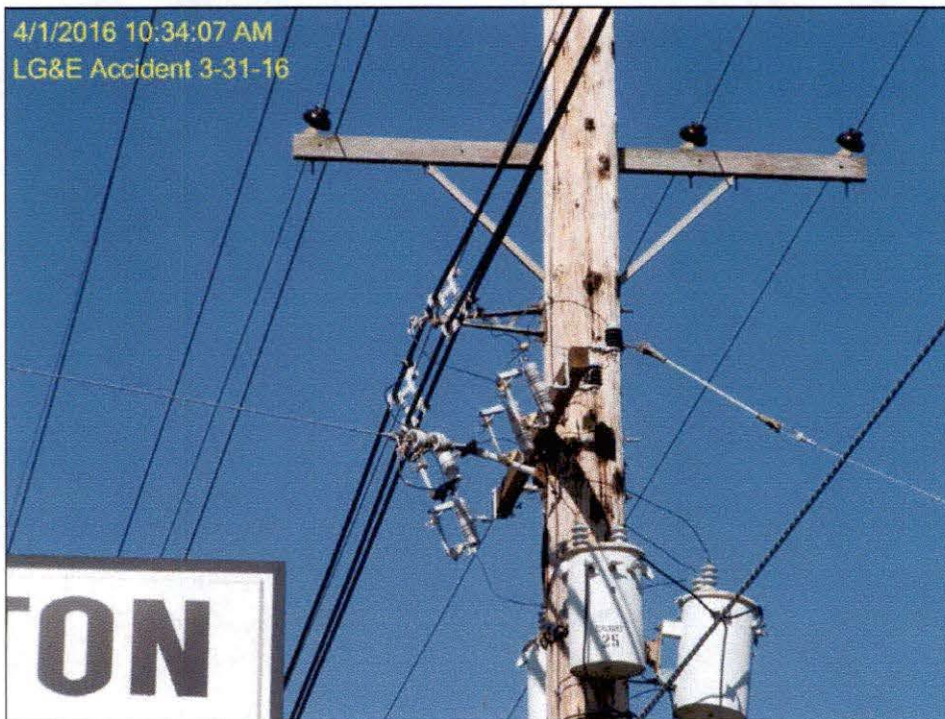
#10

4/1/2016 10:33:59 AM
LG&E Accident 3-31-16

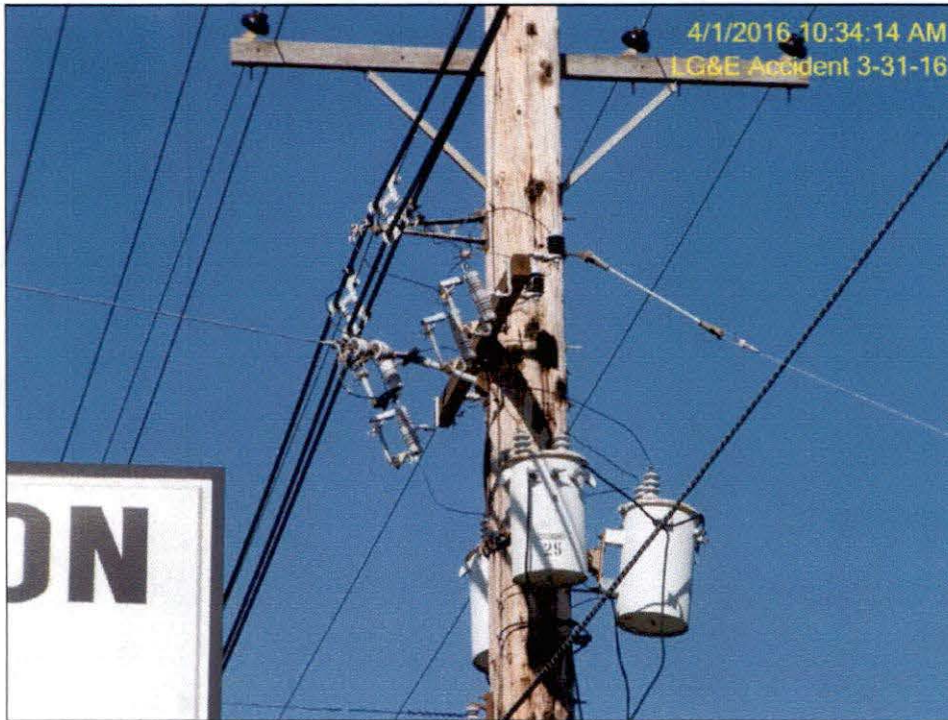


#11

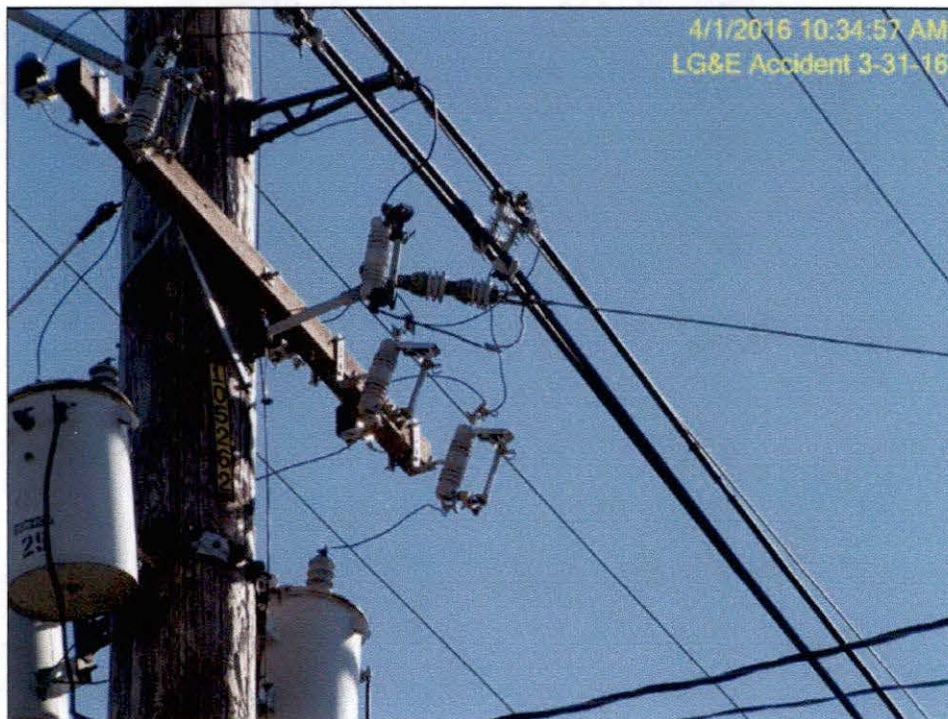
4/1/2016 10:34:07 AM
LG&E Accident 3-31-16



#12



#13



#14



#15



#16

Attachment C

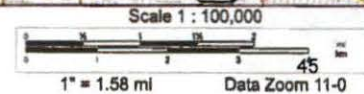
KPSC Map of Accident Site



Data use subject to license.

© DeLorme, DeLorme Street Atlas USA® 2015.

www.delorme.com



Attachment D

Accident Notification Information

Kingsolver, Steve (PSC)

From: PSC - Utility Electric Notifications
Sent: Thursday, March 31, 2016 12:48 PM
To: Willard, Kyle (PSC); Shupp, John (PSC); Kingsolver, Steve (PSC); Moore, Jeffrey C (PSC); Gorjian, Fereydoon (PSC); Rhodes, Jim R (PSC); Morris, Scott A (PSC); Johnson, Jeff A (PSC); Rice, James D (PSC); Melnykovych, Andrew (PSC); Smith, Virginia L (PSC); Raff, Richard (PSC); Gardner, Jim (PSC); Logsdon, Dan (PSC); Bell, Stephanie (PSC); Greenwell, Aaron D (PSC); Thomas, Roger (PSC)
Subject: FW: Voice Message from 5023331991
Attachments: Audio_Recording_S3-287341_001_compand.wav

From: Electric.PSC@cdcmss.aura.ky.gov
Sent: Thursday, March 31, 2016 12:48:04 PM (UTC-05:00) Eastern Time (US & Canada)
To: PSC - Utility Electric Notifications; PSC.Telephone.Notice@ky.gov
Subject: Voice Message from 5023331991

Voice message copy

Caller: 5023331991
Duration: 00:57

To hear the voice message, play the attached recording or call your Messaging mailbox.

Messaging access number: 5027822872

*Louisville Gas and Electric Company
220 W. Main Street
P. O. Box 32010
Louisville, KY 40232-2010

*Louisville Gas and Electric Company
220 W. Main Street
P. O. Box 32010
Louisville, KY 40232-2010

*Louisville Gas and Electric Company
Louisville Gas and Electric Company
220 W. Main Street
P. O. Box 32010
Louisville, KY 40232-2010