# COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

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SOUTH KENTUCKY R.E.C.C.	)	
	)	
	)	CASE NO. 2011-00404
ALLEGED FAILURE TO COMPLY WITH	)	
KRS 278 042	1	

#### ORDER

South Kentucky R.E.C.C. ("South Kentucky RECC"), a Kentucky cooperative corporation which engages in the distribution of electricity to the public for compensation for lights, heat, power, and other uses, and which was formed pursuant to KRS 279.010 to 279.220, is a utility subject to Commission jurisdiction.<sup>1</sup>

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 in compliance with 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

<sup>&</sup>lt;sup>1</sup> KRS 278.010(3)(a); KRS 279.210.

the reasonable, safe, proper, or adequate practice or methods to be observed and to fix same by Order.

Pursuant to 278.280(2), which directs the Commission to prescribe rules and regulations for the performance of services by utilities, the Commission has promulgated Administrative Regulation 807 KAR 5:006, Section 24, which requires all utilities to adopt and *execute* a safety program.

Commission Staff submitted to the Commission an Electric Utility Personal Injury Accident Report ("Report"), dated June 30, 2011, attached as an Appendix to this Order. The report alleges that on June 16, 2011, in Burnside, Kentucky, Franklin Reed, an employee of the property owner, Eddie Cleary, sustained injuries which resulted in burns to his left hand and his left little toe.

According to the Report, the victim was working on a mobile home installing a pitched metal roof over an existing flat metal roof. Mr. Reed was attaching the TV cable to the South Kentucky RECC neutral conductor while standing on the old flat metal roof of the mobile home. At some point, the South Kentucky RECC neutral conductor came into contact with the South Kentucky RECC energized primary conductor and momentarily energized the neutral conductor and, possibly, the TV cable. At the time the neutral conductor became energized, it appears Mr. Reed was in contact with both the neutral conductor and the metal roof.

South Kentucky RECC took photographs of the scene and took measurements of the lines. According to South Kentucky RECC's measurements, the neutral conductor was in compliance with the NESC; however, the primary conductor should have been approximately four feet higher.

Based on Commission Staff's investigation of the accident and the information provided by South Kentucky RECC in its 7-day summary report and supplements thereto, (Attachment A to the Report), Commission Staff alleges that South Kentucky RECC has violated the following provision of the NESC 1990 edition:

1. 1990 NESC, Section 23, Rule 234.C.1.a – Service Adequacy and Safety Standards – Clearances of Wires, Conductors, and Cables, and Equipment from Buildings, Bridges, Rail Cars, Swimming Pools, and other Installations.

. . . .

- C. Clearances of Wires, Conductors, and Cables, and Rigid Live Parts from Buildings, Signs, Billboards, Chimneys, Radio and Television Antennas, Tanks and Other Installations except Bridges.
- 1. Vertical and Horizontal Clearances. a. Clearances Unguarded or accessible supply wires, conductors, or cables, or rigid live parts may be located adjacent to buildings, signs, billboards, chimneys, radio and television antennas, tanks, and other installations and any projections therefrom. The vertical and horizontal clearances of such rigid and non-rigid posts shall be not less than the values given in Table 234-1 when at rest under the conditions specified in rule 234A1. Those facilities may be installed beside, over or under buildings, as illustrated in figures 234-1(b).

Based on its review of the Report and being otherwise sufficiently advised, the Commission finds that prima facie evidence exists that South Kentucky RECC has failed to comply with KRS 278.042. We further find that a formal investigation into the incident that is the subject matter of the Report should be conducted and that this investigation should also examine the adequacy, safety, and reasonableness of South Kentucky RECC's practices related to the construction, installation and repair of electric facilities.

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

1. South Kentucky RECC shall submit to the Commission, within 20 days of the date of this Order, a written response to the allegations contained in the Report.

2. South Kentucky RECC shall appear on January 24, 2012, at 10:00 a.m., Eastern Standard Time, in Hearing Room 1 of the Commission's offices at 211 Sower Boulevard in Frankfort, Kentucky, for the purpose of presenting evidence concerning the alleged violations of KRS 278.042, and of showing cause why it should not be subject to the penalties prescribed in KRS 278.990(1) for these alleged violations.

3. At the scheduled hearing in this matter, South Kentucky RECC 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.

- 4. The January 24, 2012 hearing shall be recorded by videotape only.
- 5. The Report in the Appendix hereto is made a part of the record in this case.
- 6. Any requests for an informal conference with Commission Staff shall be set forth in writing and filed with the Commission within 20 days of the date of this Order.

By the Commission

**ENTERED** 

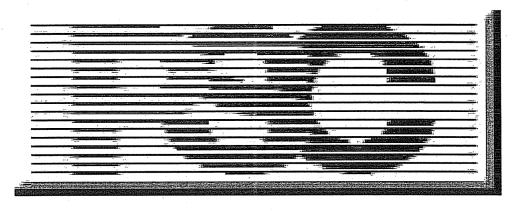
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KENTUCKY PUBLIC ISERVICE COMMISSION

Executive Director

#### **APPENDIX**

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2011-00404 DATED  $\,$  OCT  $\,$  1 9  $\,$  2011



## **ACCIDENT INVESTIGATION** ~ Staff Report

Report Date ~ June 30, 2011

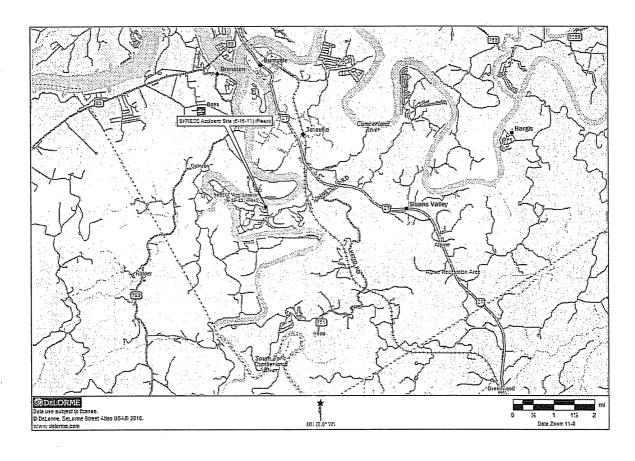
Accident Date ~ June 16, 2011

Serving Utility ~ South Kentucky RECC

**Incident Location** ~ Burnside, Kentucky

Victim ~ Mr. Franklin Reed

 $\underline{\textbf{PSC Investigator}} \sim \text{Steve Kingsolver}$ 





### Kentucky Public Service Commission

Electric Utility Personal Injury Incident Report

**Utility:** 

South Kentucky Rural Electric Cooperative Corporation (South Ky. RECC)

Reported By:

Eddie Black, Safety Team Leader

Incident Occurred:

Approximately 10:50 AM, June 16, 2011

**Utility Notified:** 

11:05 AM, June 16, 2011

**PSC Notified:** 

12:25 PM, June 16, 2011

**PSC Investigated:** 

9:00 AM, June 17, 2011

Report Received:

June 22, 2011

Incident Location:

18 Lakeview Drive, Burnside, Kentucky 42519

#### **Incident Description:**

The victim, Franklin Reed, was in the process of installing a pitched metal roof over the existing flat metal roof on a mobile home. The victim was attaching the Cable TV cable to the South Kentucky RECC neutral conductor while standing on the old flat metal roof of the mobile home. It appears the victim was attempting to increase the clearance of the Cable TV cable over the mobile home. Sometime during this process, it appears the South Kentucky RECC neutral conductor came in contact with the South Kentucky RECC energized primary conductor and momentarily energized the neutral conductor and possibly the Cable TV cable. It appears the victim was in contact with the neutral conductor while standing on the flat metal roof of the mobile home when it became energized. The victim received burns to his left hand and little toe on his left foot. The victim was transported to the local hospital and then taken to UK Burn Center in Lexington, Kentucky. The victim was released from the hospital on June 16, 2011. The South Kentucky RECC facilities were moved before the Public Service Commission investigation of this accident. The information in this report is based solely on information provided to this investigator by the South Kentucky RECC Safety Department. Based on the information received from South Kentucky RECC, it appears there was a violation, at the time of this accident, concerning the required clearance of primary conductors set forth in the National Electric Safety Code.

Victim:	Name:	Address:	Employer:
	Franklin Reed	30 Lakeview Ave	Eddie Cleary,
		Burnside, Kentucky 42519	Property Owner

Age: 25

Date of Birth:

Injuries: Burns on left hand and on little toe of left foot.

witnesses:	Name:	Address:	Employer;
	None		
Information Fro	m: Name:	Position:	Employer:
	Eddie Black	Safety Team Leader	South Ky, RECC

#### **Probable Violations:**

KAR 278.042

Service adequacy and safety standards for electric utilities-

**National Electric Safety Code** 

National Electric Safety Code: 1990 Edition

#1

- 234. Clearance of Wires, Conductors, and Cables, and Equipment from Buildings, Bridges, Rail Cars, Swimming Pools, and other Installations
- C. Clearances of Wires, Conductors, and Cables, and Rigid Live Parts from Buildings, Signs, Billboards, Chimneys, Radio and Television Antennas, Tanks, and Other Installations except Bridges
- 1. Vertical and Horizontal Clearances

#### a. Clearances

Unguarded or accessible supply wires, conductors, or cables, or rigid live parts may be located adjacent to buildings, signs, billboards, chimneys, radio and television antennas, tanks, and other installations and any projections therefrom. The vertical and horizontal clearances of such rigid and non-rigid pasts shall be not less than the values given in Table 234-1 when at rest under the conditions specified in rule 234A1. Those facilities may be installed beside, over or under buildings, as illustrated in figures 234-1(a) and 234-1(b).

200

Table 234-1 Clearance of Wires, Conductors, Cables, and Unguarded Rigid Live Parts Adjacent but Not Attached to Buildings and Other Installations Except Bridges

(Voltages are phase to ground for effectively grounded circuits and those other circuits where all ground faults are cleared by promptly de-energizing the faulted section, both initially and following subsequent breaker operations.

See the definitions section for voltages of other systems.)

		cı	Insulated communication conductors and ables; messengers; surge protection wires; grounded guys; neutral onductors meeting cule 230E1; supply cables meeting Rule 230C1 (ft)	Unguarded rigid live parts, 0 to 750 V; non-insulated communication conductors; supply-cables of 0 to 750 V meeting Rules 230C2 or 230C3 (ft)	Supply cables over 750 V meeting Rules 230C2 or 230C3; open supply conductors, 0 to 750 V (ft)	Open supply conductors, over 750 V to 22 kV	Unguarded rigid live parts, over 750 V to 22 kV (ft)
1.	Bu	lidings					
	a.	Horizontal					
		(1) To walls, projections and guarded window	s 4.5 ⑦	5.0	5.5 ①②③	7.5 ①②⑩(	n) 7.0
		(2) To unguarded		•			
		windows (1)	4.5	5.0	5.5 ①② ③	7.5 (10 (11)	7.0
		(3) To balconies and areas accessible to			,		
		pedestrians ①	4.5	5.0	б.Б 🗿	7.5 🔞 🛈	7.0
	b.	Vertical	•				
		(1) Over or under roofs					
		projections not acces to pedestrians (3)	3.0 sme	3.5	10.5	12.5	12.0

(2) Over or under balconies and roofs accessible to				. •	•
pedestrians ①	10.5	11.0	11.5	13.5	13.0
(3) Over roofs accessible to	•	•			
vehicles but not subject	10.5	11.0	11.5	10.5	100
to truck traffic (5)	10.5	11.0	11.5	13.5	13.0
(4) Over roofs accessible to					
truck traffic 📵	15.5	16.0	16.5	18.5	18.0
2. Signs, chimneys, billboards, radio					
and television antennas, tanks,					
and other installations not		*			
classified as buildings or bridges					
a. Horizontal (1)	3.0	3.5	5.5 ①②⑨	7.5 ①②⑩⑪	7.0
b. Vertical over or under 4	3.0	3.5	6.0 ①	8.0	7.5

- Where building, sign, chimney, antenna, tank, or other installation does not require maintenance such as painting, washing, changing of sign letters, or other operations which would require persons to work or pass between supply conductors and structure, the clearance may be reduced by 2 ft.
- Where available space will not permit this value, the clearance may be reduced by 2 ft provided the conductors, including splices and taps, have covering which provides sufficient dielectric to prevent a short circuit in case of momentary contact between the conductors and a grounded surface.
- ① A roof, balcony, or area is considered accessible to pedestrians if the means of access is through a doorway, ramp, window, stalrway, or permanently mounted ladder. A permanently mounted ladder is not considered a means of access if its bottom rung is 8 ft or more from the ground or other permanently installed accessible surface.

- (1) The required clearances shall be to the closest approach of motorized signs or moving portions of installations covered by Rule 234C.
  - (5) This footnote not used in this edition.
- (i) For the purpose of this rule, trucks are defined as any vehicle exceeding 8 ft in height.
- $\ensuremath{\mathfrak{D}}$  This clearance may be reduced to 3 in for the grounded portions of guys.
- Windows not designed to open may have the clearances permitted for walls and projections.
- (3) This clearance shall be not less than 3.5 ft with the conductor or cable displaced by wind; see Rule 234C1b.
- (1) This clearance shall be not less than 4.5 ft with the conductor displaced by wind; see Rule 234Clb.
- (i) Where available space will not permit this value, the clearance may be reduced to 7.0 ft for conductors limited to 8.7 kV to ground.

Line/Equipment Measurements/Clearances

Line Clearances At Point of Incident:	Measured	Minimum Allowed by NESC	Applicable NESC Edition *	Voltage	Construct Date
Primary (Single Phase) to Roof Elevation:	8'-6"	12'-6"	1990 EDITION	7.2kV	10-24-02
Primary Neutral to Roof Elevation:	4'-6"	3'	1990 EDITION	<b></b>	10-24-02

<sup>\*</sup> If clearances were not in compliance with the current edition, then the edition in effect when the facilities were last constructed or modified would apply.

Date of Measurement: June 16, 2011

Temp & Weather: Approximately 80°

<u>Measurements Made By:</u>	Name:	Company:
	Jackson Denham	South Ky. RECC
	Jon Slavey	South Ky. RECC

Investigated By:	Name:	Company:
Utility	Steve Kingsolver y Regulatory and Safety Investigator IV	KPSC
Signed:	There Kin swolver	
Date:	6-30-11	
Reviewed By:	Name: John Shupp	Company: KPSC
	Staff Engineer	
Signed:	Joh V. Stype	,
Date:	6/30/11	

Attachments:

A. South Ky. RECC Summary Accident Report B. KPSC Photographs of Accident Site C. KPSC Map of Accident Site

### Attachment A

South Ky. RECC Summary Accident Report



Allen Anderson, CEO

925-929 North Main Street Post Office Box 910 Somerset, KY 42502-0910 Telephone 606-678-4121 Toll Free 800-264-5112 Fax 606-679-8279 www.skrecci.com

June 21, 2011

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

Mr. Steve Kingsolver

SUBJECT: Electrical Contact Accident 6/16/2011

Dear Steve,

Please find enclosed the information on the electrical contact accident that occurred on 6/16/2011. This accident involved South Ky. RECC facilities in Pulaski County Kentucky. The contact involved Franklin Reed of Burnside, Kentucky.

Sincerely,

SOUTH KENTUCKY RECC

Richard Randall

Richard Randall Safety and Training Coordinator RECEIVED

JUN 22 2011

COMMISSION

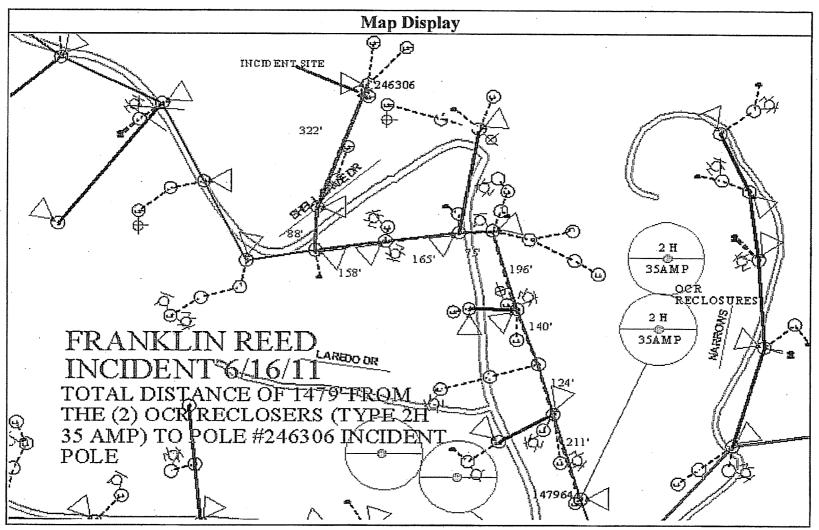
## INVESTIGATIVE REPORT

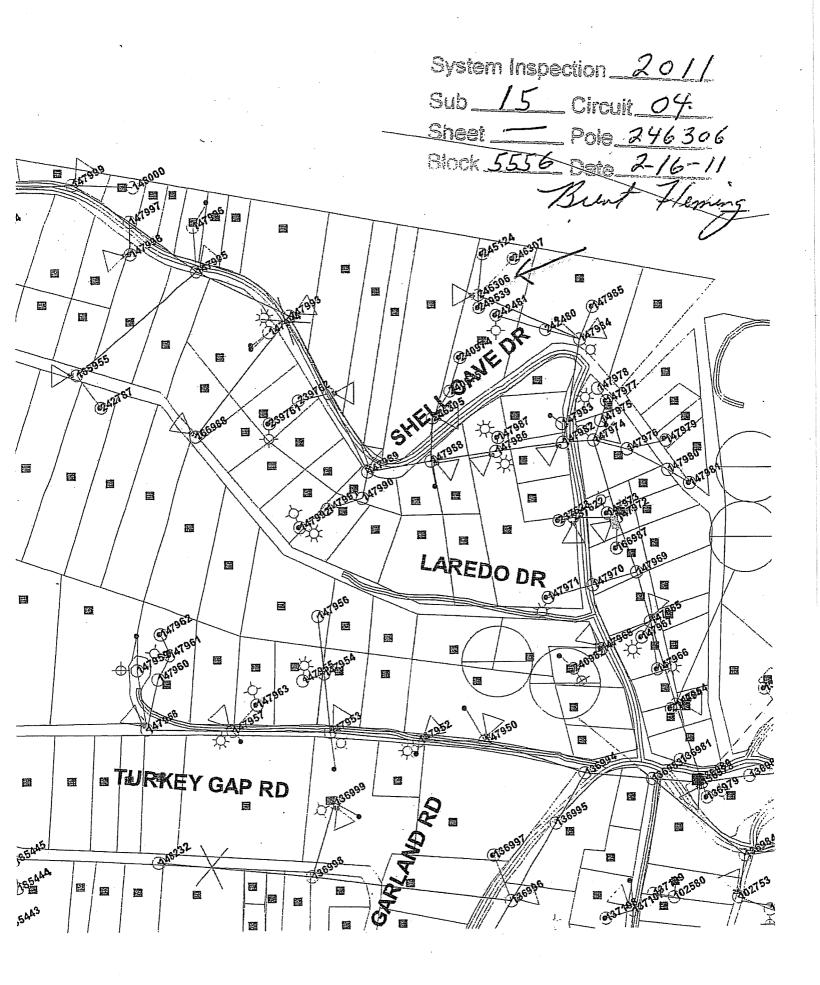
COOPERATIVE:	NAME: South KY RECC	TELEPHONE # (606) 678-4121				
	ADDRESS: 925-929 N. Main St. Sor.	nerset KY 42503				
DATE AND TIME OF INCIDENT:	(MM/DD/YY) COOPERATIVE (MM/DD/YY) NOTIFIED:					
	061611	6 1 6 1 1				
	1 0 5 0 X A.M 1 P.M	1 0 5 X A.M P.M.				
LOCATION:	18 Lakeview Drive Burnside, Kentuc	ky 42519				
DESCIPTION OF INCIDENT:	Franklin Reed was on the roof of a mobile home. We speculate he had pulled South Ky. RECC system neutral down with a strap and had wire tied the TV Cable to South Ky. RECC system neutral.					
	We speculate from our own investigation that it is possible when the neutral is pulled down it can contact the energized conductor in the span.					
	Mr. Reed had received an electrical transported by EMS to local hospita					
	Mr. Reed was preparing to install a pitched metal roof over the existing flat metal roof					
DILLIBED DADEN	MANG R. 11' P. 1	TE 05				
INJURED PARTY:	NAME: Franklin Reed AG TELEPHONE 606 271 4474 OCCU	E: 25 DOB				
	ADDRESS: 30 Lakeview Ave. But					
EXTENT OF INJURY:	Had burn on left hand and left foot li					
TREATMENT:	(AMBULANCE, DOCTOR, HOSPI EMS to local hospital then transported center. Was released on 6/16/11 from	ed to UK Hospital in Lexington burn				
COOPERTAIVE EMPLOYEES AT SCENCE:	Harlan Stout, Eddie Black, Richard Inabnitt, Mark Wilson, Jon Slavey, S					
WITNESSES:	(NAME AND CONTACT #) NONE					

WEATHER AND	Warm around 80 degrees, fairly clear sunshine				
TERRAIN	Grassy, rock out cropping, rolling, located in mobile home park				
CONDITIONS					
SYSTEM PROFILE	(VOLTAGE TYPE AND SIZE CONTUCTOR, TYPE POLE STRUCTURES, POLE #, ETC.)  7,200 volts, single phase, # 2 ACSRspan between VA-6 and VA-5				
	Pole number 246306 at VA-5 structure				
***	(TYPE, LOCATION, RATING, DID THEY OPERATE, POLE #.)				
EQUIPMENT	OCR #2826- 1479 feet from incident- 35 amp type 2H-no record of				
PROTECTIVE DEVICES	Operation of OCR-pole # 147964 OCR installed 6/06				
DID OUTAGE OCCUR	X NO DATE: TIME: A.M P.M DUATION:				
WAS CO-OP NOTIFIED OR AWARE OF WORK IN THE AREA – EXPLAIN:	Not Aware of any work in area				
CONSTRUCTION	Facilities built 10/24/02. Added meter pole 4/9/04				
SYSTEM INSPECTION	Last system inspection was 2/16/11				
ADDITIONAL COMMENTS:	PSC notified at 12:25 pm 6/16/11  New Wave Cable notified at 1:34 pm 6/16/11				

PREPARED BY: Kichal Kanlell	Safety Coordinator	6/22/11	606 678 4121
Signature	Job Title	Date	Telephone #

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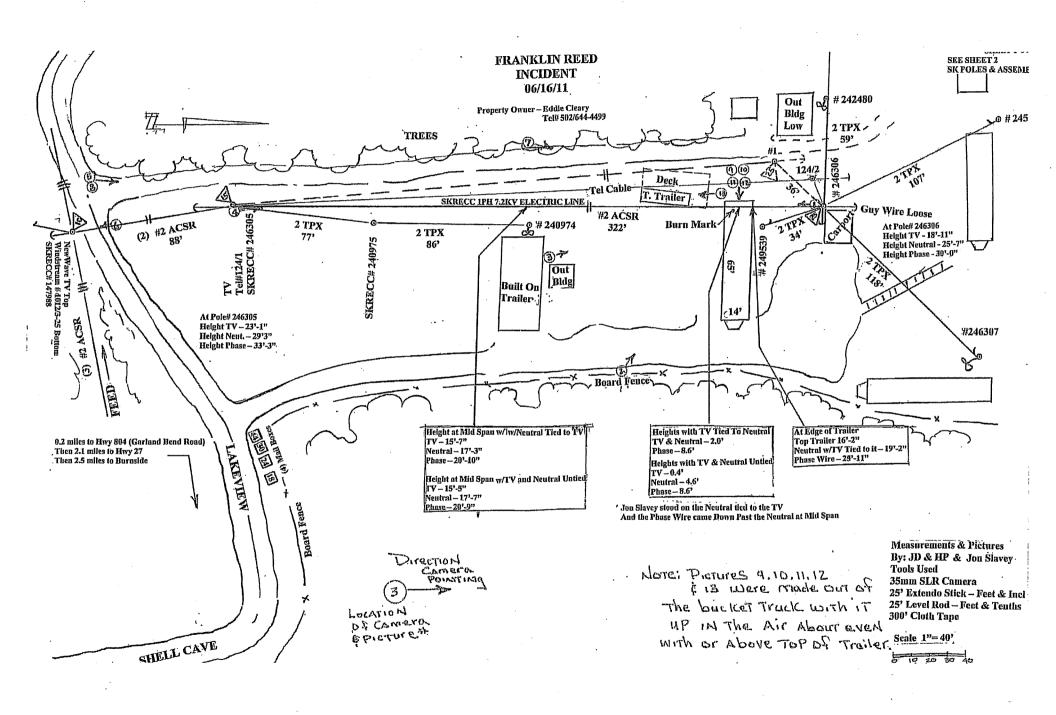




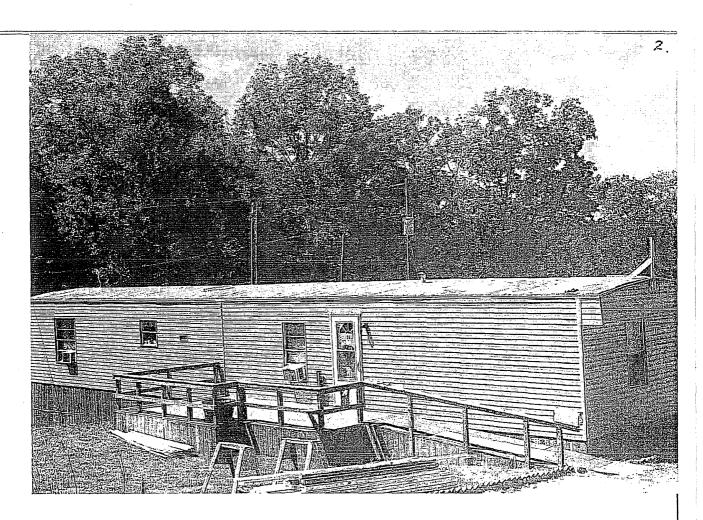
#### FRANKLIN REED INCIDENT 06/16/11

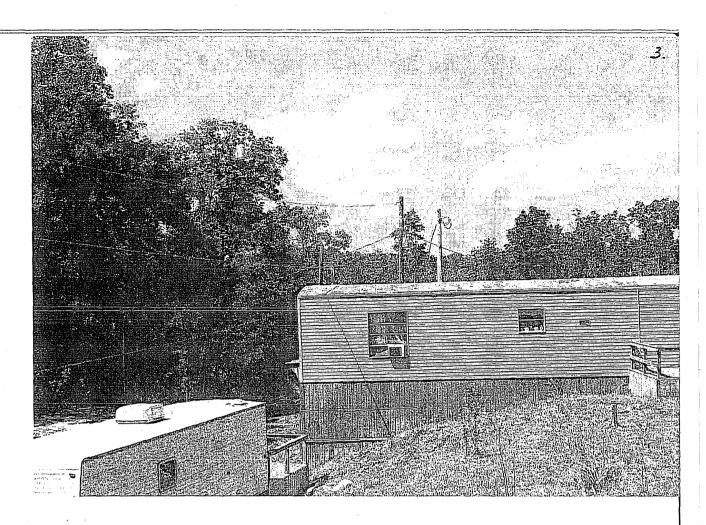
JD & HP 06/16/2011

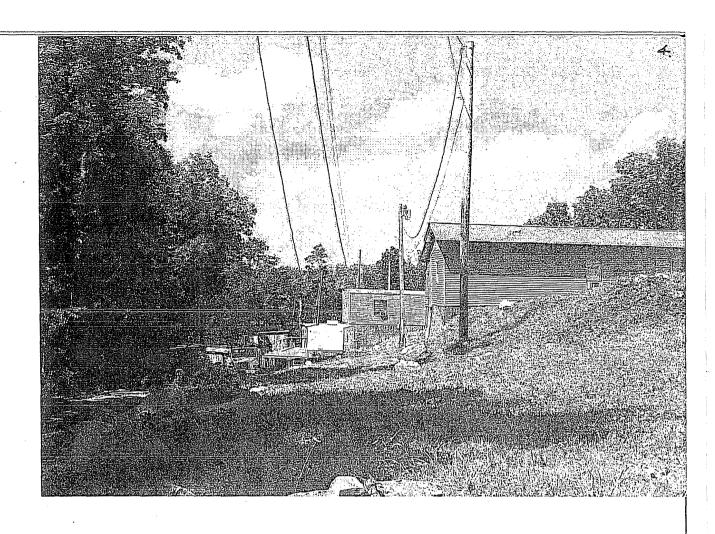
- Picture #1 With back toward Pole# 246306 looking at Pole# 246305
- Picture# 2 61' off Right Front Corner of Trailer
- Picture# 3 Standing at Back of Trailer Looking at Top of Trailer & Wire Crossing
- Picture# 4 Back to Pole#246305 looking at Pole# 246306 Standing Slightly to the Side to see the wire
- Picture# 5 Standing Up in the Edge of Road Looking at Pole# 246305 Close & Pole# 246306 Far Off
- Picture# 6 Under Line Looking Across Road at Pole# 147988
- Picture# 7 Standing Across back Roadway Across from Pole# 240974 Looking at Top of Trailer & Wire Crossing
- Picture#8-Same Shot as Picture#5 with new Pole#1 Set
- Picture# 9 At Rear of Trailer at Center TV Cable Attached Attached to Neutral
- Picture# 10 Measurement -Top of Trailer Cable Strapped to Neutral Height to TV & Neutral 2.0'
  Height to Phase 8.6'
- Picture# 11 Picture Burn Mark on Trailer Roof
- Picture# 12 TV Cable on Roof (After Cut Loose)
  Cable TV 0.4'
  Neutral 4.6'
  Phase 8.6'
- Picture#13 John Slavey stood on the Neutral tied to the TV and the Phase Wire came down past the Neutral at Mid Span

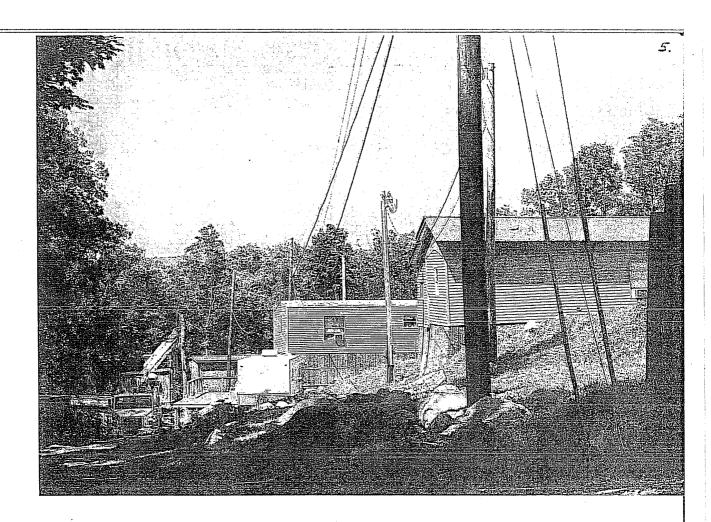


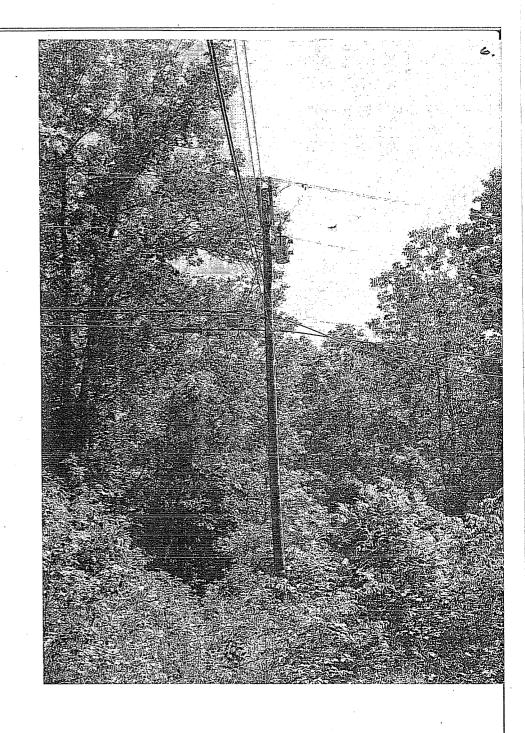
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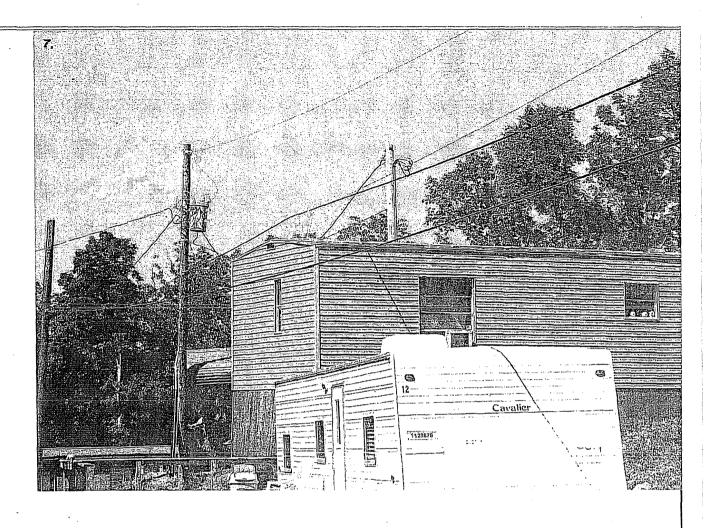


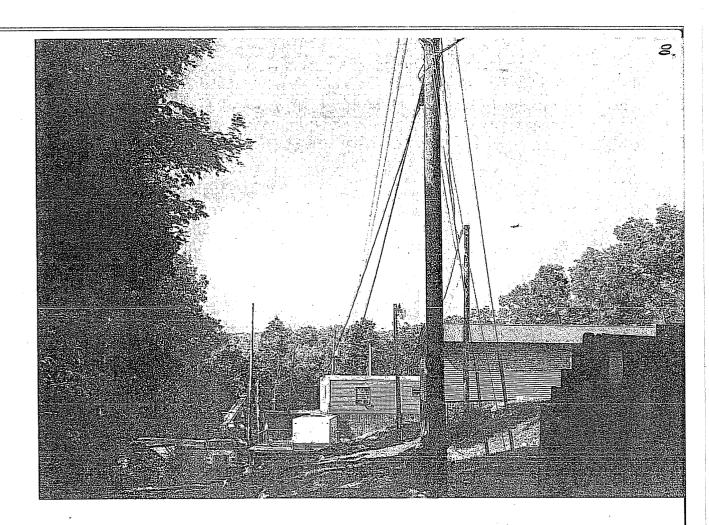


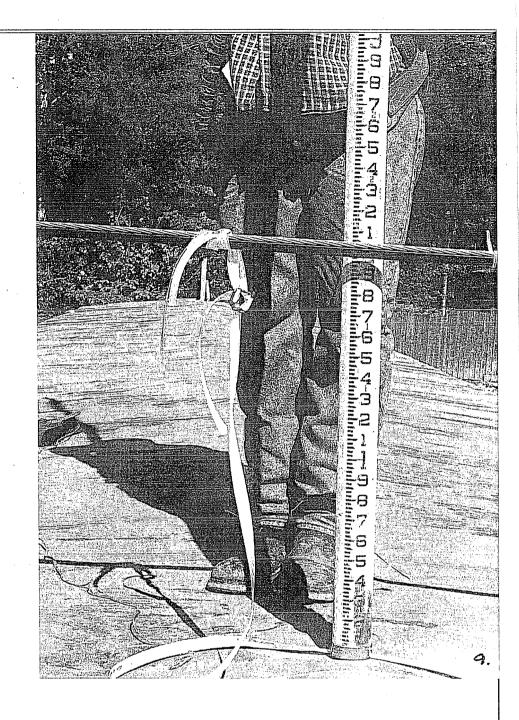


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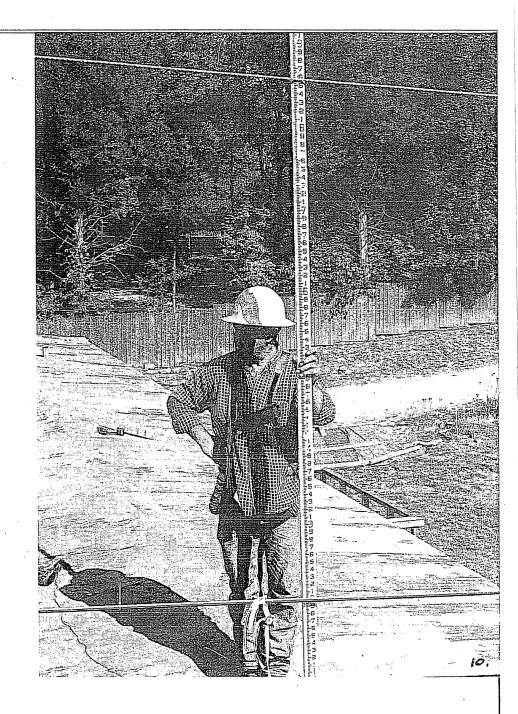


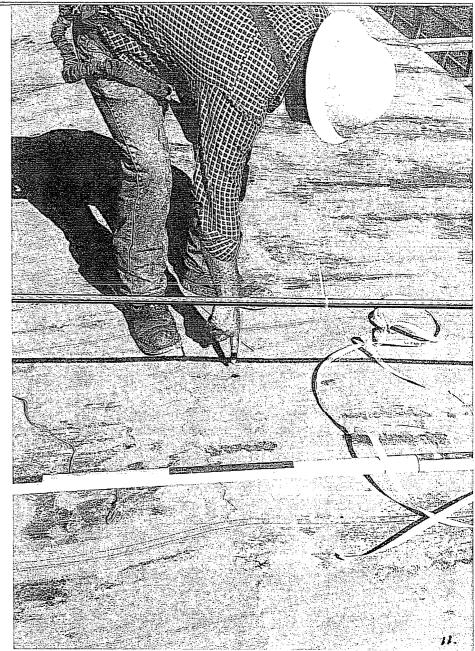


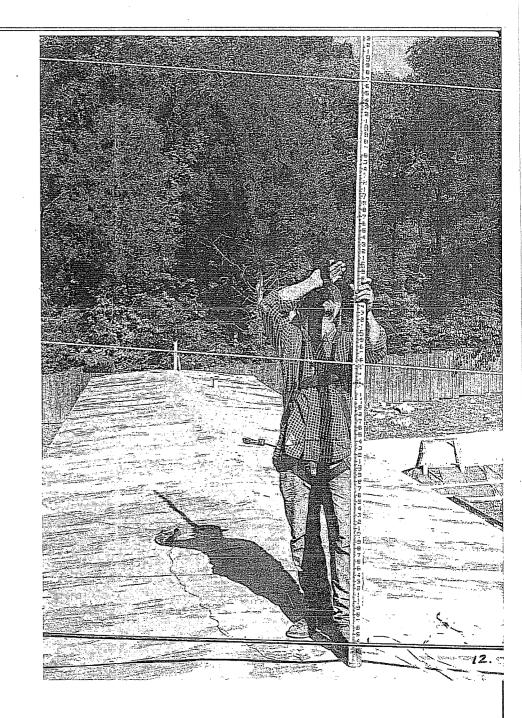


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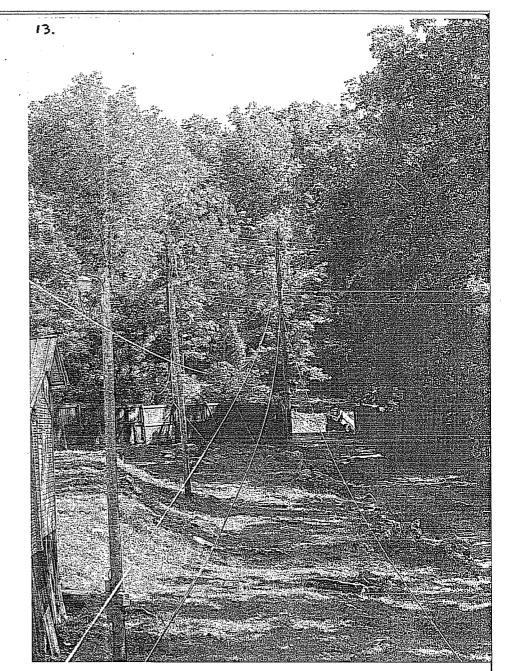
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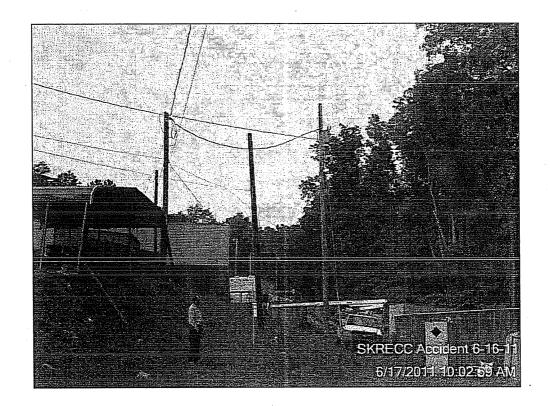


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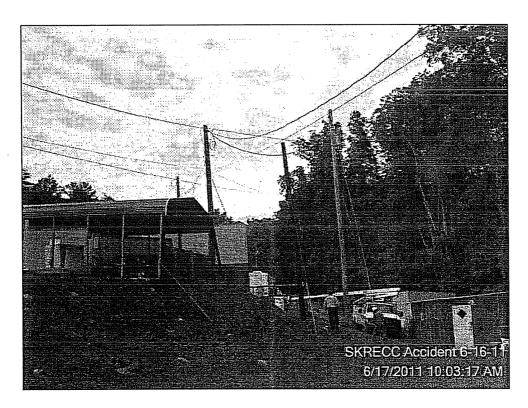


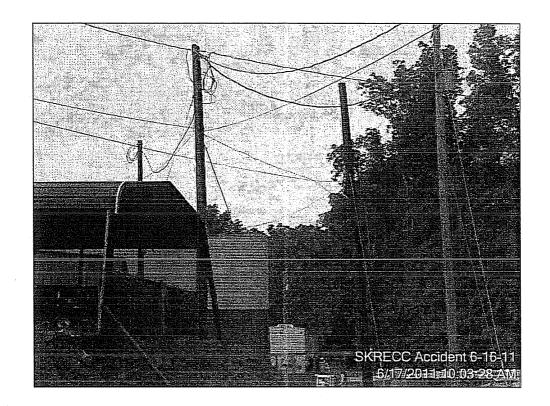
## Attachment B

**KPSC Photographs of Accident Site** 

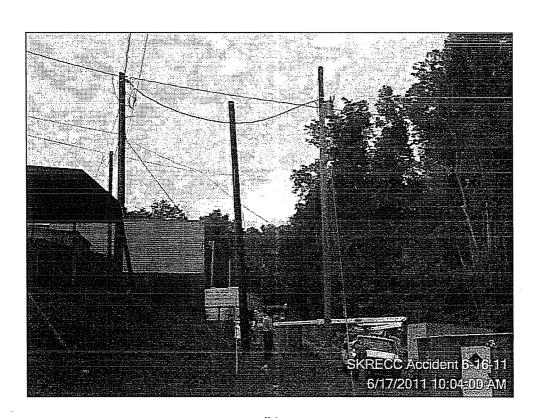


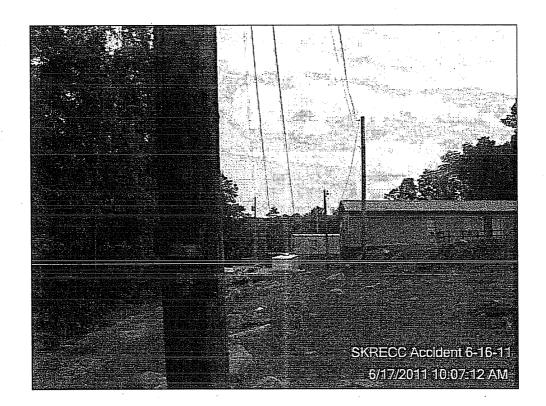
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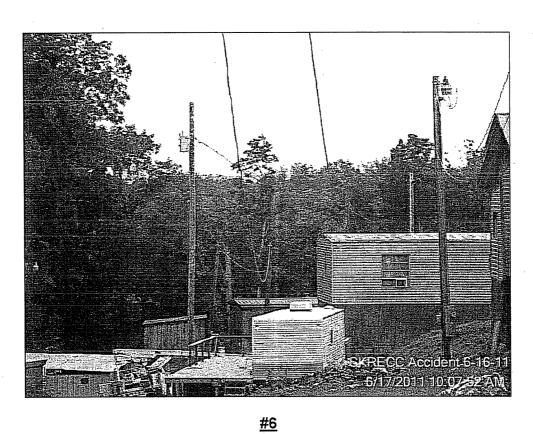


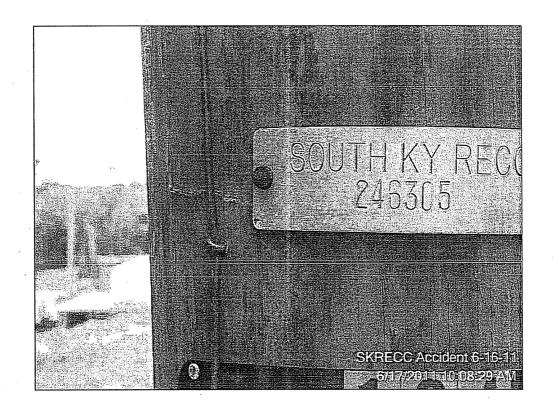
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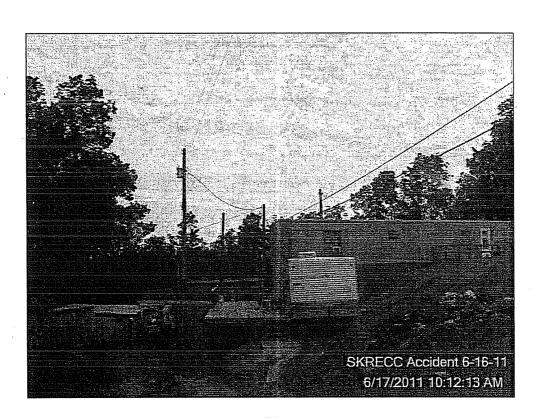


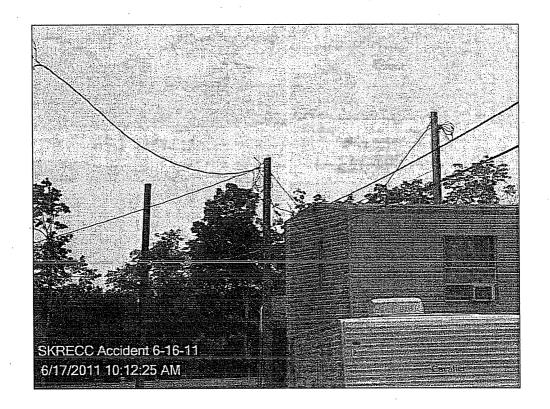
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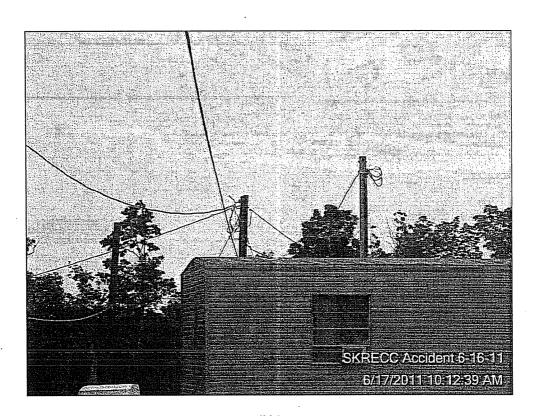


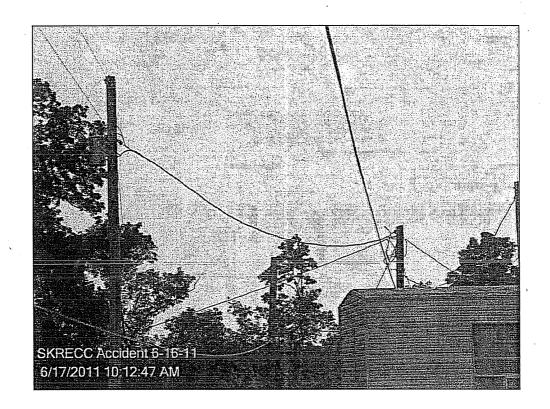
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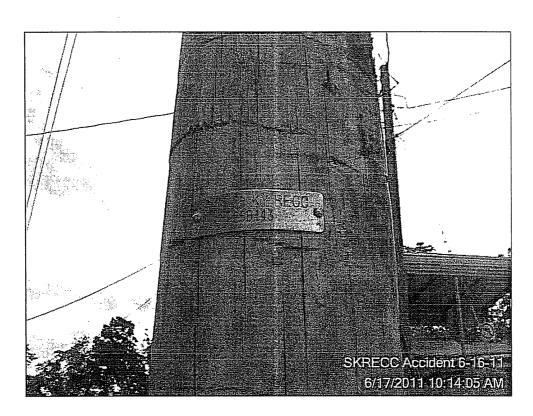


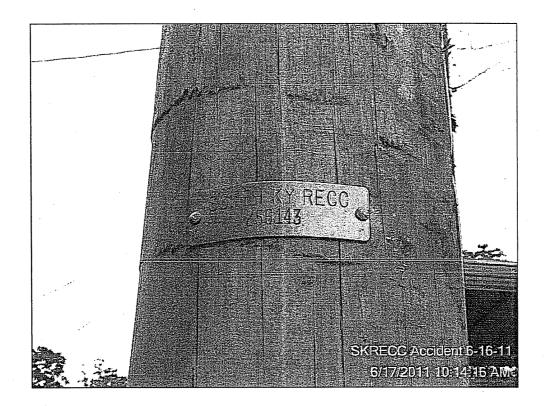
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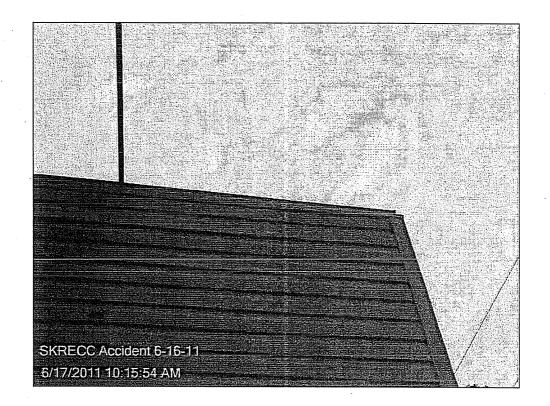
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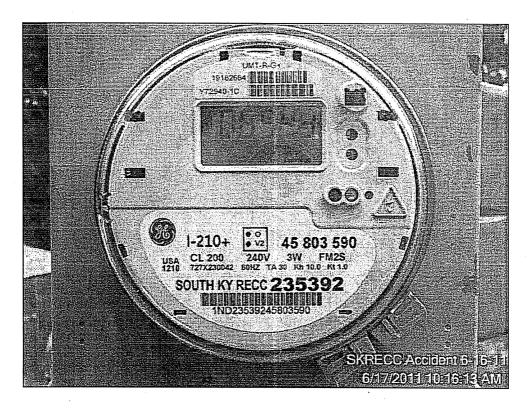


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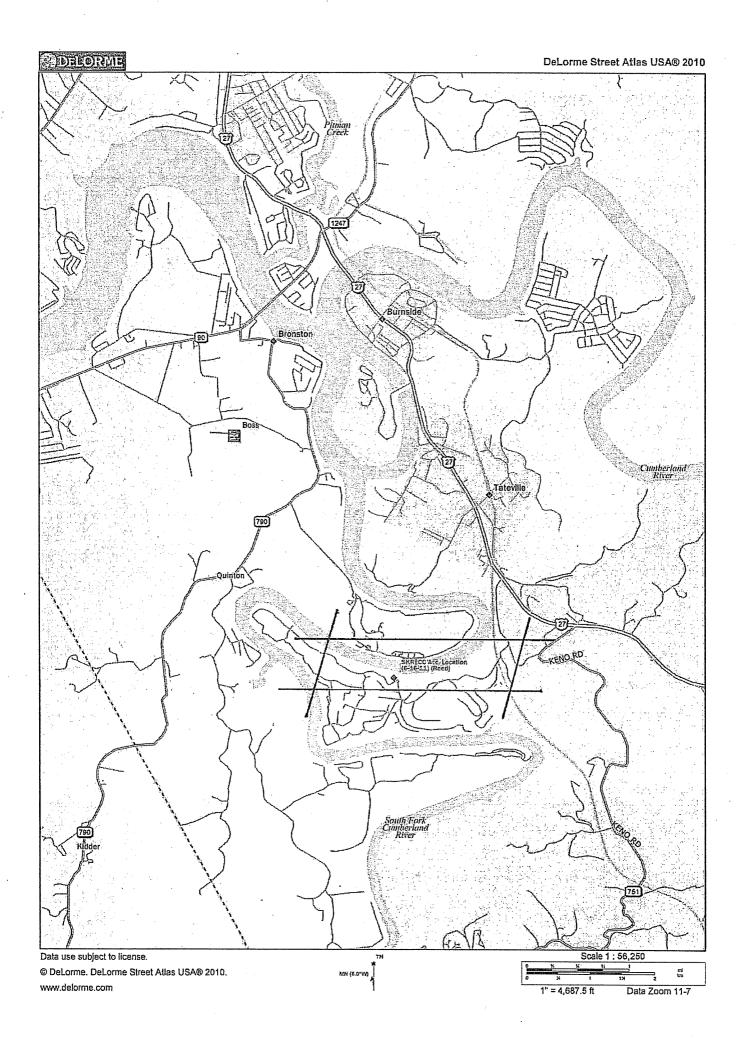


<u>#15</u>



## Attachment C

**KPSC Map of Accident Site** 



Allen Anderson President & CEO South Kentucky R.E.C.C. 925-929 N. Main Street P. O. Box 910 Somerset, KY 42502-0910