



Steven L. Beshear  
Governor

Robert D. Vance, Secretary  
Environmental and Public  
Protection Cabinet

Larry R. Bond  
Commissioner  
Department of Public Protection

Debbie Martin  
Shelby Energy Cooperative, Inc.  
620 Old Finchville Road  
Shelbyville, KY 40065

Commonwealth of Kentucky  
**Public Service Commission**  
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Mark David Goss  
Chairman

John W. Clay  
Vice Chairman

Caroline Pitt Clark  
Commissioner

March 7, 2008

RE: Case No. 2008-00069

We enclose one attested copy of the Commission's Order in the above case.

Sincerely,

A handwritten signature in black ink, appearing to read "Beth O'Donnell".

Beth O'Donnell  
Executive Director

BOD/rs  
Enclosure

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

SHELBY ENERGY COOPERATIVE, INC.        )  
\_\_\_\_\_                                            )  
ALLEGED FAILURE TO COMPLY                )  
WITH KRS 278.042                            )  
CASE NO. 2008-00069

O R D E R

Shelby Energy Cooperative, Inc. ("Shelby Energy") is a Kentucky corporation engaged in the distribution of electricity for compensation for lights, heat, power, and other uses. It is subject to the jurisdiction of the Commission.<sup>1</sup> Pursuant to KRS 278.042, the Commission shall prescribe the service adequacy and safety standards for electric utilities, as stated in the Commission's administrative regulations and order and in the most recent edition of the National Electrical Safety Code ("NESC"). Under 807 KAR 5:041, Section 3(1), the Commission requires utilities to construct and maintain plants and facilities in accordance with good accepted engineering practices, as provided in NESC.

Commission Staff submitted to the Commission an Electric Utility Personal Injury Accident Report ("Report"), dated December 3, 2007, attached hereto as Appendix A. The Report alleges that on November 12, 2007, in Shelbyville, Shelby County, Kentucky, Cosby Carroll died as a result of injuries sustained in a fall from an aerial bucket at the site of a Shelby Energy electric construction project.

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<sup>1</sup> See KRS 278.010(3)(a).

In March 2006, Shelby Energy hired Dobson Power Line Construction ("Dobson Construction") to serve as a contractor for a 3-year electric system construction project.<sup>2</sup> Mr. Carroll was a Dobson Construction employee and served as a lineman. Dobson Construction had a supervisor on site on the day of the accident. According to the Report, the supervisor stated that he conducted a verbal job briefing with the employees prior to the start of the work on the day of the accident, but that there were no written work briefings relating to this job.

On the day of the accident, a Dobson Construction contract crew was working on a reconductoring job, upgrading an old single-phase circuit with a new three-phase circuit and neutral. Prior to the accident, the crew had attached the three conductors and the neutral line to individual ropes which were then attached to a single rope. The single rope was strung through a dolly in order to pull the four individual lines up to the pole for attachment. When the accident occurred, Mr. Carroll was in the bucket of a truck approximately 30 feet above the ground waiting to transfer the four individual ropes into their respective dollies. The Report indicates that the latch of the primary dolly had not been properly fastened after the rope was strung through it. When the rope was pulled, it slipped out of the unfastened dolly at a high velocity, striking Mr. Carroll and pulling him out of the bucket. He slid approximately 8 feet down the boom and then fell approximately 26 feet, striking the back outrigger box of the truck and falling to the ground. Mr. Carroll was air-lifted to University Hospital in Louisville, Kentucky where he later died due to injuries sustained in the fall.

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<sup>2</sup> Dobson Construction was selected as the contractor after having submitted a winning bid to Shelby Energy for its project, as required under the regulations for the United States Department of Agriculture's Rural Utilities Service.

Mr. Carroll was reportedly wearing his safety harness at the time of the accident. However, for unknown reasons, Mr. Carroll failed to attach the lanyard of the harness to the bucket of the truck. A witness at the scene states that, prior to the accident, he witnessed Mr. Carroll attach and detach his lanyard numerous times as he got into and out of the bucket that day.

The Report noted four probable violations of Commission Regulation 807 KAR 5:041, Section 3(1). All alleged violations arise under the 2007 edition of NESC. The alleged violations are as follows:

NESC Section 42: General rules for employees:

1. 420-C-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.
2. 420-K-1: At elevated locations above 3 m (10 ft), climbers shall be attached to equipment or structures by a fall protection system while at the worksite, at a rest site, in aerial devices, helicopters, cable carts, and a boatswain's chair.
3. 420-K-4: Fall arrest equipment shall be attached to a suitable anchorage.
4. 420-K-5: The employee shall determine that all components of the fall protection system are properly engaged and that the employee is secure in the line-worker's body belt, harness, or any other fall protection system.

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

1. Shelby Energy 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. Shelby Energy shall appear on April 22, 2008 at 9:00 a.m., Eastern Daylight Time, in Hearing Room 1 of the Commission's offices at 211 Sower Boulevard in Frankfort, Kentucky to present evidence concerning the incident which is the subject of the Report. Specifically, Shelby Energy shall present evidence as to the four violations of KRS 278.042 and the NESC and to show cause as to why it should not be held subject to the penalties of KRS 278.990 for the alleged failure to comply with the aforementioned Commission regulation.

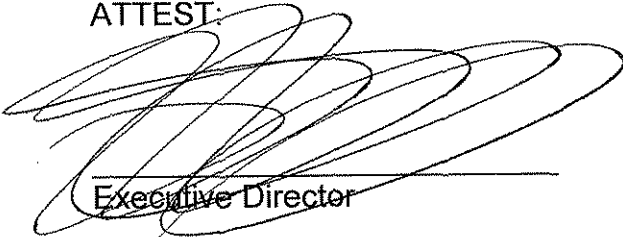
3. The Report, attached hereto as Appendix A, is made a part of the record in this case.

4. 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.

Done at Frankfort, Kentucky, this 7th day March, 2008.

By the Commission

ATTEST:



Executive Director

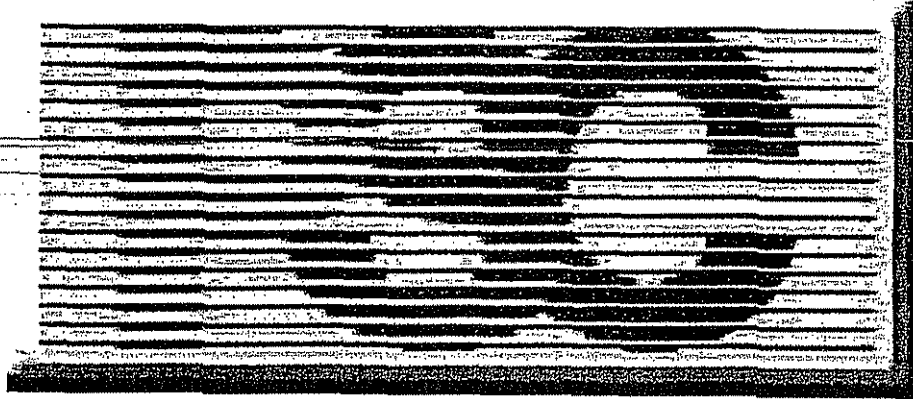
APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE  
COMMISSION IN CASE NO. 2008-00069 DATED MARCH 7, 2008



# Kentucky Public Service Commission

## Electric Utility Personal Injury Accident Report



### INCIDENT INVESTIGATION ~ Staff Report

Incident Location ~ 5500 Vigo Road, Shelbyville, KY

Report Date ~ 12-3-2007

Incident Date ~ 11-12-2007

PSC Investigator ~ Jeff Moore

Utility ~ Shelby Energy

Injured ~ Cosby Carroll

#### PSC Regulated Rural Electric Utilities

- Big Sandy RECC
- Blairstown Energy Cooperative
- Central Energy Cooperative
- Danford Valley Electric
- Farrar RECC
- Fleming-Mason Energy Cooperative
- Harlan RECC
- High County Energy Cooperative
- Johnson Energy Cooperative
- Knoxton Purchase Electric Cooperative
- Longway Electric Co.
- Madison Valley RECC
- Marble County RECC
- North RECC
- Owsen Electric Cooperative
- South Central Energy Cooperative
- Shelby Energy Cooperative
- South Kentucky RECC
- Way County RECC

#### PSC Regulated Investor-Owned Utilities

- American Electric Power (AEP)
- Blue Bell Electric
- Keokuk Electric Company (KEC)
- Louisville Gas and Electric Company (LGE)
- Mountain State Power Company (MSP)

#### Multi-Service Areas

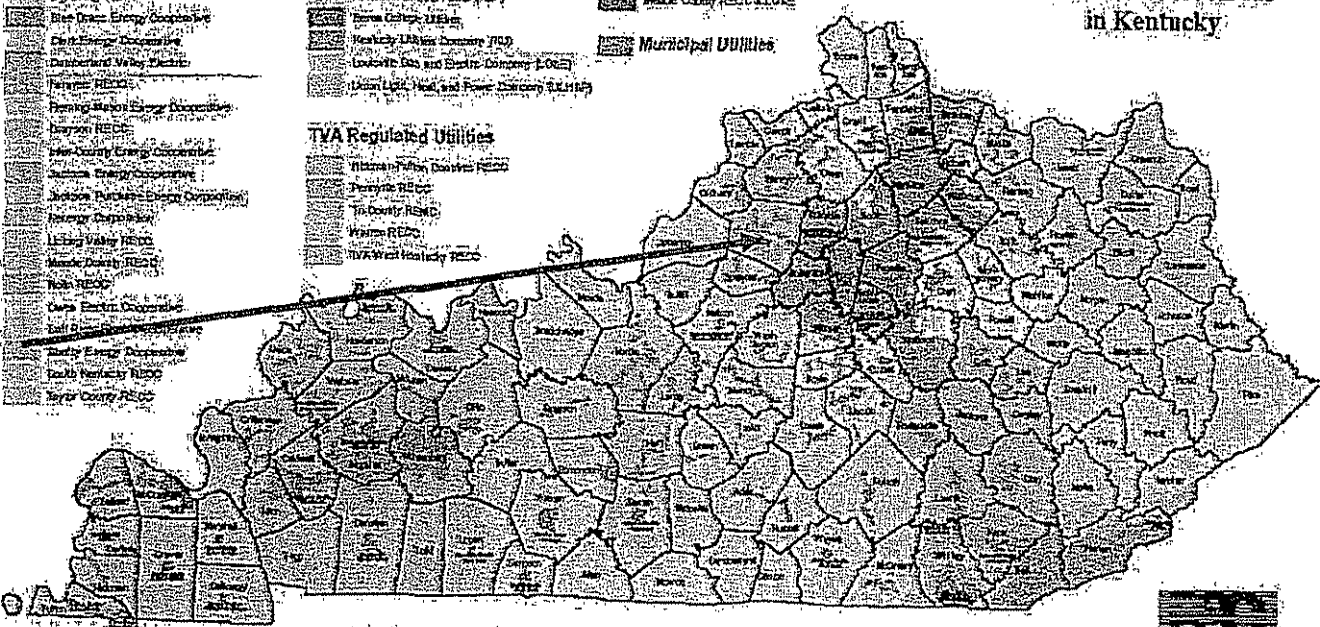
- Jackson Energy Cooperative (JEC)
- Martin County Electric

#### Municipal Utilities

#### TVA Regulated Utilities

- Williamson Electric RECC
- Waynes RECC
- Wingo RECC
- TVA West Kentucky RECC

### Electric Service Areas in Kentucky



The electric service areas are compiled from official service maps on file with the Commission. These are legal documents which define the actual service area of each utility regulated by the Commission. Kentucky Statute 16.525, Kentucky has a mutual agreement with the PSC that not require. These documents were derived from the PSC's certified service areas, or from boundaries established for regulatory purposes by the utility itself. If the municipal service area boundaries were unknown, a work order should be obtained from the utility.

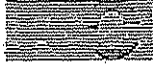


# Kentucky Public Service Commission

## Electric Utility Personal Injury Accident Report

UTILITY:	SHELBY ENERGY COOPERATIVE	
Reported By:	David Martin, Shelby Energy Cooperative	
Accident Occurred:	11/12/2007	Approximately: 12:20 PM
Utility Notified:	11/12/2007	Approximately: 12:35 PM
PSC Notified:	11/12/2007	Approximately: 1:00 PM
PSC Investigated:	11/13/2007	Approximately: 9:20 AM
Report Received:	11/29/2007	
Accident Location:	5500 Vigo Road, Shelbyville, Kentucky	
Accident Description:	<p>I received a call from David Martin with Shelby Energy Cooperative on Monday, November 12, 2007. Mr. Martin reported an accident had occurred involving an employee on the contract crew (Dobson Power Line Construction) at 5500 Vigo Road in Shelby County. Mr. Martin reported the crew was working on a reconductoring job, upgrading an old single-phase circuit with a new three-phase circuit and neutral.</p> <p>According to the crew, they had strung the single rope through the dolly for the next pull. While the crew pulled the single rope used to pull the four individual ropes attached to the conductors through this dolly, Mr. Carroll (victim) positioned his bucket truck on the inside angle of the pull, Mr. Carroll then went up in the bucket waiting to transfer the individual ropes into the other dollies. During the pull the rope slipped out of the dolly, striking the victim, pulling him out of the bucket, and onto the boom. The victim fell approximately 26' striking the truck, then fell to the ground. The witnesses at the accident site said Mr. Carroll had his harness on, but the lanyard was not attached to the bucket. It was still attached to the D ring of his harness. Mr. Dobson (owner of Dobson Power Line) notified 911, and the victim was air lifted to University Hospital in Louisville, Kentucky. Shelby Energy was notified that Mr. Carroll died from his injuries.</p> <p>Shelby Energy and Dobson Power Line investigated what happened to the dolly after the accident site was clear. They found that the dolly with the pull rope through it had not been fastened correctly. The pictures in Shelby Energy's accident report show the dolly after the accident. According to the Shelby and Dobson investigation, when tension was applied to the rope the rope to slipped out of the dolly.</p>	





# Kentucky Public Service Commission

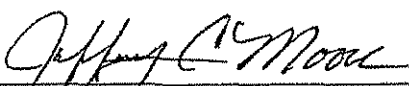
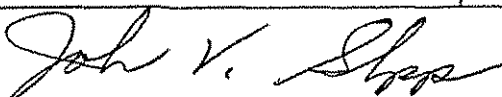
## Electric Utility Personal Injury Accident Report

VICTIM(S):	NAME		ADDRESS	EMPLOYER
	Cosby Carroll		Unknown	Dobson Power Line Construction
	Fatality	Age		
	Yes	34		
Witness(es):	I n j u r y	Fatally injured due to the fall.		
		Name		Address
Information From:	James Dobson		Unknown	Dobson Power Line Construction
	Murray P. Reynolds		Unknown	Dobson Power Line Construction
	Roy Lee Thomas		Unknown	Dobson Power Line Construction
	Gene Thomas Bohannon		Unknown	Dobson Power Line Construction
Information From:	Name		Address	Employer
	David Martin		Unknown	Shelby Energy Cooperative
	Wayne Anderson		Unknown	Shelby Energy Cooperative



# Kentucky Public Service Commission

Electric Utility Personal Injury Accident Report

Temp & Weather:	68 ° / Overcast		
Probable Violations:	<b><u>KRS 278.042 Service Adequacy and Safety Standards</u></b>		
	NESC Section 42: General rules for employees:		
	1. 420-C-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.		
	2. 420-K-1: At elevated locations above 3 m (10 ft), climbers shall be attached to equipment or structures by a fall protection system while at the worksite, at a rest site, in aerial devices, helicopters, cable carts, and a boatswain's chair.		
	3. 420-K-4: Fall arrest equipment shall be attached to a suitable anchorage.		
	4. 420-K-5: The employee shall determine that all components of the fall protection system are properly engaged and that the employee is secure in the line-worker's body belt, harness, or any other fall protection system.		
Investigated By:	Name	Company	
	Jeff Moore	Kentucky Public Service Commission	
Signed:		Date	1-8-2008
	Reviewed By:	Name	Company
John Shupp		Mgr., PSC Engineering Staff	
Signed:		Date	1/8/08

Attachments:

- A. Utility Accident Report on CD
- B. Utility Photographs of Accident Site on CD
- C. PSC Photographs of Accident Site on CD
- D. Copy of Cited Violation(s)



# Kentucky Public Service Commission

Electric Utility Personal Injury Accident Report

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## Attachment A

Utility Accident Report on CD

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# Kentucky Public Service Commission

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Electric Utility Personal Injury Accident Report

## Attachment B

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Utility Photographs of Accident Site on CD

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# Kentucky Public Service Commission

Electric Utility Personal Injury Accident Report

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## **Attachment C**

PSC Photographs of Accident Site on CD

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# Kentucky Public Service Commission

Electric Utility Personal Injury Accident Report

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**Attachment D**

Copy of Cited Violation(s)

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## Section 42. General Rules for Employees

### **420. Personal General Precautions**

#### A. Rules and Emergency Methods

1. Employees shall carefully read and study the safety rules, and may be called upon at any time to show their knowledge of the rules.
2. Employees shall familiarize themselves with approved methods of first aid, rescue techniques, and fire extinguishment.

#### B. Qualifications of Employees

1. Employees whose duties require working on or in the vicinity of energized equipment or lines shall perform only those tasks for which they are trained, equipped, authorized, and so directed. Inexperienced employees shall: (a) work under the direction of an experienced and qualified person at the site, and (b) perform only directed tasks.
2. Employees operating mechanized equipment shall be qualified to perform those tasks.
3. If an employee is in doubt as to the safe performance of any assigned work, the employee shall request instructions from the employee's supervisor or person in charge.
4. Employees who do not normally work on or in the vicinity of electric supply lines and equipment but whose work brings them

into these areas for certain tasks shall proceed with this work only when authorized by a qualified person.

C. *Safeguarding Oneself and Others*

1. Employees shall heed safety signs and signals and warn others who are in danger or in the vicinity of energized equipment or lines.
2. Employees shall report promptly to the proper authority any of the following:
  - a. Line or equipment defects such as abnormally sagging wires, broken insulators, broken poles, or lamp supports
  - b. Accidentally energized objects such as conduits, light fixtures, or guys
  - c. Other defects that may cause a dangerous condition
3. Employees whose duties do not require them to approach or handle electric equipment and lines shall keep away from such equipment or lines and should avoid working in areas where objects and materials may be dropped by persons working overhead.
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.
5. No employee shall approach or bring any conductive object, without a suitable insulating handle, closer to any exposed energized part than allowed by Rule 431 (communication) or Rule 441 (supply), as applicable.



6. Employees should exercise care when extending metal ropes, tapes, or wires parallel to and in the proximity of energized high-voltage lines because of induced voltages. When it is necessary to measure clearances from energized objects, only devices approved for the purpose shall be used.

D. Energized or Unknown Conditions

Employees shall consider electric supply equipment and lines to be energized, unless they are positively known to be de-energized. Before starting work, employees shall perform preliminary inspections or tests to determine existing conditions. Operating voltages of equipment and lines should be known before working on or in the vicinity of energized parts.

E. Ungrounded Metal Parts

Employees shall consider all ungrounded metal parts of equipment or devices such as transformer cases and circuit breaker housings, to be energized at the highest voltage to which they are exposed, unless these parts are known by test to be free from such voltage.

F. Arcing Conditions

Employees should keep all parts of their bodies as far away as practical from switches, brushes, commutators, circuit breakers, or other parts at which arcing may occur during operation or handling.

G. Liquid-Cell Batteries

1. Employees shall ascertain that battery areas are adequately ventilated before performing work.

2. Employees should avoid smoking, using open flames, or using tools that may produce sparks in the vicinity of liquid-cell batteries.
3. Employees shall use eye and skin protection when handling an electrolyte.
4. Employees shall not handle energized parts of batteries unless necessary precautions are taken to avoid short circuits and electrical shocks.

#### 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 that they are in good condition.

#### I. Clothing

1. Employees shall wear clothing suitable for the assigned task and the work environment.
2. When employees will be exposed to an electric arc, clothing or a clothing system shall be worn in accordance with Rule 410A3.
3. When working in the vicinity of energized lines or equipment, employees should avoid wearing exposed metal articles.

#### J. Ladders and Supports

1. Employees shall not support themselves, or any material or equipment, on any portion of a tree, pole structure, scaffold, ladder, walkway, or other elevated structure or aerial device, etc., without it first being determined, to the extent practical, that such support is adequately strong, in good condition, and properly secured in place.

2. Portable wood ladders intended for general use shall not be painted except with a clear nonconductive coating, nor shall they be longitudinally reinforced with metal.

3. Portable metal ladders intended for general use shall not be used when working on or in the vicinity of energized parts.

4. If portable ladders are made partially or entirely conductive for specialized work, necessary precautions shall be taken to ensure that their use will be restricted to the work for which they are intended.

K. Fall Protection

1. At elevated locations above 3 m (10 ft), climbers shall be attached to equipment or structures by a fall protection system while at the worksite, at a rest site, in aerial devices, helicopters, cable carts, and a boatswain's chair.

2. Qualified climbers may be permitted to be unattached to equipment or structures while climbing, transferring, or transitioning across obstacles on structures. Unqualified climbers shall be attached while performing these activities.

3. Fall protection equipment shall be inspected before use by the employee to ensure that the equipment is in safe working condition.

4. Fall arrest equipment shall be attached to a suitable anchorage.

5. The employee shall determine that all components of the fall protection system are properly engaged and that the employee is secure in the line-worker's body belt, harness, or any other fall protection system.