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August 27, 2014

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

Re: Case No. 2014-00165  
Duke Energy Kentucky, Inc. Alleged Failure to Comply with KRS 278.042

Dear Mr. Derouen:

Enclosed for filing is the Stipulation of Facts and Settlement Agreement entered into between Commission Staff and Duke Energy Kentucky, Inc. Please bring this document to the Commission's attention for its review and consideration

Sincerely,

A handwritten signature in black ink, appearing to read "Jonathan Beyer".

Jonathan Beyer  
Staff Attorney

Enclosure

cc: Parties of Record

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

DUKE ENERGY KENTUCKY, INC.	)	
_____	)	
ALLEGED FAILURE TO COMPLY WITH	)	CASE NO. 2014-00165
KRS 278.042	)	

STIPULATION OF FACTS AND SETTLEMENT AGREEMENT

By Order dated May 27, 2014, the Commission initiated this proceeding to determine whether Duke Energy Kentucky, Inc. ("Duke Energy") should be subject to the penalties prescribed in KRS 278.990 for alleged violations of 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 National Electrical Safety Code ("NESC"), and for alleged violations of Duke Energy's safety manual.

The fourteen alleged violations of Duke Energy's safety manual and the NESc, as cited by the Commission's May 27, 2014 Order, can be structured into three areas:

1. Failure to observe proper safety procedures on the job site to ensure the safety of all individuals involved.
  - a. NESc, Part 4, Section 42, Rule 421.A.2 – General Rules for Employees – General Operating Routines – Duties of a first-line Supervisor or person in charge – This individual shall: See that all safety rules and operating procedures are observed by employees under the direction of this individual.
  - b. NESc, Part 4, Section 42, Rule 421.A.6 – General Rules for Employees – General Operating Routines – Duties of a first-line Supervisor or person in charge – This individual

shall: Conduct a job briefing with the employees involved before beginning each job. A job briefing should include at least the following items: procedures, personal protective equipment requirements, energy source controls, hazards associated with the job, and special precautions.

c. NESC, Part 4, Section 42, Rule 420.C.4 – 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.

d. Duke Energy Safety Manual, Electrical Safety for Transmission and Distribution, Job Briefing, #1 – Job briefings are required to be performed at the start or resumption of each work activity.

e. Duke Energy Safety Manual, Electrical Safety for Transmission and Distribution, Job Briefing, #2 – The supervisor, crew leader, or employee-in-charge along with crew members will hold a job briefing to review work procedures, hazards associated with the job, special precautions, energy source control, and personal protective equipment.

2. Failure to wear proper personal protective equipment (“PPE”) and suitable flame resistant clothing.

a. NESC, Part 4, Section 41, Rule 410.A.3 – Supply and communications systems – Rules for employers – General requirements – General – The employer shall insure that an assessment is performed to determine potential exposure to an electric arc for employees who work on or near energized lines, parts, or equipment. If the assessment determines potential employee exposure, clothing made from acetate, nylon, polyester, or polypropylene shall not be worn, unless arc rated.

b. NESC, Part 4, Section 42, Rule 420.H – 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 they are in good condition.

c. NESC, Part 4, Section 42, Rule 420.I.1 – General Rules for Employees – General – Clothing – Employees shall wear clothing suitable for the assigned task and work environment.

d. Duke Energy Safety Manual, Electrical Safety for Transmission and Distribution, Personal and Electrical Protective Equipment, #9-h – Dielectric footwear shall be worn while at or below ground level whenever danger from step or touch potential exists. Dielectric footwear shall be worn: While scouting, troubleshooting, or walking lines during outage restoration.

e. Duke Energy Safety Manual, Electrical Safety for Transmission and Distribution, Apparel and Jewelry, #1 – All employees working within 10 feet of exposed, energized conductors or equipment shall wear flame resistant clothing. Shirts and pants worn underneath shall be 100% natural fiber. Protective arc rating shall be at least 4.2 cal/cm<sup>2</sup>.

3. Failure to observe the required minimum approach distance (“MAD”) to energized lines or parts.

a. NESC, Part 4, Section 44, Rule 441.A.1 (Table 441-1) – Additional Rules for Supply Employees – Energized conductors and parts – Minimum approach distance to energized lines or parts – General – Employees shall not approach or bring conductive objects 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: (P-280 for complete rule) – Table 441-1 AC live work minimum approach distance – 12.5kV – 0.750 volts to 15 kV – Phase to Phase: 2’3” – (P-284 Table 441-1).

b. Duke Energy Safety Manual, Electrical Safety for Transmission and Distribution, Working On or Near Exposed Energized Parts, General, #3 – When working around exposed energized parts, employees shall use proper protective equipment and work practices and comply with minimum approach distances.

c. Duke Energy Safety Manual, Electrical Safety for Transmission and Distribution, Working On or Near Exposed Energized Parts, General, #4 – Avoid positions where a shock or slip could expose the body to equipment at a potential different from the body.

d. Duke Energy Safety Manual, Electrical Safety for Transmission and Distribution, Minimum Approach Distance, #1 (Table 1) – Employees shall not approach or take any conductive object closer to exposed energized parts than the minimum distance shown in Table 1 unless the employee is: Insulated from the energized part by wearing rubber gloves and/or sleeves that are rated for the voltage. OR – The energized part is insulated with line hose or rubber blankets. OR – Doing live-line bare-hand work – AC Minimum Approach Distance from Live Parts – 1.1kV to 15.0 kV – 2'1”.

The Commission's Order arose out of an incident which occurred on November 18, 2013. Lawrence "Kevin" Dudley, a Duke Energy employee, sustained injuries while patrolling a transmission circuit that had locked out due to a storm at approximately 5:00 A.M. in the area of 5940 Lieberman Road in Covington, Kentucky. One four-person work crew was tasked with this assignment. The work crew at the incident job site included employee in charge Jason Seiter, victim Lawrence "Kevin" Dudley, Cindy Greive, and Danny Morris. All crew members, except Mr. Dudley, stated that there was no job briefing form filled out for this assignment. Mr. Dudley's statement was that he had no recollection of the event. While assessing the circuit in the area of the incident, the crew discovered a broken transmission/ distribution pole with a line down. All four of the crew members assessed the damage, determined a method of accessing the downed pole/ line, and discussed what was needed to make the repairs. Duke Energy stated that the crew was approximately 12-14 feet from the nearest conductor during this discussion. After this discussion, Mr. Seiter, Ms. Greive, and Mr. Morris turned to

walk back to their vehicles. As they were walking away, they heard and saw a flash over their shoulders from an arc. They turned to see the victim, Mr. Dudley, lying under the distribution conductors. The distribution circuit became de-energized after Mr. Dudley made contact with the conductors. After the crew determined Mr. Dudley was clear of the conductors, they pulled Mr. Dudley further from the conductors and immediately called 911. Mr. Dudley was transported to University Hospital in Cincinnati, Ohio, where he was treated for second and third degree burns to his left wrist, right shoulder and right arm. Mr. Dudley was released from the hospital ten days later, on November 28, 2013, and has fully recovered from his injuries.

On June 16, 2014, Duke Energy filed a response to the Commission's Order. Duke Energy's response set forth several defenses, including the denial of any willful violations, a particular denial that written job briefing forms were required when the work crew was in storm assessment mode, and an assertion that Duke Energy maintains policies and procedures in its Safety Manual regarding the proper use of PPE and that it regularly trains its employees on the use and necessity of PPE. Duke Energy generally agreed with the factual recitation of events contained in the Commission's Order and Accident Investigation Staff Report.

At an informal conference held on July 17, 2014, Duke Energy stated that this incident, including when it is appropriate to fill out job briefing forms, the failure to wear proper PPE, and the violation of MAD requirements, were addressed at meetings with affected staff. It disputed the appropriateness of several violations, particularly the allegation that the victim willfully violated the MAD requirements and that the work crew was required to document its job briefing while in job assessment mode.

As a result of information provided by Duke Energy, and negotiations between Commission Staff and Duke Energy in the course of the informal conference, Duke Energy and the Commission Staff submit the following Stipulation of Facts and Settlement Agreement (“Stipulation”) for the Commission’s consideration in rendering its decision in this proceeding:

1. Duke Energy agrees that the Accident Investigation Staff Report (“Report”), Exhibit A to the Commission’s May 27, 2014 Order in this case, accurately describes and sets forth the facts and circumstances surrounding the incident giving rise to the Order.

2. Pursuant to 807 KAR 5:006, Section 25, each utility is required to adopt and execute a safety program. Duke Energy currently utilizes the Safe Work Practices manual as its safety manual. However, Duke Energy is replacing the Safety Work Practices manual with the Health and Safety Handbook. The Health and Safety Handbook will become the safety manual for all of Duke Energy Corporation. Upon completion, the Health and Safety Handbook, together with the Work Standards Manual will comprise Duke Energy Kentucky’s safety program for transmission and distribution employees as required by 807 KAR 5:006, Section 25.

3. Duke Energy will modify its Work Standards Manual to:

- Clarify that the Corporate Environmental Health & Safety department publishes a Health and Safety Handbook, which is an overarching safety manual for Duke Energy. The Work Standards Manual is in effect a more specific and detailed version of the Health and Safety Handbook, and the two should not conflict.

Hence, Transmission and Distribution personnel should always reference the Work Standards Manual first and the Health and Safety Handbook second. These standards are minimal requirements. Management can elect to implement greater requirements than those published;

- Describe its modified job briefing policy to:
  - Clarify when a crew shall hold a verbal assessment of potential hazards on a job site;
  - Clarify when a job briefing should be documented;
  - Distinguish job briefing expectations between when a crew is in “assessment mode” and “restoration mode;” and
  - Clarify what constitutes “work activity” necessitating a written job briefing;
- Revise language describing the type of footwear transmission and distribution employees are required to wear clarifying its PPE policy to require certain employees to wear EH-rated boots with a safety toe, a substantial heel, and ankle protection instead of slip-on dielectric footwear.

4. Duke Energy personnel will send documentation of the changes to its Work Standards Manual by October 2014 or as soon as available and, as necessary, will provide interim status updates to the Commission regarding the timeline in which the new language will be implemented in its Work Standards Manual.



5. Within ten days of the adoption of the Work Standards Manual revisions described above, and the Health and Safety Handbook, Duke Energy will file a notice with the Commission indicating the dates of adoption of the Work Standards Manual revisions and the Health and Safety Handbook.

6. Duke Energy will provide the Commission with a copy of the revised Work Standards Manual and a copy of its new Health and Safety Handbook within ten days of their adoption.

7. Duke Energy will submit to the Commission sign-in sheets and documentation, if any, of meetings in which this incident was reviewed with Kentucky Duke Energy employees.

8. Duke Energy agrees to pay the amount of \$7,500 in full settlement of the proceeding. The scope of this proceeding is limited by the Commission's May 27, 2014 Order as to whether Duke Energy should be assessed penalties under KRS 278.990 for multiple alleged violations of the NESC rules as made applicable under KRS 278.042, and for multiple alleged violations of its safety manual, with each violation having a potential penalty of \$2,500. Neither the payment of \$7,500, nor any agreement contained in this Stipulation, shall be construed as an admission by Duke Energy of any liability in any legal proceeding or lawsuit arising out of the facts set forth in the Report, nor shall the Commission's acceptance of this Stipulation be construed as a finding of a willful violation of any Commission regulation, NESC rule, or rules within Duke Energy's safety manual.

9. In the event that the Commission does not accept this Stipulation in its entirety, Duke Energy reserves the right to withdraw therefrom and require that a

hearing be held on any and all issues herein, and that none of the provisions contained herein shall be binding upon the parties hereto, used as an admission by Duke Energy of any liability in any legal proceeding or lawsuit arising out of the facts set forth in the Report, or otherwise used as an admission by either party.

10. This Stipulation is for use in Commission Case No. 2014-00165. None of the provisions in this Stipulation establishes any precedent for any other case and neither Duke Energy nor Staff shall be bound by any part of this Stipulation in any other proceeding, except that this Stipulation may be used in any proceeding by the Commission to enforce the terms of this Stipulation or to conduct a further investigation of Duke Energy's service, and Duke Energy shall not be precluded or estopped from raising any issue, claim, or defense, therein by reason of the execution of this Stipulation.

11. Duke Energy and Staff agree that the foregoing Stipulation is reasonable, is in the public interest, and should be adopted in its entirety by the Commission. If so adopted by the Commission, Duke Energy agrees to waive its right to a hearing and will not file any petition for rehearing or seek judicial appeal.

**Duke Energy Kentucky, Inc.**

By  \_\_\_\_\_

Title Associate General Counsel

Date AUGUST 26, 2014

Staff of the Kentucky Public Service Commission

By *Janetha Byers*

Title *Staff Attorney II*

Date *8/27/14*