

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

NOLIN RURAL ELECTRIC COOPERATIVE CORPORATION)	
_____)	
ALLEGED FAILURE TO COMPLY WITH KRS 278.042)	CASE NO. 2011-00061

O R D E R

By Order dated March 1, 2011, the Commission directed Nolin Rural Electric Cooperative Corporation ("Nolin") to show cause why it should not be subject to the penalties provided under KRS 278.990 for violations of KRS 278.042, which require an electric utility to construct and maintain its plant and facilities in accordance with the most recent edition of the National Electric Safety Code ("NESC"), which is the 2007 edition. In the Commission's March 1, 2011 Order, the Commission found prima facie evidence that Nolin failed to comply with the following NESC sections:

NESC Section 42: General Rules for Employees:

Violation 1. 411. Protective Methods and Devices
A. Methods

3. Employees shall be instructed as to the character of the equipment or lines and methods to be used before any work is undertaken thereon.

Violation 2. 420. Personal General Precautions
C. 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.

Violation 3: 420. Personal General Precautions
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.

Violation 4: 421. General Operating Routines
A. Duties of a First-Level 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 the safety rules and operating procedures are observed by the employees under the direction of this individual.
3. Make all the necessary records and reports, as required.

NESC Section 44. Additional Rules for supply employees

Violation 5: 441. Energized Conductors or Parts
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 441-1¹ or Table 441-4 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; or

¹ See Report at 6.

- c. The energized line or part is insulated from the employee and from any other line or part at a different voltage.

Table 441-1: AC Live Work Minimum Approach Distance⁴
(See Rule 441 in its entirety.)

Voltage in kilovolts phase to phase ^{1,2}	Distance to employee			
	Phase-to-ground		Phase-to-phase	
	(m)	(ft-in)	(m)	(ft-in)
0 to 0.050 ¹	not specified		not specified	
0.051 to 0.300 ¹	avoid contact		avoid contact	
0.301 to 0.750 ¹	0.31	1-0	0.31	1-0
<u>0.751 to 15</u>	<u>0.65</u>	<u>2-2</u>	<u>0.67</u>	<u>2-3</u>
15.1 to 36.0	0.77	2-7	0.86	2-10
36.1 to 46.0	0.84	2-9	0.96	3-2
46.1 to 72.5	1.00 ³	3-3 ³	1.20	3-11

1 For single-phase systems, use the highest voltage available.

2 For single-phase lines off three phase systems, use the phase-to-phase voltage of the system.

3 The 46.1 to 72.5 kV phase-to-ground 3-3 distance contains a 1-3 electrical component and a 2-0 inadvertent movement component.

4 Distances listed are for standard atmospheric conditions. The data used to formulate this table was obtained from test data taken with standard atmospheric conditions. Standard atmospheric conditions are defined as temperatures above freezing, wind less than 15 mi per hr or 24 km per hr, unsaturated air, normal barometer, uncontaminated air, and clean and dry insulators. If standard atmospheric conditions do not exist, extra care must be taken.

Violation 6: 443. Work on Energized Lines and Equipment
A. General Requirements

- 1. When working on energized lines and equipment, one of the following safeguards shall be applied:
 - a. Insulate employee from energized parts
 - b. Isolate or insulate the employee from ground and grounded structures, and potentials other than the one being worked on.

Violation 7: 446. Live Work
B. Equipment

- 1. Insulated aerial devices, ladders, and other support equipment used in live work shall be evaluated for

performance at the voltages involved. Tests shall be conducted to ensure the equipment's integrity. Insulated aerial devices used in bare-hand work shall be tested before the work is started to ensure the integrity of the insulation.

The violations cited in the Commission's March 1, 2011 Order arose from a July 9, 2009 incident in Elizabethtown, Kentucky, wherein Pat Burman, an employee of Hamilton Power Line Construction, LLC ("Hamilton"), a contractor for Nolin, sustained injuries when he made contact with an energized primary conductor.

On March 18, 2011, Nolin submitted an answer to the Commission's March 1, 2011 Order and a request for an informal conference. The informal conference was held at the Commission's offices on April 13, 2011. The discussions at the informal conference led to the filing of a Joint Stipulation of Facts and Settlement Agreement (collectively referred to as "Settlement Agreement"). The Settlement Agreement, attached hereto as the Appendix and incorporated herein by reference, sets forth Nolin's agreement with the statement of facts contained in Commission Staff's Electric Utility Personal Injury Accident Report ("Report"), signed and dated August 20, 2009. The Report was appended to the Commission's March 1, 2011 Order. The Settlement Agreement also discusses the remedial actions taken by Nolin and a civil penalty in the amount of \$17,500.00 that Nolin will pay \$6,000.00 with the remaining \$11,500.00 suspended on the condition that Nolin performs the duties under the Settlement Agreement and files the necessary documentation within the time allotted.

In determining whether the terms of the Settlement Agreement are in the public's interest and are reasonable, the Commission has taken into consideration the comprehensive nature of the Settlement Agreement, Nolin's actions taken after the accident, including the implementation of a system of safety inspections of both its own

construction work crews, and its contractor crews and Nolin's cooperation in achieving a resolution of this proceeding.

Based on the evidence of the record and being otherwise sufficiently advised, the Commission finds that the Settlement Agreement is in accordance with the law and does not violate any regulatory principle. The Settlement Agreement is a product of arm's-length negotiations among capable, knowledgeable parties, is in the public's interest, and results in a reasonable resolution of all issues in this case.

IT IS THEREFORE ORDERED that:

1. The Joint Stipulation of Facts and Settlement Agreement is adopted and approved in its entirety as a complete resolution of all issues in this case.
2. Nolin is assessed a penalty of \$17,500.00.
3. Nolin shall pay \$6,000.00 of the \$17,500.00 civil penalty within 30 days of the date of this Order by cashier's check or money order payable to the Kentucky State Treasurer and mailed or delivered to the Office of General Counsel, Kentucky Public Service Commission, 211 Sower Boulevard, Post Office Box 615, Frankfort, Kentucky 40602.
4. The remaining \$11,500.00 of the civil penalty is suspended on the condition that Nolin abide by the terms contained in the Settlement Agreement and provide all required documentation within the time allotted.
5. Nolin will perform one safety inspection of each crew working on its system each month and will file its safety inspection report documents for each of those safety inspections with the Commission for a period of 12 months following the issuance

of this Order. The safety inspection documents shall be filed with the Commission within 15 days of the end of the month in which the inspections were conducted. Nolin shall file the safety inspection documents both in electronic format and hard copy.

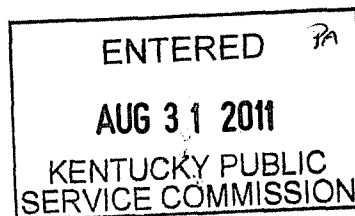
6. Nolin shall maintain all safety inspection documents for a period of at least two years and shall provide the safety audit checklists to Commission inspectors upon request and during the inspectors' periodic inspections.

7. Nolin shall ensure that all construction crews working in the vicinity of energized Nolin facilities make written documentation of each daily job briefing. Nolin shall not file copies of daily job briefing documentation with the Commission unless the Commission requires Nolin to do so by subsequent Order. The written job briefing documentation shall be maintained and provided to the Commission's inspectors upon request, under the same terms as applicable to safety inspection documents under paragraph 6 above.

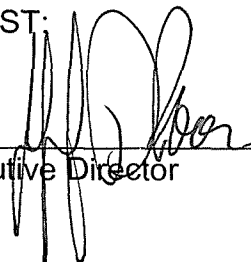
8. Upon payment of the \$6,000.00 civil penalty, this case shall be closed and removed from the Commission's docket without further Order of the Commission.

10. Any documents filed in the future pursuant to ordering paragraphs 5 through 7 herein shall reference this case number and shall be retained in the utility's general correspondence file.

By the Commission



ATTEST:



Executive Director

APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE
COMMISSION IN CASE NO. 2011-00061 DATED **AUG 31 2011**

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

RECEIVED

MAR 22 2011

PUBLIC SERVICE
COMMISSION

In the Matter of:

NOLIN RURAL ELECTRIC COOPERATIVE)
CORPORATION)
_____)
ALLEGED FAILURE TO COMPLY)
WITH KRS 278.042)

CASE NO. 2011-00061

STIPULATION OF FACTS AND SETTLEMENT AGREEMENT

By Order dated March 1, 2011, the Commission initiated this proceeding to determine whether Nolin Rural Electric Cooperative Corporation ("Nolin") should be subject to the penalties prescribed in KRS 278.990 for seven alleged violations of KRS 278.042, which requires an electric utility to construct and maintain its plant and facilities in accordance with the most recent edition of the National Electric Safety Code (NESC).¹

The seven alleged violations of the NESC cited by the Commission's March 1, 2011 Order are as follows:

NESC Section 42: General Rules for Employees:

Violation 1. 411. Protective Methods and Devices
A. Methods

3. Employees shall be instructed as to the character of the equipment or lines and methods to be used before any work is undertaken thereon.

Violation 2. 420. Personal General Precautions
C. Safeguarding Oneself and Others

¹ At present, the most recent version of the NESC is the 2007 edition.

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.

Violation 3: 420. Personal General Precautions
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.

Violation 4: 421. General Operating Routines
A. Duties of a First-Level 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 the safety rules and operating procedures are observed by the employees under the direction of this individual.
3. Make all the necessary records and reports, as required.

NESC Section 44. Additional Rules for supply employees

Violation 5: 441. Energized Conductors or Parts
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 441-1² or Table 441-4 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; or
 - c. The energized line or part is insulated from the employee and from any other line or part at a different voltage.

² See Report at 6.

Table 441-1: AC Live Work Minimum Approach Distance⁴
 (See Rule 441 in its entirety.)

Voltage in kilovolts phase-to-phase	Distance to employee			
	Phase-to-ground		Phase-to-phase	
	(m)	(ft-in)	(m)	(ft-in)
0 to 0.050 ¹	not specified		not specified	
0.051 to 0.300 ¹	avoid contact		avoid contact	
0.301 to 0.750 ¹	0.31	1-0	0.31	1-0
0.751 to 15	0.65	2-2	0.67	2-3
15.1 to 36.0	0.77	2-7	0.86	2-10
36.1 to 46.0	0.84	2-9	0.96	3-2
46.1 to 72.5	1.00 ³	3-3 ³	1.20	3-11

1 For single-phase systems, use the highest voltage available.

2 For single-phase lines off three phase systems, use the phase-to-phase voltage of the system.

3 The 46.1 to 72.5 kV phase-to-ground 3-3 distance contains a 1-3 electrical component and a 2-0 inadvertent movement component.

4 Distances listed are for standard atmospheric conditions. The data used to formulate this table was obtained from test data taken with standard atmospheric conditions. Standard atmospheric conditions are defined as temperatures above freezing, wind less than 15 mi per hr or 24 km per hr, unsaturated air, normal barometer, uncontaminated air, and clean and dry insulators. If standard atmospheric conditions do not exist, extra care must be taken.

Violation 6: 443. Work on Energized Lines and Equipment
 A. General Requirements

1. When working on energized lines and equipment, one of the following safeguards shall be applied:
 - a. Insulate employee from energized parts
 - b. Isolate or insulate the employee from ground and grounded structures, and potentials other than the one being worked on.

Violation 7: 446. Live Work
 B. Equipment

1. Insulated aerial devices, ladders, and other support equipment used in live work shall be evaluated for performance at the voltages involved. Tests shall be conducted to ensure the equipment's integrity. Insulated aerial devices used in bare-hand work shall be tested before the work is started to ensure the integrity of the insulation.

The Commission's March 1, 2011 Order arose out of a July 9, 2009 incident in which Pat Burman, an employee of Hamilton Construction, sustained burn injuries as a result of an accident at the site of a Nolin electric construction project at 773 Beasley Boulevard, Elizabethtown, in Hardin County, Kentucky.

At the time of the July 9, 2009 incident, Hamilton Construction was working under contract with Nolin and was installing new conductors and upgrading a single phase line on Nolin's system to a three phase tie circuit. The first-level supervisor or person in charge at the construction site on the day of the incident was Hamilton Construction employee, Billy Hamilton.

Mr. Burman was working in an aerial lift bucket at the time of the July 9, 2009 incident. While working on the energized circuit, Mr. Burman made contact with an energized primary conductor at the same time his left arm was in contact with grounded equipment mounted on a nearby utility pole. As a result of the contact with the energized conductor, Mr. Burman received burn injuries to his back and left arm. Mr. Burman was not using required personal protective equipment (PPE) at the time of the incident, nor had Mr. Burman or any other member of the Hamilton Construction crew installed required rubber protective equipment on the energized primary conductors prior to Mr. Burman making contact with the conductors.

Commission Staff investigated the July 9, 2009 incident and submitted to the Commission an electric utility Incident Investigation Report ("Report"), dated August 20, 2009, which is attached as an Appendix to the Commission's March 1, 2011 Order.

Pursuant to 807 KAR 5:006, Section 26(2), Nolin provided a summary written report ("summary report") regarding the July 9, 2009 accident to Commission Staff,

which is appended to Commission Staff's Report as Attachment A. According to the summary report, Mr. Burman was wearing fire retardant clothing at the time of the incident. However, according to the summary report, he was not wearing other PPE such as rubber gloves or rubber sleeves that could have insulated him from the electric charge. The summary report also states that a job briefing was conducted at approximately 8:45 a.m. on the day of the incident, but that the Hamilton Construction crew did not document in writing the contents of the job briefing or the crew members who were in attendance.

Nolin's summary report also contains a copy of a test record provided by Hamilton Construction showing that the aerial lift bucket used by Mr. Burman at the time of the July 9, 2009 incident had last been dielectrically tested pursuant to applicable standards on February 26, 2007. Section 8.8.2 of the American National Standards Institute (ANSI) American National Standard Vehicle-Mounted Elevating and Rotating Aerial Devices (ANSI/SIA A92.2-1990) provides that such periodic tests must be performed, at a minimum, once every twelve months.

On March 18, 2011, Nolin filed a response to the Commission's March 1, 2011 Order. In its response, Nolin does not dispute the recitation of facts in the Commission's March 1, 2011 Order, but Nolin denies that it violated any provisions of the NESC, because the allegations in this matter arose from the conduct of Hamilton Construction's crews.

The March 1, 2011 Order also provides that the Commission's investigation in this matter will examine the adequacy, safety, and reasonableness of Nolin's practices related to the construction, installation and repair of electric facilities, as they relate to

the facts of this case. In its response to Items 3 and 4 of Commission Staff's First Data Request, Nolin states that, since 2009, it has instituted a system of safety inspections of both its own construction work crews and its contractor crews. Nolin states in its responses that, in 2009, it conducted 154 inspections of its own crews and 38 inspections of contractor crews, and in 2010 it performed 171 inspections of its own crews and 37 inspections of contractor crews.

Pursuant to a request by Nolin, an informal conference was held on April 13, 2011, at the Commission's Frankfort offices. Representatives of Nolin, Hamilton Construction, and legal counsel were in attendance, as were Commission Staff. As a result of discussions held during the informal conference, Nolin and Commission Staff submit the following Stipulations of Facts and Settlement agreement ("Stipulation") for the Commission's consideration in rendering its decision in this proceeding:

1. Nolin agrees with the Report's description of the facts and circumstances surrounding the July 9, 2009 incident, which gave rise to the Commission's March 1, 2011 Order.

2. Nolin agrees for a civil penalty of \$17,500 to be assessed. Nolin agrees to pay \$6,000 of the civil penalty. The scope of this proceeding is limited by the Commission's March 1, 2011 Order on whether Nolin should be assessed a penalty under KRS 278.990 for willful violations of the NESC rules as made applicable under KRS 278.042 and the adequacy, safety, and reasonableness of its practices related to the construction, installation and repair of electric facilities and whether such practices require revision. Neither the payment of the \$6,000 nor any other agreement contained in this Stipulation, shall be construed as an admission by Nolin of any liability in this

matter, or in any legal proceeding or lawsuit arising out of the facts set forth in the Report, nor shall the Commission's acceptance of this Settlement Agreement be construed as a finding of a willful violation of any Commission regulation or NESC rule.

3. Nolin agrees that the remaining amount of the civil penalty, \$11,500 is suspended and should be imposed upon Nolin if it fails to comply with any provision of this Stipulation, and that such suspended penalty shall become due and payable if Nolin does not remedy its failure to comply within 30 days after the Commission has issued written notice to Nolin.

4. Commission Staff agrees that if the suspended penalty described in paragraph 3 above has not become due and payable within the 12-month safety inspection document filing period described in paragraph 6 below, it shall be vacated.

5. Commission Staff agrees that the safety inspection program which Nolin has implemented for both its own construction crews and its contractor crews since 2009 demonstrate that Nolin has proper procedures in place relating to the safety practices of its contractor crews, including performing regular safety inspections of its contractor crews.

6. Nolin agrees that it will perform one safety inspection of each crew working on its system each month and will file its safety inspection report documents for each of those safety inspections with the Commission for a period of 12 months following the issuance of the final order in this matter. The safety inspection documents shall be filed with the Commission within 15 days of the end of the month in which the inspections were conducted. Nolin agrees to file the safety inspection documents both in electronic format and hard copy.

7. Nolin shall maintain all safety inspection documents for a period of at least two (2) years and shall provide the safety audit checklists to Commission inspectors upon request and during the inspectors' periodic inspections.

8. Nolin shall ensure that all construction crews working in the vicinity of energized Nolin facilities make written documentation of each daily job briefing. Nolin shall not file copies of daily job briefing documentation with the Commission unless the Commission requires Nolin to do so by subsequent Order. The written job briefing documentation shall be maintained and provided to the Commission's inspectors upon request, under the same terms as applicable to safety inspection documents under paragraph 7 above.

9. In the event that the Commission does not accept this Stipulation in its entirety, Nolin and Commission Staff reserve their rights to withdraw from it and require that a hearing be held on any and all issues involved and that none of the provisions contained herein shall be binding upon the parties hereto, used as an admission by Nolin 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. 2011-00061. None of the provisions in this Stipulation establishes any precedent for any other case, and neither Nolin nor Staff shall be bound by any part of this Stipulation in any other proceeding, except that this Stipulation may be used in any proceedings by the Commission to enforce the terms of this Stipulation or to conduct a further investigation of Nolin's service, and Nolin shall not be precluded or estopped from raising any issue, claim or defense therein by reason of the execution of this Stipulation.

11. Nolin and Commission 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, Nolin agrees to waive its right to a hearing and will not file any petition for rehearing or seek judicial appeal.

Dated this 14th day of July 2011.

NOLIN RURAL ELECTRIC COOPERATIVE CORPORATION

By: Michael L. Miller
Signature

MICHAEL L. MILLER
Print Name

Title: PRESIDENT & CEO

Date: JULY 14, 2011

STAFF OF THE KENTUCKY PUBLIC SERVICE COMMISSION

By: L. Allyson Honaker
Allyson Honaker, Staff Attorney III

Michael L Miller
President & CEO
Nolin R.E.C.C.
411 Ring Road
 Elizabethtown, KY 42701-6767