

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

LOUISVILLE GAS AND ELECTRIC COMPANY)	
_____)	
ALLEGED FAILURE TO COMPLY WITH)	CASE NO.
KRS 278.042)	2011-00097
)	

O R D E R

By Order dated March 29, 2011, the Commission directed Louisville Gas and Electric Company ("LG&E") to show cause why it should not be subject to the penalties provided under KRS 278.990 for 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 Electrical Safety Code ("NESC"), which is the 2007 edition. The alleged violations cited in the Commission's March 29, 2011 Order are as follows:

1. 2007 NESC Section 41, Rule 410A.3.—Supply and Communication Systems-Rules for employees—General Requirements—Effective as of January 1, 2009, the employer shall ensure that an assessment is performed to determine potential exposure to an electric arc for employees who work on or near energized parts or equipment. If the assessment determines a potential employee exposure greater than 2 cal/cm² exists (see Neal, Bingham, and Doughty [B59]), the employer shall require employees to wear clothing or a clothing system that has an effective arc rating not less than the anticipated level of arc energy. When exposed to an electric arc or flame, clothing made from the following materials shall not be worn: acetate, nylon, polyester, or polypropylene. The effective arc rating of clothing or a clothing system to be worn at voltages 1000 V and above shall be determined using Tables 410-1 and 410-2 or performing an arc hazard analysis. When an arc hazard analysis is performed, it shall include a calculation of the estimated arc energy based on the available fault current, the duration of the arc (cycles), and the distance from the arc to the employee. (There are exceptions to this rule.)

2. 2007 NESC Section 41, Rule 411.A.3—Supply and Communication systems—Rules for employers—Protective methods and devices—Methods—Employees shall be instructed as to the character of the equipment or lines and methods to be used before any work is undertaken thereon.
3. 2007 NESC Section 42, Rule 420.C.4—General Rules for Employees—Personal General Precautions—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.
4. 2007 NESC Section 42, Rule 420.C.5—General Rules for Employees—Personal General Precautions—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 431 (communication) or Rule 441 (supply), as applicable.
5. 2007 NESC Section 42, Rule 420.H—General Rules for Employees—Personal General Precautions—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.
6. 2007 NESC Section 42, Rule 421.A—General Rules for Employees—General Operating Routines—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.
7. 2007 NESC Section 44, Rule 441.1A.1.—Additional Rules for Supply Employees—Energized Conductors or Parts—Minimum Approach Distance to Live Parts—General—Employees shall not approach, 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. Employees shall not approach or bring any conductive objects within the minimum approach distance listed in Table 441-1 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 rubber 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.

The March 29, 2011 Order also alleged six violations of Commission Regulation 807 KAR 5:006, Section 24(1) which requires each jurisdictional utility to adopt and execute a safety program, including the establishment of a safety manual with written guidelines for safe working practices and procedures to be followed by utility workers. The alleged violations arise under LG&E's Safety Manual. The alleged violations are as follows:

1. A.2.1: General Rules—Individual Responsibility—It is the responsibility of each employee to perform assigned duties to assure: a. Safety to himself or herself; b. Safety to fellow employees; c. Protect the public; d. Protection of company property.
2. A.3.1—General Rules—Supervisors' 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.
3. A.3.2—General Rules—Supervisors' Responsibility for Safety—A job briefing/tailgate discussion shall be held prior to starting each job. The job briefing shall include at least the following subjects: a. Hazards associated with the job; b. Work procedures involved; c. Special precautions; d. Energy source controls; e. Personal Protective Equipment requirements.
4. 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.
5. F.1.18—Substations—Working in Substations—No employee may approach, or take any conductive object without an insulating handle, closer to exposed energized parts than the clearances set forth in table D-1 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.

6. F.1.19—Substations—Working in Substations—Electric equipment, lines and circuits shall be considered energized until determined by testing to be de-energized and grounded.

The violations cited in the Commission's March 29, 2011 Order arose from a November 9, 2010 incident in Middletown, Kentucky, wherein James Willis, an employee of LG&E, sustained injuries while cleaning the inside of a breaker cubicle.

On April 18, 2011, LG&E submitted an answer to the Commission's March 29, 2011 show cause Order and a request for an informal conference. The informal conference was held at the Commission's offices on May 16, 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 LG&E's agreement with the statement of facts contained in the Commission Staff's Electric Utility Personal Injury Accident Report ("Report"), signed and dated January 27, 2011. The Report was appended to the Commission's March 29, 2011 show cause Order. The Settlement Agreement also discusses the remedial actions taken by LG&E and a civil penalty in the amount of \$32,500.00 of which LG&E will pay \$15,000.00 in full satisfaction of this proceeding.

In determining whether the terms of the Settlement Agreement are in the public interest and are reasonable, the Commission has taken into consideration the comprehensive nature of the Settlement Agreement, LG&E's actions taken after the accident, and LG&E's cooperation in achieving a resolution of the issues in 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 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. LG&E is assessed a civil penalty of \$32,500.00.

3. LG&E shall pay \$15,000.00 of the \$32,500.00 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 \$17,500.00 of the civil penalty is suspended on the condition that LG&E abide by the terms contained in the Settlement Agreement and provide all required documentation within the time allotted.

5. Within 30 days of the date of entry of this Order approving the Settlement Agreement, LG&E shall provide to the Commission documentation on the training given as a result of this incident, including the type of training, who attended, and how this training will be implemented into the training program on a regular basis.

6. LG&E currently performs safety audits of its substation crews. Within 30 days of the date of entry of this Order approving the Settlement Agreement, LG&E shall

provide to the Commission copies of the safety audits performed on all LG&E Louisville substations for the three month period prior to the date of the accident and for the three month period following the date of the accident.

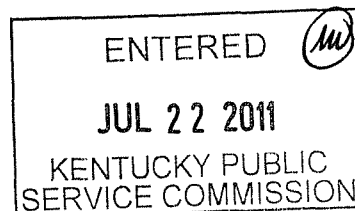
7. LG&E shall maintain all of the safety audit documents and provide them to Commission inspectors upon request during the inspectors' periodic inspections.

8. The hearing scheduled for August 16, 2011 is cancelled.

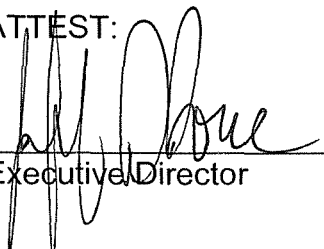
9. Upon payment of the \$15,000.00 civil penalty, this case shall be closed and removed from the Commission's docket without further Order of the Commission.

10. Any documents filed in the future pursuant to ordering paragraphs 5 through 6 herein shall reference this case number and shall be retained in the utility's general correspondence file.

By the Commission



ATTEST:


Executive Director

APPENDIX

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE
COMMISSION IN CASE NO. 2011-00097 JUL 22 2011

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

LOUISVILLE GAS AND ELECTRIC)	
COMPANY)	
_____)	CASE NO. 2011-00097
)	
ALLEGED FAILURE TO COMPLY)	
WITH KRS 278.042)	

STIPULATION OF FACTS AND SETTLEMENT AGREEMENT

This agreement is formally known as a Stipulation of Facts and Settlement Agreement ("Settlement Agreement"). The parties to this Settlement Agreement are Louisville Gas and Electric Company ("LG&E") and Staff of the Kentucky Public Service Commission ("Commission Staff"). It is the intent and purpose of the parties hereto to express their agreement on a mutually satisfactory resolution of all of the issues in the proceeding.

It is understood by the parties that this Settlement Agreement is not binding upon the Public Service Commission ("Commission"). The Commission must independently approve and adopt this Settlement Agreement before this matter can be deemed concluded and removed from the Commission's docket. The parties have expended considerable efforts to reach a stipulation as to the facts of this matter, as well as in developing a proposal for settlement. LG&E and Commission Staff agree that this Settlement Agreement, viewed in its entirety, constitutes a reasonable resolution of all issues in this proceeding.

In addition, the adoption of this Settlement Agreement will eliminate the need for the Commission, Commission Staff, and LG&E to expend significant resources in litigating this proceeding and will eliminate the possibility of, and any need for, rehearing or appeals of the Commission's final Order.

FACTS

LG&E and the Commission Staff submit this stipulation of facts for the Commission's consideration in rendering a decision in this proceeding. Commission Staff developed and submitted to the Commission an Electric Utility Personal Injury Accident Report ("Report") on this matter signed and dated January 27, 2011. The Report describes an incident which occurred on November 9, 2010, in Middletown, Kentucky, in which James Willis, an employee of LG&E, was injured while cleaning the inside of a breaker cubicle. LG&E and Commission Staff agree that the Report fairly and accurately describes the events which occurred on the day of the November 9, 2010, incident.

According to the Report, on the day of the accident the victim, other LG&E Sub-Station Construction and Maintenance employees, and contract crews were working in a substation, after an underground primary electric cable failure caused a fire in the control building on November 7, 2010. The fire caused heavy smoke damage in the control building and caused the load on Transformer #1 to be transferred to other substations and this transformer was de-energized. Mr. Willis had been cleaning breaker cubicles inside the control building on November 8, 2010, while Transformer #1 was de-energized. Sometime after Mr. Willis left work on November 8, 2010, a contract crew completed the work to place Transformer #1 back into service and it became

energized. When Mr. Willis returned to work on the date of the incident, no job briefing was conducted to inform him that Transformer #1 was now energized, though he was told by the lead electrician on-site that the "DC current was on". Mr. Willis began cleaning the inside of a breaker cubicle and opened the shutters, which covered parts that were energized and created the shock and burn incident. The equipment that Mr. Willis made contact with was energized at the primary voltage level of approximately 7200 volts. Mr. Willis was wearing gloves appropriate to the general task of cleaning the cubicle but was not wearing personal protective equipment sufficient to protect him from the hazard presented when he opened the shutters as described above. Mr. Willis was transported to University Hospital and was treated for burns to his third and fourth fingers on his left hand and his right hip. He was released the following day.

Show Cause Order

By a Show Cause Order dated, March 29, 2011, the Commission initiated this proceeding to determine whether LG&E should be subject to the penalties prescribed in KRS 278.990 for seven probable violations of KRS 278.042, which requires an electric utility to construct and maintain its plant and facilities in accordance with the 2007 edition of the NESC. The seven alleged violations cited in the Commission's March 29, 2011, Order are as follows:

1. 2007 NESC Section 41, Rule 410—Supply and Communication systems—Rules for employees—General Requirements—Effective as of January 1, 2009, the employer shall ensure that an assessment is performed to determine potential exposure to an electric arc for employees who work on or near energized parts or equipment. If the assessment determines a potential employee exposure greater than 2cal/cm² exists (see Neal, Bingham, and Doughty [B59]), the employer shall require employees to wear clothing or a clothing system that has an effective arc rating not less than the anticipated level of arc energy. When exposed to an electric arc or flame, clothing made from the following materials shall not be worn: acetate, nylon, polyester, or polypropylene. The effective arc

rating of clothing or a clothing system to be worn at voltages 1000 V and above shall be determined using Tables 410-1 and 410-2 or performing an arc hazard analysis. When an arc hazard analysis is performed, it shall include a calculation of the estimated arc energy based on the available fault current, the duration of the arc (cycles), and the distance from the arc to the employee. (There are exceptions to this rule)

2. 2007 NESC Section 41, Rule 411.A.3—Supply and Communication systems—Rules for employers—Protective methods and devices—Methods—Employees shall be instructed as to the character of the equipment or lines and methods to be used before any work is undertaken thereon.
3. 2007 NESC Section 42, Rule 420.C.4—General Rules for Employees—Personal General Precautions—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.
4. 2007 NESC Section 42, Rule 420.C.5—General Rules for Employees—Personal General Precautions—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 431 (communication) or Rule 441 (supply), as applicable.
5. 2007 NESC Section 42, Rule 420.H—Personal General Precautions—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.
6. 2007 NESC Section 42, Rule 421.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 safety rules and operating procedures are observed by the employee under the direction of this individual.
7. 2007 NESC Section 44, Rule 441.1—Additional Rules for supply employees—Energized Conductors or Parts—Minimum Approach Distance to Live Parts—General— Employees shall not approach, or knowingly permit others to approach any exposed ungrounded part normally energized except as permitted by this rule. Minimum Approach Distance to live parts. Employees shall not approach or bring any conductive objects within the minimum approach distance listed in Table 441-1 or Table 441-4 to exposed parts unless one of the following is met: The line or part is de-energized and grounded per Rule 444D. 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 rubber sleeves, shall be considered effective insulation for the employee from the energized part being worked. The energized line or part is insulated from the employee and from any other line or part at different voltages.

The March 29, 2011 Order also cited six probable violations of Commission Regulation 807 KAR 5:006, Section 24(1) which requires each jurisdictional utility to adopt and execute a safety program, including the establishment of a safety manual with written guidelines for safe working practices and procedures to be followed by utility workers. The alleged violations arise under LG&E's Safety Manual. The alleged violations are as follows:

1. A.2.1: General Rules—Individual Responsibility—It is the responsibility of each employee to perform assigned duties to assure: a. Safety to himself or herself; b. Safety to fellow employees; c. Protect the public; d. Protection of company property.
2. A.3.1—General Rules—Supervisors' 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.
3. A.3.2—General Rules—Supervisors' Responsibility for Safety—A job briefing/tailgate discussion shall be held prior to starting each job. The job briefing shall include at least the following subjects: a. Hazards associated with the job; b. Work procedures involved; c. Special precautions; d. Energy source controls; e. Personal Protective Equipment requirements.
4. 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 sure that they are in safe operating condition.
5. F.1.18—Substations—Working in Substations—No employee may approach, or take any conductive object without an insulating handle, closer to exposed energized parts than the clearances set forth in table D-

1 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.

6. F.1.19—Substations—Working in Substations—Electric equipment, lines and circuits shall be considered energized until determined by testing to be de-energized and grounded.

On April 18, 2011, LG&E filed a response to the Commission's March 29, 2011, Order. In its response, LG&E requested an informal conference be held in this matter. Pursuant to that request, an informal conference was scheduled in this matter for May 16, 2011, at the Commission's Frankfort offices. Representatives of LG&E were in attendance, as were Commission Staff.

During the informal conference representatives of LG&E confirmed that they have taken proactive steps to enhance the safety program of their substation employees. LG&E required Mr. Willis to complete the safety performance training program, as well as requiring all employees of the Louisville substation group, including contractors, to complete a refresher training on switch gear, including all the different types of switch gear and the proper procedures when working with switch gear. LG&E has stated that the Lexington substation employees will also be completing this training as well as other departments throughout LG&E's service areas.

SETTLEMENT AGREEMENT

As a result of discussions held during the informal conference, LG&E and the Commission Staff submit the following settlement agreement for the Commission's consideration in rendering its decision in this proceeding:

1. LG&E agrees that the Commission Staff's Electric Utility Personal Injury Accident Report, Appendix A to the Commission's March 29, 2011, Order in this matter, accurately describes and sets forth the material facts and circumstances surrounding the November 9, 2010, incident.

2. LG&E agrees to pay a total civil penalty in the amount of FIFTEEN THOUSAND DOLLARS (\$15,000), within 30 days of the date of entry of the Order approving this Settlement Agreement, in full settlement of this proceeding. The maximum penalty for the violations alleged is thirty-two thousand five hundred dollars (\$32,500), the remaining amount of seventeen thousand five hundred dollars (\$17,500) is suspended on the condition that LG&E abide by the terms contained in this Settlement Agreement and provide all required documentation within the time allotted.

3. The scope of this proceeding is limited by the Commission's March 29, 2011, Show Cause Order on whether LG&E should be assessed penalties 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 civil penalty, nor any other agreement contained in this Settlement Agreement, shall be construed as an admission by LG&E of any liability in any legal proceeding or lawsuit arising out of the facts set forth in the Electric Utility Personal Injury Accident Report or the Electric Utility Inspection 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.

4. Within 30 days of the date of entry of the Order approving this Settlement Agreement, LG&E shall provide to the Commission documentation on the training given as a result of this incident, including the type of training, who attended, and how this training will be implemented into the training program on a regular basis.

5. LG&E currently performs safety audits of its substation crews. Within 30 days of the date of entry of the Order approving this Settlement Agreement, LG&E shall provide to the Commission copies of the safety audits performed on all LG&E Louisville substations for three months prior to the incident and 3 months following the incident. On a going forward basis these reports will be available to Commission Staff during inspections.

6. In the event that the Commission does not accept this Settlement Agreement in its entirety, LG&E 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 within this Settlement Agreement shall be binding upon the parties, used as an admission by LG&E of any liability in any legal proceeding, administrative proceeding or lawsuit arising out of the facts set forth

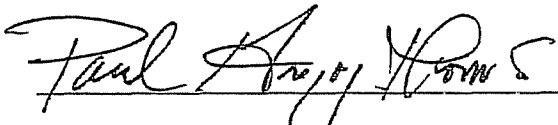
in the Accident Report and the Inspection Report or otherwise used as an admission by either party.

7. This Settlement Agreement is for use in Commission Case No. 2011-00097, and no party to this matter shall be bound by any part of this Settlement Agreement in any other proceeding, except that this Settlement Agreement may be used in any proceedings by the Commission to enforce the terms of this Settlement Agreement or to conduct a further investigation of LG&E's service. LG&E shall not be precluded or estopped from raising any issue, claim or defense therein by reason of the execution of this Settlement Agreement.

8. LG&E and Commission Staff agree that this Settlement Agreement is reasonable, is in the public interest, and should be adopted in its entirety by the Commission. If adopted by the Commission, LG&E agrees to waive its right to a hearing and will not file any petition for rehearing or seek judicial appeal.

LOUISVILLE GAS AND ELECTRIC COMPANY

By: (print name) Paul Gregory Thomas

By: (sign name) 

Title: VP Energy Delivery Distribution Operations

Date: 6/8/2011

STAFF OF THE KENTUCKY PUBLIC SERVICE COMMISSION

By: (print name) L. Allyson Honaker

By: (sign name) 

Title: Staff Attorney

Date: 6/14/11

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