COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2016-00264

ALLEGED FAILURE TO COMPLY WITH KRS 278.042

<u>ORDER</u>

By Order entered July 29, 2016, the Commission initiated this proceeding to determine whether Louisville Gas and Electric Company ("LG&E") should be subject to the penalties prescribed in KRS 278.990 for alleged violations of KRS 278.042, which requires the Commission to ensure that each electric utility constructs and maintains its plan and facilities in accordance with accepted engineering practices as set forth in the Commission's administrative regulations and orders, and the most recent edition of the National Electrical Safety Code ("NESC").

The violations giving rise to this case involve an incident occurring on March 20, 2014, during which an LG&E auxiliary operator, Ben Creech, was removing and reinstalling a 480-volt circuit breaker to restart a pump at the Trimble County Generating Station. Mr. Creech visually inspected the breaker open/closed indicator, which indicated the breaker was in the open position, and removed the circuit breaker without incident. However, the open/closed indicator was malfunctioning, and, although the indicator still displayed the breaker was in the open position, the breaker was actually in the closed position. Due to the malfunctioning indicator, Mr. Creech reinstalled the breaker in the closed position, resulting in an arc flash that inflicted first- and second-

degree burns to Mr. Creech's legs. Mr. Creech was treated and released from the hospital the same day.

On August 18, 2016, LG&E filed a response to the Commission's Order, admitting that the factual information depicting the incident in the Accident Investigation Staff Report¹ ("Staff Report") was accurate, but denying that adequate testing was not performed to determine existing conditions of the equipment being worked on, as the Staff Report concluded. LG&E also clarified that the contractor who performed an arc hazard analysis for LG&E concluded that the arc hazard protection level of 19 calories ("cal") was the maximum possible exposure, rather than the 25 cal arc rating for Category 3 protection level referenced in the Staff Report. LG&E offered affirmative defenses to certain violations regarding the determination of existing conditions prior to performing the job and job briefing. LG&E denied that it committed any willful violations of KRS 278.042, the NESC, or the LG&E Safety Manual.

At LG&E's request, an informal conference was conducted with Commission Staff in this matter on October 5, 2016. Post conference, at Commission Staff's request, LG&E filed into the record the following items: (1) a summary of the remedial actions it took as a result of the March 20, 2014 incident that is the subject of this case; (2) a summary of the root-cause failure analysis it conducted; and (3) a description of changes to LG&E procedures for removing and reinstalling a 480-volt circuit breakers.

Discussions in the course of the informal conference led to the filing for the Commission's consideration of a Stipulation of Facts and Settlement Agreement ("Stipulation"). The Stipulation, attached hereto as the Appendix, sets forth an agreed-

¹ Order, Appendix at 2–3 (Ky. PSC July 29, 2016).

upon summary of the facts and the remedial action by LG&E in full settlement of this proceeding. In determining whether the terms of the Stipulation are in the public interest and are reasonable, the Commission has taken into consideration the circumstances surrounding the alleged violation and the terms of the Stipulation. Based on the evidence of record and being otherwise sufficiently advised, the Commission finds that the Stipulation is in accordance with the law and does not violate any regulatory principle. The Stipulation 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 Stipulation is adopted and approved in its entirety as a complete resolution of all issues in this case.

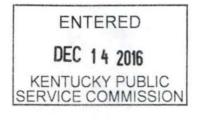
2. LG&E is assessed a civil penalty in the amount of \$2,500.

3. LG&E shall pay the amount of \$2,500 within 30 days of the date of this Order by cashier's check or money order made payable to the Kentucky State Treasurer, and to be mailed or delivered to the Public Service Commission, Office of General Counsel, 211 Sower Boulevard, P.O. Box 615, Frankfort, KY 40602.

4. Upon the payment of \$2,500 by LG&E, this case shall be closed and removed from the Commission's docket without further Order of the Commission.

-3-

By the Commission



ATTEST:

R. Matheur

Executive Director

Case No. 2016-00264

APPENDIX

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2016-00264 DATED DEC 14 2016

COMMONWEALTH OF KENTUCKY

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In the Matter of:

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2016-00264

ALLEGED FAILURE TO COMPLY WITH KRS 278.042

STIPULATION OF FACTS AND SETTLEMENT AGREEMENT

By Order entered July 29, 2016, the Commission initiated this proceeding to determine whether Louisville Gas and Electric Company ("LG&E") should be subject to the penalties prescribed in KRS 278.990 for alleged violations of KRS 278.042, which requires the Commission to ensure that each electric utility constructs and maintains its plan and facilities in accordance with accepted engineering practices as set forth in the Commission's administrative regulations and orders and the most recent edition of the National Electrical Safety Code ("NESC").

The violations giving rise to this case involves an incident occurring at the Trimble County Generating Station ("Trimble County") on March 20, 2014, during which LG&E employees Ben Creech, Auxiliary Operator, and Tom Bailey, Assistant Operator, were sent to remove and reinstall ("rack") a 480-volt circuit breaker to clear an alarm on the control panel that indicated a fly ash slurry pump would not start. Mr. Bailey installed a chain barrier to block the doorway leading to the area, and then moved around the corner to maintain the required safety distance while Mr. Creech racked the breaker. After visually inspecting the breaker's main contacts open/closed indicator

which displayed open, Mr. Creech removed the breaker without incident. With the breaker open/close indicator still displaying open, Mr. Creech attempted to reinstall the breaker, but the breaker failed, causing an arc flash that inflicted first- and second-degree burns to his legs. Mr. Creech was transported to University Hospital in Louisville, Kentucky, where he was treated and released from the hospital the same day.

On August 18, 2016, LG&E filed a response to the Commission's Order, admitting that the factual information contained in the "Accident Description" section of the Accident Investigation Staff Report¹ ("Staff Report") was accurate, but denied the conclusion that adequate testing was not performed to determine existing conditions of the equipment being worked on. LG&E also clarified that the contractor who performed an arc hazard analysis for LG&E concluded that the arc hazard protection level of 19 calories ("cal") was the maximum possible exposure, rather than the 25 cal arc rating for Category 3 protection level referenced in the Staff Report. LG&E offered affirmative defenses to certain violations regarding the determination of existing conditions prior to performing the job and job briefing. LG&E denied that it committed any willful violations of KRS 278.042, the NESC, or the LG&E Safety Manual.

At LG&E's request, an informal conference was conducted with Commission Staff in this matter on October 5, 2016. Post conference, at Commission Staff's request, LG&E filed into the record a written summary of the remedial actions it took as a result of the March 20, 2014 incident that is the subject of this case.

¹ Order, Appendix p. 2-3 (Ky. PSC July 29, 2016).

As a result of an agreement in principle reached during the informal conference, LG&E and Commission Staff submit the following Stipulation of Facts and Settlement Agreement ("Stipulation") for the Commission's consideration in rendering its decision in this proceeding.

- LG&E is a Kentucky corporation and part of PPL Corporation, engages in the distribution of gas and electricity to the public for compensation, and is a utility subject to Commission jurisdiction.
- 2. On March 20, 2014, an incident took place during which an LG&E employee, Mr. Creech, was sent to rack a 480-volt circuit breaker to clear an alarm on the control panel that indicated a fly ash slurry pump would not start at the Trimble County Generating Station. Mr. Creech put on personal protective equipment ("PPE") consisting of fire-resistant pants with an arc rating of 12.4 cal, a fire-resistant shirt with an arc rating of 8.7 cal, class 2 rubber gloves, and a hood with face shield with an arc rating of 100 cal. After visually inspecting the breaker's main contacts open/closed indicator which displayed open, Mr. Creech removed the breaker without incident. With the breaker open/close indicator still displaying open, Mr. Creech attempted to reinstall the breaker, but the breaker failed, causing an arc flash that inflicted first- and second-degree burns to Mr. Creech's legs. Mr. Creech was treated and released from the hospital the same day.

- As a result of the March 20, 2014 incident, LG&E has undertaken six remediation actions; three were fleet-wide remediation actions and three were site-specific for Trimble County.
 - a. The three fleet-wide remediation actions are as follows. First, LG&E immediately implemented a new requirement that all generation employees performing the type of task Mr. Creech was performing wear Category 4 PPE from head to toe. Second, LG&E performed an extensive, page-by-page review of its Electrical Safe Work Practices program to update the PPE required for this specific task and to determine if any other sections needed to be updated. Third, the Company retrained all Generation employees on the Electrical Safe Work Practices program.
 - b. With respect to the Trimble County plant specifically, first, LG&E conducted a very thorough Root Cause Failure Analysis, which included both reviewing the switching procedures Mr. Creech utilized and having the failed breaker inspected by an outside third party (Midwest Switchgear). Second, LG&E inspected all other 480V breakers on the plant site, which are of the same type as the one that failed, for similar problems with the mechanical interlocks. No other problems were found in any of the forty-six other breakers of this type. Third, LG&E initiated additional procedures/instructions for the process of racking these 480V breakers in or out and retrained the employees on those procedures. The additional procedures included either

installing switches to take away the control power from the breakers, or removing the control fuses located on the front panel of the breaker cabinet during the racking out process and not re-installing them until after the breaker is completely racked back in. This ensures that the control power remains off and prevents the springs from charging until after the breaker is completely racked in and connected to the 480V buss.

- 4. As a result of the March 20, 2014 incident, LG&E agrees to pay a civil penalty, pursuant to KRS 278.990, in the amount of \$2,500. The Commission's acceptance of this Stipulation will satisfy and resolve any and all claims against LG&E for any violation of KRS Chapter 278 or for any penalty under KRS 278.990 arising out of the March 20, 2014 incident.
- 5. This Stipulation is not an admission by LG&E that it willfully violated KRS 278.042 or any other provision of KRS Chapter 278. The Commission's acceptance of this Stipulation shall not be construed as a finding that LG&E willfully violated any statute.
- 6. In the event the Commission does not accept this Stipulation in its entirety, LG&E 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 used as an admission by LG&E of any liability in any legal proceeding or lawsuit arising out of the facts set forth in this Stipulation.
- This Stipulation is for use in Case No. 2016-00264. None of its provisions establishes any precedent for any other case. Neither LG&E nor Commission

Staff shall be bound by any part of this Stipulation in any other proceeding, except that it may be used in any proceeding by the Commission to investigate or enforce the terms of this Stipulation. LG&E shall not be precluded or estopped from raising any issue, claim, or defense, therein by reason of the execution of this Stipulation.

- If the Commission accepts and adopts this Stipulation, LG&E's failure to comply with Paragraph 4 of this Stipulation will constitute failure to comply with a Commission Order and may be subject to civil penalties under KRS 278.990(1) for its failure.
- 9. LG&E 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 adopted by the Commission, LG&E waives its right to a hearing in this matter and will not petition for rehearing or bring an action for review in Franklin Circuit Court.

LOUISVILLE GAS AND ELECTRIC COMPANY 65NERATIO Title Date_11/9/16 STAFF OF THE PUBLIC SERVICE COMMISSION use nce By Title 10 Date

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