## BEFORE THE STATE CORPORATION COMMISSION OF THE STATE OF KANSAS

In the Matter of the Complaint Against Kansas	)	
City Power & Light Company by Jamie Littich.	)	Docket No. 16-KCPE-195-COM
	)	

# KANSAS CITY POWER & LIGHT COMPANY'S REPLY TO COMPLAINANT'S MOTION TO RESPOND OUT OF TIME

Kansas City Power & Light Company ("KCP&L" or "Company"), by and through its counsel, hereby submits its reply ("Reply") to the *Complainant's Motion to Respond out of Time* ("Complainant's Motion") filed by Ms. Jamie Littich ("Complainant") on July 6, 2017.

In this reply, KCP&L does not respond to each and every allegation contained in Complainant's Motion but rather focuses its response on the most inaccurate assertions raised by Complainant. KCP&L's decision to respond only to certain allegations contained in Complainant's Motion should not be construed as agreement with or acquiescence to any of Complainant's allegations.

#### I. PROCEDURAL AND FACTUAL BACKGROUND

1. For the sake of brevity, KCP&L will not recite the entire procedural and factual background, except to the extent a clarification is necessary. Rather, this Reply will focus primarily on Complainant's Motion.

#### II. REPLY TO COMPLAINANT'S MOTION

- A. Complainant's assertion that Part I of the NESC applies to overhead facilities, such as those in question in this docket, is erroneous.
- 2. Complainant argues that KCP&L's assertion that the drafters of the NESC did not intend Part 1 to apply overhead facilities is erroneous. Complainant's position appears to be

\_

<sup>&</sup>lt;sup>1</sup> Complainant's Motion, ¶ 7.

based on Ms. Littich's interpretation of the NESC, which is contrary to previous interpretations provided by the NESC Interpretations Subcommittee. As KCP&L noted in its reply to Staff's second report and recommendation ("KCP&L's Reply to Staff's 2<sup>nd</sup> R&R")<sup>2</sup>, the NESC Interpretations Subcommittee spoke to the application of Part 1 of the NESC in the "NESC Committee ASC C2 Seventh Interim Collection of the NESC Interpretations 1996 1997" on page twelve (12) of that publication.<sup>3</sup>

- 3. Specifically, page twelve (12) states, "All of the rules in Part 1, which includes Rules 124A and Table 124-1, apply only to electric supply stations, as stated in Rule 101-Scope (for Part 1)" (See Attachment F to KCP&L's Reply to Staff's 2<sup>nd</sup> R&R). Additionally, another NESC Interpretations Committee document, Sixth Interim Collection of the National Electric Safety Code Interpretations 1994-1995, speaks to this topic as well. On page ten (10) of this document the committee states, "NESC Part 1 applies and is limited to electric supply conductors and equipment, along with the associated structural arrangements, *in electric supply stations* (see Rule 101 and definition of "electric supply stations") ...Section 16, including Rule 161A, applies only to electric supply conductors *within the perimeter of an electric supply station*". (*Emphasis added*)
- 4. Mr. Troy Little, a member of the NESC Committee, stated that, "KCP&L is correct in its assertion that Part 1 does not apply to the overhead facilities involved in the Littich matter. Rather, NESC's Part 1 is limited to "Installation and Maintenance of Electric Supply Stations and Equipment," just as the title states." Although Complainant attempts to discredit Mr. Little as an expert, he is substantially more qualified to provide guidance on the interpretation of the NESC, a national code, than anyone else associated with this proceeding.

- 2 -

<sup>2</sup> Filed April 17, 2017.

### B. Complainant's assertion that Rule 153 is applicable is flawed.

5. Complainant argues that because Section 2, Definitions and Special Terms of the 1997 NESC does not define "Power Transformer" or "Distribution Transformer" that the rule, which is entitled "Short Circuit Protection of Power Transformers" applies with regard to purpose, not location. This assertion is erroneous because Rule 153 is contained in Part 1 of the NESC which only pertains to transformers and other equipment within the perimeter of an electric supply station (see item A above). The transformer in this proceeding is not contained within an electric supply station; thus, not subject to Rule 153.

### C. Complainant's discussion on Rule 96 is inaccurate.

6. Rule 96 discusses ground resistance requirements and is contained in Section 9, Grounding Methods, of the NESC. The installation involved in this situation meets all applicable requirements of Section 9 Grounding Methods of the NESC. The secondary circuit in this situation is running under a higher-voltage circuit; thus, the commentary by the authors of the NESC handbook that the secondary circuit is protected by the transformer fuse is not applicable.

#### D. Complainant's assertion that Rule 171 is applicable is flawed.

7. Complainant argues that Rule 171 pertaining to application of circuit breakers, reclosers, switches and fuses is applicable to this situation. Once again, Rule 171 is contained in Part 1 of the NESC, which only pertains to equipment within the perimeter of an electric supply station. This Rule is not applicable to overhead distribution facilities (see item A above).

<sup>&</sup>lt;sup>3</sup> KCP&L Reply to Staff's 2<sup>nd</sup> R&R, ¶ 6.

#### E. Rule 161A

8. Complainant also cites Rule 161A pertaining to overcurrent protection of conductors as being applicable to this situation. Once again, Rule 161A is contained in Part 1 of the NESC, which only pertains to equipment within the perimeter of an electric supply station. This Rule is not applicable to overhead distribution facilities (see item A above), as was noted by KCP&L in its Reply to Staff's 2<sup>nd</sup> R&R.<sup>4</sup> It should be reiterated that there has already been an NESC Subcommittee interpretation pertaining to the use of Rule 161A for overhead distribution facilities. It is contained in the NESC Interpretations Committee document, Sixth Interim Collection of the National Electric Safety Code Interpretations 1994-1995. To ensure no text is omitted, the entirety of the question to the committee as well as their response is as follows, and is attached to this response as **Attachment J**:

Section 16. Conductors

Rule 161A Scope of overcurrent protection

REQUEST (15 Dec. 1994) IR 494

Rule 161A currently reads:

"161. Electrical Protection

A. Overcurrent protection is required

Conductors and insulation shall be protected against excessive heating by the design of the system and by overcurrent, alarm, indication, or trip devices."

I do not understand the intended scope of the words "conductors and insulation." Does Rule 161A apply only to utility-owned conductors within the perimeter of an electric supply station, as might be inferred from Rule 161A's inclusion in Part 1, which is entitled "Rules for the Installation and Maintenance of Electric Supply Stations and Equipment"; or does it apply generally, as implied by the title of Section 16, "Conductors"?

A related question is whether Rule 161A is intended to require overcurrent protection on supply conductors at locations outside the perimeter of an electric supply station, such as where a short branch street

<sup>&</sup>lt;sup>4</sup> KCP&L Reply to Staff's 2<sup>nd</sup> R&R, ¶ 5.

lighting circuit, say, AWG No. 10 conductors, is tapped off a continuing main line of, say, AWG No. 3/0 conductors" (Any overcurrent protection appropriate for the protection of the AWG No. 3/0 conductor is unlikely to be very useful in protecting the AWG No. 10 branch circuit.)

#### INTERPRETATION (27 Mar. 1995)

NESC Part 1 applies and is limited to electric supply conductors and equipment, along with the associated structural arrangements, in electric supply stations (see Rule 101 and definition of "electric supply station"). Note that such supply stations do not have to be utility-owned (see Rule 011). Section 16, including Rule 161A, applies only to electric supply conductors within the perimeter of an electric supply station.

Consequently, Rule 161A does not apply outside the perimeter of an electric supply station.

This interpretation by the NESC Subcommittee clearly states that Rule 161A, and the entirety of Part 1 of the NESC, does not apply outside the perimeter of an electric supply station.

#### F. Rule 218 Tree Trimming

9. Complainant states that "nowhere in the NESC does it intend for a utility to oversize circuit protection devices to accommodate vegetation." KCP&L does not oversize circuit protection devices; however, KCP&L does have a robust tree trimming program, and provides yearly reports to the KCC pertaining to the progress of its vegetation management efforts. A discussion on vegetation management was contained in KCP&L's *Answer and Motion to Dismiss Complaint* that was filed in this matter on December 11, 2015. The exposure to vegetation in the complainant's geographic vicinity is consistent with the nature of tree growth in established neighborhoods with mature trees. Large trees which overhang distribution facilities, create increased risk of vegetation related damage. Even with further trimming clearances, taller trees and longer branches can still detach and contact distribution facilities. There are few additional vegetation management actions on large overhanging trees that are possible, short of complete tree removal – which is generally not practical given community and property owner

reticence. KCP&L's vegetation management programs are consistent with industry practices, and are supported and managed by qualified experts in arboriculture and horticulture.

## G. Mr. Troy Little

- 10. Complainant argues that Mr. Little's affidavit attached to KCP&L's Reply to Staff's 2<sup>nd</sup> R&R is a potential violation of the Board of Technical Professionals.<sup>6</sup> Mr. Little is a nationally renowned electrical engineering and NESC expert who has practiced over 30 years, is licensed in 7 states, and travels extensively doing consultation work for utilities across the country. The NESC is a national code and KCP&L turned to a national expert for a second opinion when accused of NESC violations. Mr. Little's qualifications are impeccable. During his work with KCP&L, Mr. Little never held himself out to be a Kansas-licensed engineer and there is no requirement that he be licensed in Kansas to undertake the work he has done.
- 11. Moreover, the purpose of Mr. Little's affidavit in this matter was to provide Commission Staff with NESC interpretation and industry perspective from someone other than KCP&L's personnel. Complainant's allegation that KCP&L does not employ its own qualified engineers is unfounded. In fact, KCP&L employs 59 degreed electrical engineers in its delivery division alone.
- 12. It is not lost on KCP&L that Complainant has made technical electrical engineering arguments in this matter but has yet to offer any evidence of qualification to do so.

#### H. Cost of Implementing 10A fuses

13. Complainant implies that KCP&L's position on Staff's recommendation to require KCP&L to implement the use of 10 amp fuses is driven by cost considerations. Complainant's discussion on this point ignores the fact that KCP&L has already addressed this

<sup>&</sup>lt;sup>5</sup> Complainant's Motion, ¶ 24.

issue in its response to Staff's first report and recommendation ("Staff's 1st R&R"). As noted in that response, KCP&L noted that the Commission need not require KCP&L to adopt the use of 10 amp fuses to protect 50 kVA distribution transformers, because as part of its ongoing Standards Engineering activities, KCP&L began reviewing distribution fusing standards in 2013 with the goal of standardizing fusing tables across the entire system. KCP&L explained that the first standards reviewed were capacitor and transformer fuses, and that the objective of the review was to develop consistent equipment fusing tables across all KCP&L jurisdictions.<sup>8</sup> Prior to this review there were two capacitor fusing tables (KCP&L Legacy and GMO) and three transformer fusing tables (KCP&L Legacy Metro, KCP&L Legacy Districts, and GMO) in the construction standards. The fusing in all these tables provided the necessary system protection; however, in order to consolidate operational practices across all the jurisdictions the decision was made to move to one table for capacitors and one table for distribution transformers. 10 The capacitor fusing table was completed first and this change has been fully implemented.<sup>11</sup> The transformer fusing table is more complicated and has recently been completed, and KCP&L is currently in the process of stocking appropriate levels of various size fuses to accommodate the new transformer fusing table, which does include the use of 10 amp fuses to protect 50 kVA distribution transformers.<sup>12</sup> These changes are being implemented to consolidate operational practices across all KCP&L jurisdictions, and not due to any known or perceived deficiency with the previous fusing standards. 13 For that reason, the new fusing standards will be utilized for

6 0

<sup>&</sup>lt;sup>6</sup> Complainant's Motion, ¶ 25.

<sup>&</sup>lt;sup>7</sup> KCP&L Response to Staff's 1<sup>st</sup> R&R, Staff ¶ 22, filed Jan. 30, 2017.

<sup>8</sup> Id

<sup>&</sup>lt;sup>9</sup> Id.

<sup>&</sup>lt;sup>10</sup> Id.

<sup>&</sup>lt;sup>11</sup> Id.

<sup>&</sup>lt;sup>12</sup> Id.

<sup>13</sup> Id

new installations and replacement due to normal operations. <sup>14</sup> KCP&L stands by its position of prioritizing safety, while prudently managing replacement costs.

## I. Considerations for NFRIS Event Analysis

14. Complainant implies that KCP&L does not have a method for identifying locations where maintenance is required. They also appear to assert, that there are "numerous" events that would indicate "maintenance was required even though major damages were not observed" according to NFIRS records. The statement that "this type of event will be very numerous in the NFIRS records" is speculation and unsubstantiated. Through its existing programs, KCP&L both inspects equipment and monitors system operation based on its collective organizational experience and judgement, as well as its knowledge of industry best practices. In addition, KCP&L's Engineering team analyzes the performance of the KCP&L distribution system and recommends inspections, repairs, and reconstruction as deemed necessary. As noted in KCP&L's Response to Staff's 1<sup>st</sup> R&R, KCP&L has in place a variety of programs concerning system monitoring and safety. These programs were developed in accordance with the appropriate and applicable provisions of the NESC.

#### IV. <u>CONCLUSION</u>

15. In conclusion, the analysis in Complainant's Motion is based on erroneous arguments regarding application of the NESC and does not support a finding that KCP&L is in violation of the NESC or any Commission statute, rule, or regulation. KCP&L stands by its previous assertions that it is not in violation of the NESC. KCP&L continues to work with Staff to address concerns raised with regard to this Complaint.

 $<sup>^{14}</sup>$  Id

<sup>&</sup>lt;sup>15</sup> KCP&L Response to Staff's 1<sup>st</sup> R&R, ¶18, filed Jan. 30, 2017.

WHEREFORE, for the reasons set forth above, KCP&L respectfully requests the Commission reject Complainant and Staff's recommendations and instead dismiss the Complaint, with prejudice, and for other relief as the Commission deems just and reasonable.

Respectfully submitted,

## |s| Roger W. Steiner

Robert J. Hack (KS #12826)
Telephone: (816) 556-2791
E-mail: rob.hack@kcpl.com
Roger W. Steiner (KS #26159)
Telephone: (816) 556-2314
E-mail: roger.steiner@kcpl.com
Kansas City Power & Light Company

One Kansas City Place

1200 Main Street – 19<sup>th</sup> Floor Kansas City, Missouri 64105 Facsimile: (816) 556-2110

## |s| Terri Pemberton

Glenda Cafer (KS #13342) Telephone: (785) 271-9991 Terri Pemberton (KS #23297) Telephone: (785) 232-2123 Cafer Pemberton LLC 3321 SW 6<sup>th</sup> Avenue Topeka, Kansas 66606 Facsimile: (785) 233-3040

E-mail: <a href="mailto:glenda@caferlaw.com">glenda@caferlaw.com</a>
E-mail: <a href="mailto:terri@caferlaw.com">terri@caferlaw.com</a>

COUNSEL FOR KANSAS CITY POWER & LIGHT COMPANY

#### **CERTIFICATE OF SERVICE**

I, the undersigned, hereby certify that a true and correct copy of the above was electronically served, hand-delivered or mailed, postage prepaid, this 8<sup>th</sup> day of August 2017 to:

Brian G. Fedotin, Deputy General Counsel Kansas Corporation Commission 1500 SW Arrowhead Road Topeka, KS 66604-4027 b.fedotin@kcc.ks.gov

Michael Neeley, Litigation Counsel Kansas Corporation Commission 1500 SW Arrowhead Road Topeka, KS 66604-4027 m.neeley@kcc.ks.gov

Jamie Kathleen Littich 5748 Walmer Street Mission, KS 66202 jamiekw73@gmail.com

Lois J. Liechti Kansas City Power & Light Company 1200 Main Street, 19<sup>th</sup> Floor Kansas City, MO 64105 lois.liechti@kcpl.com

|s| Roger W. Steiner

Roger W. Steiner

Counsel for Kansas City Power & Light Company

## VERIFICATION

STATE OF MISSOURI	
COUNTY OF JACKSON	) ss. )
Engineering of Kansas City I	ing duly sworn, on oath state that I am Manager Standards – T&D Power & Light Company, that I have read the foregoing Response and that the facts set forth therein are true and correct to the best of my
	KANSAS CITY POWER & LIGHT COMPANY
	By: Craig Parmeley
The foregoing was sul	oscribed and sworn to before me this $8^{1h}$ day of August, 2017.
	Notary Public
My Commission Expires:	
4/26/2021	ANTHONY R WESTENKIRCHNER Notary Public, Notary Seal State of Missouri Platte County Commission # 17279952 My Commission Expires April 26, 2021

161A 161A

## Section 16. Conductors

Rule 161A

Scope of overcurrent protection

#### **REQUEST** (15 Dec. 1994)

IR 494

Rule 161A currently reads:

"161. Electrical Protection

A. Overcurrent protection required

Conductors and insulation shall be protected against excessive heating by the design of the system and by overcurrent, alarm, indication, or trip devices."

I do not understand the intended scope of the words "conductors and insulation." Does Rule 161A apply only to utility-owned conductors within the perimeter of an electric supply station, as might be inferred from Rule 161A's inclusion in Part 1, which is entitled "Rules for the Installation and Maintenance of Electric Supply Stations and Equipment"; or does it apply generally, as implied by the title of Section 16, "Conductors"?

A related question is whether Rule 161A is intended to require overcurrent protection on supply conductors at locations outside the perimeter of an electric supply station, such as where a short branch street lighting circuit of, say, AWG No. 10 conductors, is tapped off a continuing main line of, say, AWG No. 3/0 conductors? (Any overcurrent protection appropriate for the protection of the AWG No. 3/0 conductor is unlikely to be very useful in protecting the AWG No. 10 branch circuit.)

#### INTERPRETATION (27 Mar. 1995)

NESC Part 1 applies and is limited to electric supply conductors and equipment, along with the associated structural arrangements, in electric supply stations (see Rule 101 and definition of "electric supply station"). Note that such supply stations do not have to be utility-owned (see Rule 011). Section 16, including Rule 161A,

161A 161A

applies only to electric supply conductors within the perimeter of an electric supply station.

Consequently, Rule 161A does not apply outside the perimeter of an electric supply station.