

RECEIVED

MAY 02 2025

PUBLIC SERVICE
COMMISSION

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

Larry and Debra Peterman)	
)	
Complainants)	
v.)	
)	Case No. 2025-00027
Kentucky Power Company)	
)	
Defendant)	

**Amended Verified Response of Kentucky Power Company to the Commission's
February 12, 2025 Order and Motion to Dismiss**

Kentucky Power Company ("Kentucky Power") files its amended response to the Formal Complaint of Larry and Debra Peterman and respectfully moves the Public Service Commission of Kentucky ("Commission") to dismiss the Petermans' Complaint on the grounds that, after thorough inspection, Kentucky Power determined that the issues complained of in the Petermans' Complaint do not result from Kentucky Power's facilities and therefore cannot be remedied by Kentucky Power. Kentucky Power states as follows in support of its Amended Response and Motion to Dismiss:

RESPONSE TO FORMAL COMPLAINT

The September 3, 2024 Visit:

Kentucky Power was contacted by Mr. Peterman who reported experiencing a tingling sensation when entering the in-ground pool¹ located at his residence in Grayson, Kentucky, with voltage readings fluctuating around two volts, depending on the day. On September 3, 2024,

¹ Kentucky Power understands that the in-ground pool was installed after the residence was built and after electric service was run to the residence.

Kentucky Power representatives performed a thorough investigation of the issue at the Petermans' residence. Kentucky Power recorded ground resistance measurements at the transformer pole (82 ohms) and the meter base grounding rod (90 ohms), and also measured the voltage at the grounding rod behind the pool pump (0.4 volts) and from the grounding rod behind the pool pump to the pool water (0.6 volts). Kentucky Power took various voltage measurements in the pool as well and recorded 0.4 volts at the pool slide, 0.6 volts at the pool ladder, and 1.1 volts in the middle of the pool. Finally, Kentucky Power recorded 1.1 volts at the cable service splicer that is attached to the house in the center of the pool area. Kentucky Power performed each of the voltage measurements with a low impedance multimeter that is calibrated and maintained in a manner consistent with Commission regulations. The low impedance multimeter removes "ghost voltage."² At no point during the investigation on September 3, 2024 did Kentucky Power record voltage readings in or around the pool near the two volts reported by Mr. Peterman.

Kentucky Power then performed, as part of its investigation, some isolation testing to try and determine where the stray voltage recorded in and around the pool originated from. After disconnecting the two "hot legs" and the neutral wire leading to the residence at Kentucky Power's pole (the Kentucky Power facilities), Kentucky Power again took voltage readings in the

² Ghost voltages occur from having energized circuits and non-energized wiring located in close proximity to each other, such as in the same conduit or raceway. This condition forms a capacitor and allows capacitive coupling between the energized wiring and the adjacent unused wiring. Ghost voltage is not related to power system faults, and is generally not considered hazardous.

When placing multimeter leads between the open circuit and the neutral conductor, it effectively completes the circuit through the input of the multimeter. The capacitance between the connected, hot conductor and the floating conductor forms a voltage divider in conjunction with the multimeter input impedance. The multimeter then measures and displays the resulting voltage value.

Most digital multimeters available today have an input impedance that is high enough to show the capacitively coupled voltage, giving a false impression of a live conductor. The meter is actually measuring voltage coupled into the disconnected conductor. However, these voltages, at times, can be 80-85% of what the "hard" voltage should be. If not recognized as a ghost voltage this could affect the troubleshooting of circuit problems. Low impedance multimeters recognize and remove this ghost voltage from readings.

pool and again recorded 0.4 volts at the pool slide, 0.6 volts at the pool ladder, and 1.1 volts in the middle of the pool. Thus, even with disconnection of Kentucky Power's facilities, the voltage readings in the pool remained the same.

Kentucky Power continued the isolation testing and, while the Kentucky Power facilities remained disconnected, also disconnected the cable service running from the secondary pole to the residence with Mr. Peterman's permission. After disconnecting the cable service, Kentucky Power again took voltage readings in the pool and recorded 0.0 volts at the pool slide, 0.0 volts at the pool ladder, and 0.1 volts in the middle of the pool. Thus, after the cable service was disconnected the voltage readings in the pool went to zero or very near zero.

The isolation testing performed by Kentucky Power confirmed that the voltage in the pool was not originating from Kentucky Power facilities. Rather, Kentucky Power believes the voltage to be originating from the cable service. Kentucky Power advised Mr. Peterman of its investigation findings and stated that the identified causes of the voltage in the pool likely were that the cable service ground was not connected properly by the cable service provider at the top of the secondary pole and/or that the in-ground pool may not have been bonded properly at installation, which, if installed properly, would have prevented stray voltage from entering the pool.

Kentucky Power recommended that the Petermans schedule a visit from their cable service provider to address the identified cable service grounding issue. Mr. Peterman indicated that he had scheduled a visit from the cable provider to take place on September 12, 2024. Contemporaneously with the site visit, Kentucky Power generated an "after-action report" documenting the visit to the Peterman residence and the investigation findings. A copy of the after-action report is attached hereto as **EXHIBIT 1**. Kentucky Power indicated it would follow up

with the Petermans to ensure the issue was resolved and would continue monitoring the situation to ensure safety and customer satisfaction.

The September 12, 2024 Visit:

After Kentucky Power departed from the September 3, 2024 visit to the Peterman residence, Mr. Peterson again reported stray voltage in the in-ground pool and provided Kentucky Power with a photograph that purported to show his multi-meter reading 2.19 volts at the pool. Kentucky Power again visited the Peterman residence on September 12, 2024 to perform additional inspections at Mr. Peterson's request, as detailed in the after-action report filed as Exhibit 1.

Kentucky Power performed additional ground wire assessment and circuit breaker panel testing. Kentucky Power again performed voltage testing in and around the pool. Again, Kentucky Power was unable to locate any sources of voltage anywhere near the 2.19 volts reported by Mr. Peterman. Kentucky Power was unable to find any evidence that differed from that found in its original investigation on September 3, 2024, that the voltage in the pool was not resulting from Kentucky Power facilities and instead likely was resulting from the customer's cable service. Kentucky Power again recommended that the customer monitor and report any changes and indicated it would keep communication open with the Petermans for any further assistance required.

The September 27, 2024 Neutral Connection Testing:

Mr. Peterman subsequently reported a neutral connection issue to Kentucky Power. Kentucky Power then installed on September 23, 2024, a voltage recorder at the Peterman residence to investigate the reported issue. Unfortunately, the recorder failed during the monitoring period. A new voltage recorder was installed and read on September 27, 2024, and

the data collected indicated that the power quality to the home was satisfactory, with no indications of a neutral issue.

The November 6, 2024 Visit:

Despite the results of the neutral connection testing performed by Kentucky Power, Mr. Peterman reported to Kentucky Power on November 5, 2024 that he identified Kentucky Power facilities as the cause of the voltage in the pool. Mr. Peterman relayed to Kentucky Power that the disconnection of the neutral wire from the meter base resulted in the voltage in the pool dropping to zero. Kentucky Power explained that such a disconnection could not cause a total voltage drop. Kentucky Power again visited the Peterman residence on November 6, 2024 to perform additional investigation and testing.

Kentucky Power again performed a thorough investigation around the property, including additional neutral testing and voltage testing in the pool. Kentucky Power recorded a reading of 0.6 volts from the pool to the cable service connection to the residence. Kentucky Power also then performed similar isolation testing as the first visit on September 3, 2024 by disconnecting the two “hot legs” and the neutral wire leading to the residence at Kentucky Power’s pole (the Kentucky Power facilities). Kentucky Power tested the voltage from the pool water to the cable service splitter and recorded 0.8 volts with the low impedance multimeter. Kentucky Power again did not identify any of its facilities as the cause of the voltage in the pool. Upon this investigation and testing, Mr. Peterman agreed with Kentucky Power representatives that the voltage was not originating from Kentucky Power facilities.

Kentucky Power did not perform any additional visits to the Peterman residence or any additional testing after the November 6, 2024 visit, as it was understood between Mr. Peterman and Kentucky Power that the issue was not caused by Kentucky Power.

Kentucky Power denies all claims in the Petermans' formal complaint that are inconsistent with the facts as detailed and verified herein.

MOTION TO DISMISS

Kentucky Power respectfully requests that the Commission dismiss the formal complaint filed by the Petermans on the grounds that the stray voltage complained of does not result from any Kentucky Power facilities, as evidenced by the comprehensive testing performed by Kentucky Power detailed in Exhibit 1. Kentucky Power visited the Peterman residence on several occasions to address the Petermans' reported issues. Kentucky Power performed extensive and thorough testing with professional instruments that are calibrated and maintained in accordance with Commission regulations. Kentucky Power was never able to record or verify the voltage levels reported by the customer and instead recorded much lower voltage levels in the pool. Kentucky Power found through isolation testing that the stray voltage cannot be resulting from any Kentucky Power facilities. Rather, the stray voltage appears to be resulting from the cable service line. Additionally, upon information and belief, the Petermans' in-ground pool was installed after the residence was originally constructed and the electric service was run to the house. Upon information and belief, the pool was not properly bonded, which would have insulated the pool water from the stray electric voltage complained of. Therefore, regardless of where the voltage results from, if the pool had been properly bonded and installed, the voltage would not be present in the pool.

Kentucky Power takes all customer complaints seriously and has made concerted efforts to address the issues identified by the Petermans. Because the stray voltage is not and cannot be resulting from Kentucky Power facilities, Kentucky Power, as a matter of fact, cannot cure the issues complained of in the Peterman's formal complaint.

WHEREFORE, for the reasons stated herein, Kentucky Power respectfully requests that the Commission dismiss with prejudice the formal complaint against it filed by the Petermans.

Respectfully submitted,



Katie M. Glass
STITES & HARBISON PLLC
421 West Main Street
P. O. Box 634
Frankfort, Kentucky 40602-0634
Telephone: (502) 223-3477
Fax: (502) 560-5377
kglass@stites.com

Kenneth J. Gish, Jr.
Harlee P. Havens
STITES & HARBISON PLLC
250 West Main Street, Suite 2300
Lexington, Kentucky 40507-1758
Telephone: (859) 226-2300
Fax: (859) 253-9144
kgish@stites.com
hhavens@stites.com

COUNSEL FOR KENTUCKY POWER
COMPANY

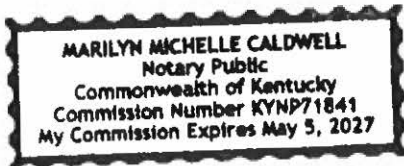
VERIFICATION

I, Craig A. Bowe, Engineer for Kentucky Power Company, after being duly sworn, state that the facts contained in this Response and Motion to Dismiss are true and accurate to the best of my knowledge.


Craig A. Bowe

COMMONWEALTH OF KENTUCKY)
)
COUNTY OF BOYD)

Subscribed and sworn to before me by Craig A. Bowe on this the 2 day of
May, 2025.




Notary Public State at Large

My Commission Expires: May 5, 2027
KYNP71841