BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

Stella Lucy,)
	Complainant,)
)
VS.)
)
Union Electric Company, d/b/a)
Ameren Missouri,)
	Respondent.)

Case No: EC-2018-0376

AMEREN MISSOURI'S POST-HEARING BRIEF

COMES NOW Union Electric Company d/b/a Ameren Missouri (the "Company") and respectfully submits its post-hearing brief.

I. Introduction

"Complaint may be made by ... any ... person, by petition or complaint in writing, setting forth any act or thing done or omitted to be done by any ... public utility ... in violation ... of any provision of law ... [or] of any rule or order or decision of the commission ...[.]"¹ A complainant has the burden of proving that the Company violated a statute, rule, order or Commission-approved tariff.² The complainant must prove the violation by a preponderance of the evidence—that it is more likely than not.³

Ms. Stella Lucy ("Complainant") initiated this proceeding by filing a formal complaint against the Company (the "*Complaint*").⁴ The *Complaint* alleges that Complainant suffered property damage when the Company was performing work on October 4, 2017 to extend 3-phase electric service to her next door neighbor, the Company caused an overvoltage of 270 volts of

¹ §386.390.1 RSMo (2018), revisor.mo.gov/main/OneSection.aspx?section=386.390&bid=35102&hl=.

² State ex rel. GS Technologies Operating Co., Inc. v. Pub. Serv. Comm'n of State of Mo., 116 S.W.3d 680, 693 (Mo. Ct. App. 2003).

³ Bonney v. Environmental Engineering, Inc., 224 S.W.3d 109, 120 (Mo. App. 2007); State ex rel. Amrine v. Roper, 102 S.W.3d 541, 548 (Mo. banc 2003); Rodriguez v. Suzuki Motor Corp., 936 S.W.2d 104, 110 (Mo. banc 1996). Holt v. Director of Revenue, State of Mo., 3 S.W.3d 427, 430 (Mo. App. 1999); McNear v. Rhoades, 992 S.W.2d 877, 885 (Mo. App. 1999); Rodriguez, 936 S.W.2d at 109 - 111; Wollen v. DePaul Health Center, 828 S.W.2d 681, 685 (Mo. banc 1992).

⁴ Complaint (June 15, 2018), EFIS Item 1.

electricity, or some other surge in electricity to be delivered to Complainant's backup generator, either by letting one of the new phases get over into the line that provides electric service to Complainant's residence, or by hooking up the new 3-phase line to the neutral line that serves both Complainant's generator's electrical panel and the electrical panel to Complainant's detached shop.

Although Complainant did not allege a violation of any particular statute, rule, order or Commission-approved tariff, the Company acknowledges that the allegations of the Complaint implicate the Company's statutory duty, as an electrical corporation under the jurisdiction of the Commission, to provide service that is safe and adequate.⁵ For power service, the Company has a regulatory duty to ensure that the voltage is not greater than ten percent (10%) above or below the Company's standard service voltage.⁶ Per its Commission-approved tariffs, the Company provides standard single-phase secondary voltage of 120/240 volts.⁷

In response to the *Complaint*, the Company filed its *Answer, Affirmative Defenses and Motion to Dismiss Claim for Damages* (the "*Answer*").⁸ The Company admitted that it undertook a project to provide 3-phase service to Complainant's neighbor, admitted that it temporarily disconnected power to Complainant's residence on October 4, 2017 as part of the work, admitted that it assisted Complainant to bypass the electric panel for her generator so that her power could be restored, and admitted that it tested the voltage at her meter after power was restored. The Company otherwise denied the allegations of the *Complaint*. Based on a number of additional facts asserted in its *Answer*, the Company also asserted its conclusion that a malfunction in Complainant's generator transfer switch, rather than crossed wires or a Company-supplied overvoltage, was the cause of the damages Complainant reported to have sustained. Although the Company denied supplying any overvoltage, the Company also asserted its affirmative defense that per Union Electric Company Electric Tariff Sheet 138, I. General Rules and Regulations, Section J. Continuity of Service, the Company is not "responsible or liable for damages to customer's apparatus resulting from failure or imperfection of service beyond the reasonable control of the Company. In cases where such failure or imperfection of service might damage

⁵ §393.130.1 RSMo (2016).

⁶ 4 CSR 240-10.030(23)(D).

⁷ Union Electric Company Electric Tariff Sheet 107, General Rules and Regulations, II. Characteristics of Service Supplied. B. Secondary Service Voltages.

⁸ Answer, Affirmative Defenses and Motion to Dismiss (July 16, 2018), EFIS Item 5.

customer's apparatus, customer should install suitable protective equipment." Finally, the Company asked that the Commission dismiss that portion of the *Complaint* that appeared to request that the Commission order the Company to pay money damages to Complainant, since the Commission is without statutory authority to award damages.

Staff investigated the allegations of the *Complaint* and subsequently filed its *Staff Investigation Report.*⁹ In the report, Staff concluded that it could not determine a definite cause of Complainant's damages and found no definite evidence that the Company violated a tariff, statute, or regulation. Staff concluded that Complainant's damages were the result of an error involving Complainant's generator transfer switch, but could not determine the cause of the error—whether improper voltage, equipment failure, or some other cause.

The evidentiary hearing in this matter was held on October 23, 2018. The Commission admitted the testimony of four witnesses: the Complainant; Mr. Cedric Cunigan, Utility Engineering Specialist III of the Commission's Engineering Analysis Unit; Ms. Aubrey Krcmar, Ameren Missouri Regulatory Liaison; and Mr. Edwin Gruehne, Ameren Missouri Supervisor of Electrical Operations, Meramec Valley Division, Franklin District. The Commission also received all exhibits offered by each of the parties into evidence. At the close of the evidence, the case was deemed submitted for the Commission's determination.¹⁰

II. Issues

A. May the Commission award Complainant damages?

Complainant initially alleged that the Company's actions caused her to incur \$4,575.79 in damages.¹¹ Although Complainant did not formally amend her *Complaint*, Complainant later provided Staff with additional receipts, indicating that her total damage figure was \$5,125.25.¹² At hearing, Complainant offered Exhibits 50 and 51 into evidence, which included receipts for various repairs and services, and which were admitted into evidence.¹³

Regardless of Complainant's proof of the amount of damages she alleges to have sustained, and regardless of whether the Commission determines that the Company caused Complainant's

⁹ Staff Investigation Report (July 31, 2018), EFIS Item 6, attached to which was a separate document titled Staff Report.

¹⁰ Transcript, Evidentiary Hearing Vol. II (October 23, 2018), EFIS Item 12 ("Tr. ")

¹¹ Complaint, last page.

¹² Staff Investigation Report, see Staff Report attached thereto, heading dated July 27, 2018.

¹³ *Tr.* p. 52, l. 6-7.

damages, the Commission lacks the authority to order the Company to pay damages to Complainant. This is because the Commission is a regulatory body of limited jurisdiction having only such powers as are conferred by statute, and cannot require a refund, order damages, or grant equitable relief. *State ex. rel. GS Technologies Operating Co., Inc. v. Public Service Comm'n*, 116 S.W.3d 680, 695 (Mo. App. 2003); *American Petroleum Exchange v. Public Service Comm'n*, 172 S.W.2d 952, 956 (Mo. 1943). Because the Commission cannot grant the relief requested, it is appropriate for the commission to dismiss, specifically, the claim for damages.

B. Did the Company's conduct cause or contribute to cause Complainant's alleged damages?

As an initial matter, the Company notes that it questions whether Complainant may be seeking to be relieved of the burden of proving, *specifically*, how the Company caused the damages she alleges to have sustained. For example, Complainant testified: "And why Ameren won't admit it is beyond me. Okay? Because the circumstances that day and the way that it programmed out and the repeatedly, It's not my fault, we didn't do nothing, it's not my fault, we didn't do nothing, you know. It's just logical, that -- why this happened when it did. And we've never had a problem with that generator before. We've never had a problem since[.]"¹⁴ Similarly, in closing, Complainant noted, "Accidents happen. It's not planned. Okay? They didn't plan on doing *whatever they done* to make our house catch fire[.]"¹⁵(emphasis added). In other words, is Complainant informally attempting to invoke the doctrine of *res ipsa loquitur*, and asking the Commission to infer from circumstantial evidence alone that the Company, in the process of supplying electricity to her residence, damaged her property?¹⁶ If so, the Commission must first determine if she has established the three elements that entitle her to the inference:

The plaintiff must prove the doctrine's three elements: (1) the incident resulting in injury is of the kind which ordinarily does not occur without someone's negligence; (2) the incident is caused by an instrumentality under the control of the defendant; and (3) the defendant has superior knowledge about the cause of the incident. By plaintiff proving the three elements, the defendant must meet a broader assault than that posed by specific allegations of negligence under a specific negligence theory. The plaintiff, however, still bears the risk of nonpersuasion and must show by the

¹⁴ *Tr.*, p. 27, l. 21-p. 28, l. 3.

¹⁵ *Tr.*, p. 162, l. 14-16.

¹⁶ The doctrine is a, "rule of evidence that permits a [trier of fact] to infer from circumstantial evidence that the defendant is negligent without requiring that the plaintiff prove defendant's specific negligence." *GS Technologies*, 116 S.W.2d at 694 (citing *Weaks v. Rupp*, 966 S.W.2d 387, 393 (Mo. App. W.D. 1998).

greater weight of the evidence that injury resulted from the defendant's negligence.¹⁷

If Complainant has done so, then even if Complainant proved the three elements and was entitled to a reasonable inference of negligence on the Company's part, the Company notes that it is only an inference, not a rebuttable presumption, such that the burden of proof to prove a Company violation remains with Complainant, and the Commission is free to reject the inference whether the Company were to present evidence to the contrary or not.¹⁸

Assuming that Complainant has invoked the doctrine, the Company asserts that Complainant has failed to prove the second and third elements, and therefore is not entitled to a reasonable inference of negligence by the Company. All the parties appear to agree that there was some sort of unusual event involving electricity at Complainant's residence on October 4, 2017, during which Complainant's generator transfer switch inside the generator panel was damaged, the generator shut down, Company-supplied electricity was prevented from reaching her residence until the generator was bypassed, and certain personal property of Complainant's was damaged. While the Company admits that it controls *its* electric supply, electricity was actually being supplied to the generator panel immediately prior to the incident by an instrumentality *not* under the Company's control-Complainant's generator. We know this because Complainant admitted that shortly after a worker advised her that her service was about to be disconnected, she "heard the generator on, which told [her] they had cut the power."¹⁹ This indicates two things: first, that the supply of electricity from the Company was disconnected (exactly as the worker advised it would be),²⁰ and that Complainant's generator began supplying electricity to Complainant's home. The Complainant admitted that a while later, the generator went off, but when she went inside her house, there was no power.²¹ Complainant's generator kicked on a second time before Company-

¹⁷ Weaks, 966 S.W.2d at 393–94 (internal citations omitted). Complainant *did* allege possible causes—*see Complaint*, "**Oct 11**...the surge had blown the power[.]"; "**12/3/2017** These are the bills we paid to get thing back to order before the wires was hooked up wrong."; "Ameren's subcontractor had to in error was too hook a 3 phase line to [the neutral] to result in the damage that done." Complainant did not present any evidence, however, to show that any of these things actually occurred. Normally, if a plaintiff attempts to prove a specific cause of the incident, she cannot rely on a presumption of the defendant's negligence. However, the Company acknowledges that, "if the plaintiff" sevidence tends to show the cause of the occurrence but also leaves the cause in doubt or not clearly shown, plaintiff will not be deprived of the benefit of the *res ipsa loquitur* doctrine." *Id.* at 394. This exception to the rule presupposes, of course, that a plaintiff has established the three elements identified above.

¹⁸ GS Technologies, 116 S.W.2d.at 695.

¹⁹ *Tr.* p. 20, l. 14-15.

²⁰ *Id.* p. 20, l. 1-5.

²¹ *Id.* p. 20, l. 16-20.

supplied electric service was restored to Complainant's residence. This was when the crew came to the house at Complainant's urging. The crew observed the damaged generator panel, determined that there was Company supplied-electricity at Complainant's meter, consulted with Complainant's generator serviceman about how to bypass the generator panel, then temporarily disconnected Company service at her transformer (presumably to safely bypass the panel). At the point service was temporarily disconnected at Complainant's transformer (cutting off the supply of electricity to her meter), her generator kicked on a second time (upon which her husband turned it off).²² Not until the crew completely bypassed the generator was Company-supplied power to the residence restored.²³ This evidence makes clear that there was more than one instrumentality supplying electricity that could have caused the damage, and one of them—Complainant's generator—was not under the company also lacks superior knowledge about the cause of the electrical problem.

1. Complainant's Evidence.

At the evidentiary hearing, Complainant testified to the following regarding the incident when damage to her generator panel and other property occurred. "They" were working for a while to bring 3-phase service to her neighbor.²⁴ The day the incident occurred, Complainant was in her yard when a gentleman approached her and informed her that her power would be shut off, not for long, in order to do something to the line.²⁵ She told him that was fine because she had a generator.²⁶ A little while later, when she went out back to unload something off her trailer, she heard the generator on, which told her they had cut the power.²⁷ A while later, when she went back out back with another load, the generator was off, but when she went inside to check on her husband, the power was off.²⁸ Their garage was full of smoke.²⁹ She left her husband in the garage, drove down her driveway and flagged down the workers, and told them her garage was full of smoke and they better come down and fix it.³⁰ The workers went to her garage, saw the smoking

- ²⁵ Id. p. 20, l. 1-3.
- ²⁶ *Id.* p. 20, 1. 3-4

²⁹ *Id.* p. 20, l. 21-22.

²² *Id.* p. 21, l. 23-p. 23, l. 6.

²³ *Id.* p. 23, 1. 7-8; p. 30, 1. 15-18.

²⁴ *Id.* p. 19, 1. 22-25.

²⁷ *Id.* p. 20, l. 13-15.

²⁸ *Id.*, p. 20, l. 16-20.

³⁰ *Id.* p. 20, 1. 23-p. 20, 1. 5.

generator panel, and commented that they did not know anything about the generator panel.³¹ Her husband called her generator repairman while a couple of the workers checked the voltage at Complainant's meter, then went back inside.³² Complainant went with them to the meter and heard the first worker report the voltage as 270, the other suggest that it was 240, and the first agree that it was 240.³³ When they all went inside, her husband had the third worker get on the phone with the generator serviceman so the serviceman could explain, "how to do the switch [on the generator]."³⁴ Next, the crew used a long stick at the pole beside Complainant's house and turned the power off.³⁵ At that point, Complainant's generator turned back on, but her husband immediately shut it off.³⁶ After that, the workers, "got power back into the house[.]"³⁷ Power was restored to Complainant's residence by bypassing her generator.³⁸ The night of the incident, Complainant's furnace would not work, and had to be repaired.³⁹ A couple of days later, Complainant noticed that the light on the ceiling fan in the shop behind their house was strobing, and there was no power to the shop.⁴⁰ She walked across the yard and told someone working there about the problem. Whoever that was told her, "you got to be hooked to a 3-phase."⁴¹ Complainant then called the Company's customer service department, as one of the workers had told her to do on the day of the incident, and found out how to file a claim.⁴² The underground wiring from Complainant's house to her shop had to be dug up and replaced.⁴³ The GFI plugs on the exterior of the shop had to be replaced as well.⁴⁴ Complainant sent receipts to the claim administrator, and even left voicemails and sent a letter to follow up, but heard nothing in return.⁴⁵ After that point,

- ³⁵ *Id.* p. 22, l. 25-p. 23, l. 3.
- ³⁶ *Id.* p. 23, 1. 3-6.
- ³⁷ *Id.* p. 23, 1. 7-8.
- ³⁸ *Id.* p. 30, l. 15-18
- ³⁹ *Id.* p. 23, l. 12-18.
- ⁴⁰ *Id.* p. 23, 1. 19-23.
- ⁴¹ *Id.* p. 23, l. 24-p. 24, l. 6.

⁴³ *Id.* p. 34, l. 2-4; p. 38, l. 19-25.

³¹ *Id.* p. 20, l. 6-11.

³² *Id.* p. 21, l. 22-p. 22, l. 9.

³³ *Id.* p. 22, l. 1-8.

³⁴ *Id.* p. 22, l. 10-11.

 $^{^{42}}$ *Id.* p. 24, 1. 14-p. 25, 1. 3; p. 22, 1. 13-16. Complainant's own testimony as to when she first called the Company conflicts. At another point at hearing, Complainant insisted that she called the Company the day the incident happened: *Tr.* p. 30, 1. 1-8. The Company's records indicate that she called on October 5, 2017, the day after the incident. *See* Exhibits 10C and 11C. While the date is not in and of itself important, her conflicting testimony about it, as well as the Company's records that contradict her testimony, do call into question the accuracy of Complainant's recall of the events to which she testified.

⁴⁴ *Id.* p. 40, 1. 2-6.

⁴⁵ *Id.* p. 25, l. 4-18.

getting ahold of the claims adjustor was impossible.⁴⁶ Eventually, Complainant received two letters informing her that the Company was not responsible for the damage done to her property.⁴⁷

At hearing, pictures Complainant took of her damaged generator panel, showing burnt wires, smoke damage and burnt switches, were admitted into evidence.⁴⁸ A stack of receipts and bills Complainant sent to the Company were also admitted into evidence.⁴⁹ Among the bills, in Ex. 50, was a doorhanger from a Company serviceman. The serviceman came out on October 23, 2017 and checked the power again after the incident where Complainant walked across the yard and complained about the strobing light in the shop.⁵⁰

On rebuttal, Complainant insisted that the gentlemen out working on the line, who put up the 3-phase and the poles, were not Ameren Missouri employees, but were subcontractors and identified themselves to her as such.⁵¹

2. Staff's Evidence.

The *Staff Report* prepared by Mr. Cunigan was admitted into evidence.⁵² In the *Staff Report*, Mr. Cunigan notes that as part of its investigation, Staff sought information from Complainant, her generator repairman, and the Company.⁵³ Although the *Staff Report* includes a "likely timeline of events,"⁵⁴ Staff was unable to, "determine a definite cause for the Complainant's damages … whether an improper voltage was applied, the equipment failed on its own or if there was some other cause." Staff was able to conclude only that the damages "appear[ed] to be the result of an error involving the Complainant's generator transfer switch."⁵⁵

At hearing, Mr. Cunigan clarified that by "error," he meant a failure or equipment malfunction, the cause of which he was not able to determine.⁵⁶ Mr. Cunigan agreed that the photos admitted into evidence via Complainant's testimony corroborated his conclusion that the generator transfer switch failed.⁵⁷

⁴⁹ *Tr*. p. 39, l. 13-23

⁵² Ex. 41.

⁵⁴ *Id.* pp. 2-5. ⁵⁵ *Id.* p. 5.

⁵⁷ *Id.* p. 54. l. 7-10.

⁴⁶ *Id.* p. 25, l. 4-18.

⁴⁷ *Id.* p. 25, l. 19-p. 26, l. 3.

⁴⁸ *Tr*. p. 33, l. 11-25; Exs. 41-46.

⁵⁰ *Id.* p. 42, l. 18-p. 43, l. 2; Ex. 50.

⁵¹ *Id.* p. 156, l. 25-p. 157, l. 15; p. 158, l. 4-p. 159, l. 3.

⁵³ Id., p. 3.

⁵⁶ *Tr*. p. 53, l. 3-6.

3. The Company's Evidence.

Mr. Guehne, a Company lineman for twelve years and for the past four years a Company supervisor of electrical operations, testified on behalf of the Company.⁵⁸ Mr. Guehne has experience making repairs and upgrades to the Company's electric lines, as well as planning and providing daily supervision of the crews who do these jobs.⁵⁹ He has technical and specialized knowledge about the Company's electrical distribution system, including system upgrades, and about the Company's methods of keeping records regarding its system upgrades, operation, maintenance and repairs.⁶⁰

Mr. Guehne is familiar with the Company project to upgrade single-phase service to 3phase service, from Highway 30 northward along Hendricks Road to Complainant's south neighbor because his division was involved in the project and he supervised the project from beginning to end.⁶¹ The project involved overhead service along a three-quarter mile stretch of Hendricks Road, starting at Highway 30 and ending just south of the gravel driveway of Complainant's neighbor to the south.⁶² To bring in the two additional phases while keeping the original single-phase energized, the original single-phase conductor was moved over out of the way of the work, by shifting it onto fiberglass arms that extend six to seven feet from the poles.⁶³ New poles and crossarms were installed. Then, ropes, and new conductors attached to the ropes, were pulled across rollers installed on the new crossarms, all the way from Highway 30 northward to a dead end structure at the south neighbor's driveway.⁶⁴ From the dead end structure, the 3phase lines went westward underground through a trench on the south side of the south neighbor's driveway, to that neighbor's machine shop.⁶⁵ The additional phases were not energized while they were pulled through.⁶⁶ The additional phases did not extend over the south neighbor's driveway.⁶⁷

During the project, the original single-phase conductor serving the customers along Hendricks Road remained the same—it was the exact same wire that had been there for years.⁶⁸

⁵⁸ *Id.* p. 77, l. 3-21.

⁵⁹ *Id.* p. 77, l. 18-p. 78, l. 18.

⁶⁰ *Id.* p. 78, l. 19-p. 79, l. 22.

⁶¹ *Id.* p. 80, l. 13-p. 81, l. 12; p. 138, l. 14-p. 139, l. 7.

⁶² *Id.* p. 82, l. 23-p. 83, l. 21; p. 85, l. 13-19; p. 86, l. 21-p. 87, l. 12; Ex. 2

⁶³ *Id.* p. 87, l. 22-p. 15.

⁶⁴ *Id.* p. 88, l. 8-89, l. 8.

⁶⁵ *Id.* p. 87, 1. 14-21; Ex. 2.

⁶⁶ *Id.* p. 89, l. 11-16.

⁶⁷ *Id.* p. 89, l. 21-23.

⁶⁸ *Id.* p. 89, l. 24-p. 90, l. 6.

The only change made to the wire was to add a "normally open switch" to it, at the pole just south of the Lucy's driveway.⁶⁹ This was added because after the new 3-phase segment was energized on October 9, 2017, customers from Complainant's residence northward would receive power from the north part Hendricks Rd, from East Linda Lane, like they always had, while customers to the south of the switch would receive their power from the south at Highway 30. But in the event the power went out on either side of the switch, the switch could be closed so that those without power could receive it from the other direction.⁷⁰

Complainant receives service from the Company via a tap at the pole at the end of her driveway. The tap connects to the original single-phase at Hendricks Road via a hotline clamp—a ring that can be removed and reattached via an insulated fiber stick. The tap proceeds overhead up Complainant's driveway for three poles, then dead ends at the third pole, which has a transformer on it. From the transformer, the service wires feed underground to Complainant's residence.⁷¹ Complainant's service was not in any way altered as a result of the 3-phase project. The only thing the Company did was move her tap from the south side of the pole at the end of her driveway to the north side, so that at the completion of the project Complainant's tap would be on the other side of the normally open switch at their pole. This was the work that was done by the Company on October 4th, 2017.⁷² The process was that the Company's crew notified Complainant the power would be cut for a short time. Then, the crew used a stick to take the hotline clamp for Complainant's tap off of the line. Then the crew dead-ended the single-phase conductor so that it stopped on both sides of the pole. Then, they installed a jumper to connect the two dead ends for the time being (until the normally open switch was added). Then, they moved Complainant's hotline clamp to the north side of the pole.⁷³ Mr. Guehne testified that simply disconnecting then reconnecting Complainant's tap to the energized, original single-phase line in this manner would not have caused a power surge or over-voltage on Complainant's tap, because the supplied voltage remained the same.⁷⁴

Mr. Guehne was not at Complainant's residence on October 4th, 2017, but he did talk to his crew at the end of that work day about the incident. His crew leader, Mr. Politte, informed him

⁶⁹ *Id.* p. 90, l. 7-25.

⁷⁰ Id.; p. 129, l. 11-p. 132, l. 9

⁷¹ Id. p. 91, l. 3-p. 92, l. 3; Ex. 2.

⁷² *Id.* p./ 92, 1. 4-23.

⁷³ *Id.* p. 93, l. 24-p. 14.

⁷⁴ *Id.* p. 106, l. 25-p. 107, l. 11.

that during maintenance to Complainant's line to move her tap, Complainant stated that she had smoke in her garage. The crew went to see. They spoke to her generator serviceman on the phone about bypassing the generator's switch to restore Complainant's service from the Company's electric grid, and successfully restored her service.⁷⁵ Mr. Politte, also took a picture of the generator transfer panel that day and sent it to Mr. Guehne.⁷⁶

Although in the *Complaint*, Complainant theorized that possibly the two new phases got hooked up wrong, causing a power surge on October 4th, 2017, Mr. Guehne explained that while the additional conductors for the 3-phase service had been strung as of that date, they were still de-energized as of that date, and could not have been hooked up in some way that would cause single-phase customers to experience an over-voltage or power surge.⁷⁷ Complainant also theorized that possibly one of the new phases had gotten over into her line, causing a power surge. However, Mr. Guehne explained that given the tension with which the additional phases are pulled in and attached at the dead-end structure, the phases cannot physically reach or get into each other.⁷⁸ Nor could the 3-phases installed to serve her neighbor possibly reach her service line, given that the 3-phase to the neighbor's machine shop runs underground and Complainant's tap is overhead.⁷⁹ At hearing, Complainant cross-examined Mr. Guehne on the additional possibility that during the project, a "hot wire" was attached to the neutral wire out at Complainant's pole at Hendricks Road. Mr. Guehne explained that nothing would have happened to Complainant's service in that event—the neutral is grounded via a ground rod and while there might have been a tremendous flash and some burned wire, the grounding would have prevented anything from happening on Complainant's end.⁸⁰ Staff also cross-examined Mr. Guehne as to whether, when the tap was moved, it might possibly have been hooked up in the wrong place. Mr. Guehne explained that there is only one 7200 volt phase there to hook up to and the neutral, and the crew just moved the tap from one side of the pole to the other.⁸¹

Additionally, Mr. Guehne checked the Company's eADMS system, which logs customer reports of unplanned outages, to see if any other customer receiving single-phase service from the

⁷⁵ *Id.* p. 110, l. 11-p. 11, l. 12.

⁷⁶ *Id.* p. 118, l. 15-p. 119, l. 18; Ex. 8.

⁷⁷ *Id.* p. 93, l. 6-19; p. 95, l. 8-14; 101, l. 19-24.

⁷⁸ *Id.* p. 94, l. 15-23.

⁷⁹ *Id.* p. p. 94, l. 24-p. 95, l. 7.

⁸⁰ *Id.* p. 140, l. 13-p. 141, l. 22.

⁸¹ *Id.* p. 133, l. 16-p. 134, l. 2.

Company along Hendricks Road experienced a surge or reported any other problem on October 4, 2017. Specifically, Mr. Guehne checked the logs pertaining to two neighbors south of Complainant, the Complainant, and two neighbors north of Complainant. The eADMS records for these properties did not reflect any reports of problems on October 4, 2017.⁸²

As to energizing the newly installed phases along Hendricks Rd., Mr. Guehne testified that that did not occur until October 9, 2017. He confirmed that date by searching the Company Job Briefing Forms, which are used by crew leaders on the morning of a job to review with the crew the steps to be taken that day. Each crew member also signs the form.⁸³ The form dated October 9, 2017, was admitted into evidence as Exhibit 3. It reflects that all the final steps preceding energizing the 3-phase occurred on October 9, 2017: opening the normally open switch at Complainant's driveway, removing the mechanical jumper that had been installed at that pole, closing the switches at Highway 30 so that power would run from Highway 30 north to all the customers south of Complainant, testing the phase, and pulling the old poles that had not yet been removed.⁸⁴ The Company call contacts records, which include outgoing calls to notify customers of planned outages, also corroborate the October 9th date.⁸⁵ As to the neighbor's service, Mr. Guehne testified that the 3-phase underground to his machine shop was not energized until even later than October 9, 2017, because the overhead crew had gotten ahead of the crew that installs the underground line, which as of that date was still waiting on a wiring ok from Franklin County before the 3-phase service to the shop could be energized.⁸⁶

Mr. Guehne was also questioned about the Company's transformer at the end of Complainant's tap and whether it could have malfunctioned and caused the incident. He explained that a transformer steps down the primary voltage (the primary voltage supplied along Hendricks Road being 7200 volts) to a usable voltage for the customer—240 volts/120 volts phase to phase.⁸⁷ He testified that simply reconnecting Complainant's tap to a new spot on the single-phase line could not have caused the transformer at the other end of the tap to malfunction.⁸⁸ He did concede that transformers do occasionally just malfunction, but he has not seen that result in an

⁸² *Id.* p. 101, l. 25-p. 103, l. 12; Ex. 4.

⁸³ *Id.* p. 95, l. 13-24.

⁸⁴ *Id.* p. 98, 1. 2-p. 99, 1. 11; Ex. 3.

⁸⁵ Ex. 10C, *see* entry dated 2017-10-06, reflecting an outbound call to notify Complainant of an outage planned for October 9, 2017.

⁸⁶ *Id.* p. 99, l. 12-p. 100, l. 6.

⁸⁷ *Id.* p. 107, l. 5-23.

⁸⁸ *Id.* p. p. 107, l. 24-p. 108, l. 7.

overvoltage.⁸⁹ Further, while Complainant believed that she may have been receiving an overvoltage of 270 volts at the time of the incident on October 4, 2017, Mr. Guehne explained that it is simply not possible, given the preset number of windings inside a residential transformer, for the transformer to produce significantly more than 240 volts unless more windings are added to the lower voltage side of the transformer.⁹⁰ Slight variation in voltage, up or down, does happen due to the length of the line from the substation but voltage regulators are installed to correct voltages and customers within sight distance of each other between voltage regulators would, for example, only experience a one or two volt difference from each other.⁹¹ For a residential transformer to deliver 270 volts, the primary voltage coming from the single-phase feeder would have to have been quite a bit higher than 7200 volts. But in that case, other customers on the line would also have experienced a problem, and none were reported.⁹² In addition, delivery of a significantly higher voltage to the transformer would have damaged Complainant's transformer, and the damage would have been permanent, since transformers cannot repair themselves.⁹³ Mr. Guehne testified that he checked the Company's Transformer Load Management and System Improvement records, and they reflect that Complainant's transformer is still the original transformer installed at the premises back in 2006.⁹⁴ That transformer does not appear to have experienced such an overvoltage during the October 4, 2017 incident given that on October 23, 2017, when a Company troubleman was dispatched to Complainant's residence to check the voltage, the voltage delivered from it to Complainant's residence was completely normal.⁹⁵

Mr. Guehne also testified about Complainant's generator, and whether he believed it operated properly on October 4, 2017. It was his opinion that when the Company de-energized Complainant's service, the generator switch did transfer over to generator power, but when Company service was restored, the switch did not correctly transfer back to Company power.⁹⁶ He based his opinion in part on what he saw in Exhibit 8, the photo of the generator panel provided to him by Mr. Politte, which showed burn damage at the area of the transfer switch, as well as

⁸⁹ *Id.* p. 108, l. 8-20.

⁹⁰ *Id.* p. 122, l. 11-123, l. 10.

⁹¹ *Id.* p. 123, l. 11-p. 124, l. 16.

⁹² *Id.* p. 109, 1. 5-21; and *see* n. 78.

⁹³ *Id.* p. 109, l. 22-p. 110, l. 4.

⁹⁴ *Id.* p. 114, l. 21-p. 117, l. 23; Ex. 6; Ex. 7.

⁹⁵ *Id.* 111, l. 13-p. 113, l. 5; *see* Ex. 5, OAS ticket dated 10/23/2017, "Good voltage at XFM/Good Connecti ... Left DH (doorhanger)"; and *see* Ex. 50, p. 3 doorhanger dated 10/23/2017, "Tested voltage at transformer. Good: 247-123-124. Good connections at transformer."

⁹⁶ *Id.* p. 118, l. 6-14.

corrosion on the conductor blocks and fuses.⁹⁷ While he concluded based on all his prior testimony that there was no power surge from the Company, and could tell from the picture there was arcing and a significant amount of heat inside the panel, he could not say what exactly happened inside the generator panel.⁹⁸ As to the strobing shop light that Complainant reported, contrary to Complainant's belief that it occurred because her tap was hooked up to 3-phase service, Mr. Gruehne noted that strobing can be caused by a bad neutral, or where a direct buried cable, such as the one between Complainant's house and shop, faults and arcs to the ground.⁹⁹ Similarly, when Complainant suggested that excess voltage caused her 4-ought aluminum wire to melt, he explained to her that for typical residential installations, the Company uses wire with a 600 volt insulation rating, and it is high heat caused by high amperage, or amp draw, rather than excessive voltage, that melts wires.

4. The Company's conduct did not cause or contribute to cause Complainant's damages.

At hearing, Complainant presented a single piece of evidence to prove that on October 4, 2017, when damage appears to have occurred to her property, it was the Company that caused the damage. That evidence was her testimony that she heard a worker say that the voltage at her meter was 270 volts. Complainant admitted, however, that that the same worker corrected himself to say that they voltage was actually 240, although she attempted to discredit that statement by noting "a look" that passed between that worker and the other worker before he corrected himself. While in her *Complaint*, and at hearing, Complainant presented various *theories* concerning how the Company might have caused the damage to her property—one of the new phases may have gotten into her line, a "live" line may have gotten hooked up to the neutral at her pole at the street, her line may have gotten hooked to the 3-phase service—she did not present evidence to prove that any of these events actually occurred, let alone that if they occurred, they caused the damage.

Although Complainant bore the burden of proof, the Company presented uncontroverted evidence which by process of elimination disproved all of Complainant's unsupported theories of causation, and presented evidence to prove that the voltage delivered through the Company transformer to the meter at Complainant's residence on the day of the incident could not have been

⁹⁷ *Id.* p. 119, l. 21p. 120, l. 11.

⁹⁸ *Id.* p. 136, l. 4-p. 137, l. 12; p. 151 l. 11-p. 152, l. 10.

⁹⁹ *Id.* p. 121, l. 19-p. 122, l. 10.

270 volts, regardless of what a Company crew member testing voltage might have accidentally stated. In short, the Company's evidence proved that the Company's work upgrading a portion of the line along Hendricks Road from single-phase to the 3-phase service did not cause any unusual electrical event-surge or overvoltage-and the electric distribution system and Company equipment serving Complainant's residence were working properly on the day of the incident and after. The original single-phase conductor, which remained energized during the project, was intentionally set several feet out of the way of the new phases while the work to install the new phases occurred. The new conductors for the additional phases were pulled to the dead-end structure at her neighbor's driveway and tensioned in such a manner that they could not cross each other, either. The additional phases did not extend overhead beyond the dead-end structure and therefore could not extend from the south side of Complainant's south neighbor's driveway northward to the pole at Complainant's driveway where her overhead tap was located. The new 3phase service lines running from the dead-end structure westward to her neighbor's shop run parallel to Complainant's tap, but could not contact the tap because they run underground along the south side of the neighbor's driveway, while Complainant's tap runs overhead on poles along her driveway. Setting aside all of the above which demonstrate that there was no contact between the original single-phase or Complainant's tap and the additional phases (i.e., no wires got into each other or crossed, and Complainant's tap was not hooked up to the 3-phase service), none of the additional phases along Hendricks Road were even energized until five days after the incident occurred, and the neighbor's underground 3-phase service was not energized until sometime after that. When the Company disconnected Complainant's tap from that original single-phase (to do the work necessary to dead-end the single phase on each side of her pole, install the mechanical jumper and install the normally open switch), there was no line other than that original single phase that the Company could have accidentally hooked Complainant's tap back up to when it reconnected her tap. Had the Company accidentally attached some "live wire" to the neutral for the single-phase line along Hendricks Road, there would have been a tremendous flash at the pole, and wires may have been burned down, but the ground wire and ground rod at the pole would have sent the current into the ground and prevented any adverse electrical event via Complainant's tap. The Company transformer located at the end of Complainant's tap, which steps down the 7200 volts of electricity from the single-phase to a usable residential voltage, is not physically capable of randomly malfunctioning so as to cause it to deliver 270 volts, because it does not have a

sufficient number of windings inside it to produce this voltage. To have delivered 270 volts to Complainant's meter through her transformer, the Company would have to have been supplying well in excess of 7200 volts all along the single-phase line that served all its customers along Hendricks Road on October 4, 2017. However, that would have caused all those other customers to experience an overvoltage as well, which does not appear to have happened since no other customer served by that line reported any overvoltage or surge or unplanned outage problems on that day. The lack of any such report also suggests that the theorized "live wire"/neutral event did not occur—since it likely would have burned down wires. Had 270 volts been delivered to Complainant's meter through her transformer, her transformer would have been damaged, remained damaged, and would have continued to malfunction—but the transformer on Complainant's tap has not been repaired or replaced since it was installed in 2006, and in fact, on October 23, 2017, voltage delivered from the transformer was tested and found to be perfectly normal: 247 volts, 123-124 phase to phase.

While no witness could give a definitive opinion, the evidence suggests there was a problem that originated with the other source of electricity-Complainant's generator-on October 4, 2017, that resulted in damage to Complainant's property. The generator came on when the Company disconnected Complainant's tap to work on the single-phase, but the generator went back off sometime later, and Complainant was without power. Smoke poured out of the generator's electric panel. Inside the panel, there were signs of arcing, burn marks on the transfer switch and transfer panel, and melted wires. Other components were visibly corroded. When the Company crew checked voltage at the meter after viewing the smoking panel, the meter reading showed voltage was being delivered through the tap and transformer to Complainant's service line. But since Complainant's power was still out, the generator obviously shut down without transferring Complainant's residence back to the Company-supplied power. When the Company then cut power at the transformer to do the work to bypass the generator, the generator kicked on a second time (and was turned off by Complainant's husband). Complainant's power from the Company was not able to be restored until the Company crew bypassed the generator altogether. Staff's witness Mr. Cunigan concluded that Complainant's damages were the result of an error involving Complainant's generator switch transferring power, and his conclusion was bolstered after he viewed Complainant's photographs of the damaged generator panel. Mr. Guehne also concluded from his crew leader Mr. Politte's photograph of the generator panel, and in particular from the

burned transfer switch and the corrosion he saw on various components in the panel, that the generator failed, causing the damages to Complainant's property.

C. Did the Company's conduct violate a tariff, statute, Commission order or Rule?

As noted in Section I, above, Complainant did not allege that the Company violated any particular tariff, statute, Commission order or Rule. However, the allegations of the *Complaint* may implicate the Company's statutory duty, as an electrical corporation under the jurisdiction of the Commission, to provide service that is safe and adequate,¹⁰⁰ its duty per its Commission-approved tariffs to provide standard single-phase secondary voltage of 120/240 volts,¹⁰¹ or its regulatory duty to ensure that the voltage it supplies is not greater than ten percent (10%) above or below the Company's standard service voltage.¹⁰²

Complainant presented no evidence that the Company violated the above cited statute or tariff. As to the rule regarding variations in voltage, the Company disproved Complainant's allegation that at the time of the incident, the Company was supplying 270 volts of electricity to her meter, rather than 240. The Company presented evidence that the Company transformer is not capable of malfunctioning on its own in a manner to deliver 270 volts of electricity, and if enough electricity were supplied to it to cause it to deliver 270 volts, it would be permanently damaged. Further, if that happened, other customers along the same single-phase service line would have experienced an overvoltage or outage, but none reported any. Finally, a couple of weeks after the October 4, 2017 incident, the voltage supplied at the Company's transformer on Complainant's tap, which transformer has never been repaired or replaced, was 247 volts (123 and 124 volts phase to phase), which is well within the 10% variance in standard supplied voltages permitted under the cited Commission Rule.

III. Conclusion

Because Complainant failed to satisfy her burden of proof, the Commission should enter an order denying the *Complaint* on the merits.

¹⁰⁰ §393.130.1 RSMo (2016).

¹⁰¹ Union Electric Company Electric Tariff Sheet 107, General Rules and Regulations, II. Characteristics of Service Supplied. B. Secondary Service Voltage.

¹⁰² 4 CSR 240-10.030(23)(D).

Respectfully submitted,

SMITH LEWIS, LLP

/s/ Sarah E. Giboney

Sarah E. Giboney, #50299 111 South Ninth Street, Suite 200 P.O. Box 918 Columbia, MO 65205-0918 Phone: (573) 443-3141 Facimile: (573) 442-6686 giboney@smithlewis.com

/s/ Paula N. Johnson

Paula N. Johnson, #68963 Senior Corporate Counsel 1901 Chouteau Avenue, MC 1310 P.O. Box 66149 St. Louis, MO 63166-6149 Phone: (314) 554-3533 Facsimile: (314) 554-4014 amerenmoservice@ameren.com

Attorneys for Union Electric Company d/b/a Ameren Missouri

CERTIFICATE OF SERVICE

The undersigned hereby certifies that a true and correct copy of Ameren Missouri's Post-

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Missouri Public Service Commission Mr. Ron Irving 200 Madison Street, Suite 800 P.O. Box 360 Jefferson City, MO 65102 <u>staffcounselservice@psc.mo.gov</u> ron.irving@psc.mo.gov

Ms. Stella Lucy 1725 Hendricks Road Robertsville, MO 63072 Office Of Public Counsel 200 Madison Street, Suite 650 P.O. Box 2230 Jefferson City, MO 65102 opcservice@ded.mo.gov

/s/ Sarah E. Giboney Sarah E. Giboney