

A **48 year old male** employee was **electrocuted** when he contacted 23Kv powerline while making a repair to the line.

On the day of the accident, the victim and another employee were dispatched to 5215 Lamar Ave because of an outage. After arriving onsite, they noticed the problem was the B & C phase electrical lines were tangled with the neutral line on the East side of the road in the middle of a construction zone where they were widening and repaving the road. The B & C phase fuses had blown open, but the A phase line was still closed and energized. After pulling up under the lines, the helper tried to pull the lines apart using the run-out stick from the ground with no luck. After trying this for about 10-15 minutes, they decided to use the bucket to untangle the lines. The victim went up in the bucket to untangle the lines by hand, but the wires seemed to be welded together. After not being able to untangle the lines, he lowered the bucket and had the helper hand him some clippers and grips and then headed back up. The grips were used to hold the neutral wires together after he cut the wire and would not let them fall to the ground. After he applied the grips and clipped the neutral, the helper looked up towards the victim and noticed he was in trouble. He ran to the cab of the truck and called dispatch and called signal 91 (which is their internal emergency call) and then ran to the bed of the truck and tried using the lower controls to lower the bucket to the ground, but it would not move. After a few minutes, a fire truck arrived, but they couldn't do anything because of the close proximity to the energized lines. A short time later a second MLGW bucket truck with two other employees arrived onsite.

One of those employees ran to the first truck to try and see if he could get it to lower while his trainee, prepared their truck in case they needed to use their bucket. While this was going on, an off-duty MLGW employee arrived onsite and said that he was going to go up and get the victim. While he was up in the bucket trying to get the victim out of the bucket, a fireman climbed his ladder and helped transfer the victim into the truck's bucket and then they were lowered to the ground. The victim died on the scene.

It was determined during the investigation that the victim was in the bucket but did not isolate, test, and ground the wires before he began working on them. Although the B & C phase lines that he was working on had the fuses blown open, with the A phase line still closed, it could back feed the B & C lines. The victim was also not wearing the insulated gloves to work on energized lines; he only was wearing leather gloves. Although it did not cause the fatality, it was determined that the victim was not wearing fall protection while he was working in the bucket at an approximate height of 20 feet.

Citation(s) as Originally Issued

A complete inspection was conducted at the accident scene. Some of the items cited may not directly relate to the fatality.

Violation 1 Item 1 **Type of Violation:** **Serious**

29 CFR 1910.137(c)(2)(viii): Electrical protective equipment was not subjected to periodic electrical tests. Test voltages and/or the maximum intervals between tests were not conducted in accordance with Table I-4 and Table I-5:

On 12/9/22, the employer did not ensure that insulating equipment had been tested within 12 months before being issued to employees. Primary insulating gloves that were tested on 2/1/21 were issued for employee use on 11/14/22.

Violation 1 Item 2 **Type of Violation:** **Serious**

29 CFR 1910.269(g)(2)(iv)(C)(1): The employer did not ensure that each employee working from an aerial lift used a travel restraint system or a personal fall arrest system:

On 12/9/22, it was determined that an employee was not wearing fall protection while using an aerial lift to troubleshoot an outage where two phases of power had become entangled with the neutral wire at 5215 Lamar Avenue, Memphis, TN.

Violation 1 Item 3 **Type of Violation:** **Serious**

29 CFR 1910.269(m)(3)(ii): The employer did not ensure that all switches, disconnectors, jumpers, taps, and other means through which known sources of electric energy may be supplied to the particular lines and equipment to be de-energized were open. The employer did not render such means inoperable, unless its design does not so permit, and then sure that such means are tagged to indicate that employees are at work:

On 12/9/22, it was determined that all three phases of overhead power lines in the vicinity of work being done at 5215 Lamar Avenue, Memphis, TN, were not isolated and tagged as required. An employee was electrocuted while attempting to separate the B & C phases of power from the neutral, but the A phase in the vicinity was still energized.

Violation 1 Item 4 **Type of Violation:** **Serious**

29 CFR 1910.269(m)(3)(vi): Electric lines were not tested to ensure they were de-energized using a device designed to detect voltage:

On 12/9/22, it was determined that each of the three phase lines were not tested to verify that they were de-energized before conducting work at 5215 Lamar Avenue, Memphis, TN. An employee was electrocuted while attempting to separate the B & C phase lines from the neutral, but the A phase line was still energized.

Violation 1 Item 5 **Type of Violation:** **Serious**

29 CFR 1910.269(m)(3)(vii): The employer did not ensure the installation of protective grounds as required by paragraph (n) of this section:

Electrocution—Insp # 1641355 Memphis Light Gas & Water

On 12/9/22, it was determined that protective grounds were not installed before conducting work at 5215 Lamar Avenue, Memphis, TN. An employee was electrocuted while attempting to separate the B & C phases of power from the neutral, but the A phase in the vicinity was still energized.

