



Steven L. Beshear
Governor

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Energy and Environment Cabinet

Commonwealth of Kentucky
Public Service Commission
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David L. Armstrong
Chairman

James W. Gardner
Vice Chairman

Linda Breathitt
Commissioner

October 29, 2014

Mr. Ed Staton
Vice President – State Regulation and Rates
Kentucky Utilities Company
P.O. Box 32010
Louisville, Kentucky 40202

RE: Notice and Report of an Incident occurring on August 21, 2014, at Campbellsville University, Campbellsville, Taylor County, Kentucky

Dear Mr. Staton:

On August 21, 2014, Steve Kingsolver, one of the Commission's investigators, received notice from Kentucky Utilities Company ("KU") of an incident involving possible injuries at Campbellsville University, Campbellsville, Taylor County, Kentucky. According to KU, it appeared that Campbellsville Fire and Rescue personnel were participating in an "Ice Bucket Challenge" event. In the course of the event, firefighters set up an aerial ladder truck with a 95-foot metallic ladder from which to spray water. Two firefighters, Captain Tony Grider and Firefighter Simon Quinn, were in the bucket of the aerial ladder truck on which the ladder had been extended. After they completed the challenge, the ladder was retracted towards the truck and also raised. At that time, Captain Grider and Firefighter Quinn inadvertently contacted an energized conductor. The multiple contacts caused the truck to become energized, and Captain Grider and Firefighter Quinn both sustained injuries. Other firefighters also received minor shocks and injuries. Captain Grider later died from injuries incurred as a result of his contact with the conductor.

There were several witnesses to this incident. KU was notified of the accident at approximately 11:47 A.M. on August 21, 2014, and reported the incident to Commission Staff at approximately 1:07 P.M. the same day. Commission Staff received KU's seven day summary report on August 28, 2014.

KRS 278.042 requires the Commission to ensure that each electric utility constructs and maintains its plant and facilities in accordance with accepted engineering practices as set forth in the Commission's administrative regulations and orders and in the most recent edition of the National Electrical Safety Code ("NESC"). KRS 278.030 requires every utility to furnish adequate, efficient, and reasonable service. KRS 278.260 permits the Commission, upon its own motion, to investigate any act or practice of a utility that affects or is related to the service of a utility. KRS 278.280(1) further permits the Commission, after conducting such investigation and finding that a practice is unreasonable, unsafe, improper, or inadequate, to determine the reasonable, safe, proper, or adequate practice or methods to be observed and to fix same by Order.

While Commission Staff acknowledges the tragic loss of life in this incident, the Commission's authority is limited to determining whether the jurisdictional utility (here, KU) violated any of the aforementioned statutes, the NESC, its safety manual, or any Kentucky Public Service Commission regulations. Commission Staff's review of KU's seven day summary report found no indications of compliance issues or probable violations related to any of the aforementioned statutes, the NESC, KU's safety manual, or any Kentucky Public Service Commission regulations.

Public safety is always a priority of the Commission. Therefore, the Commission encourages KU to review the details of this incident and determine if there are any additional safety precautions which could be implemented to prevent this type of situation from reoccurring in the future. Additionally, Commission Staff strongly recommends that KU, as well as all other electric utilities across the state, work closely with the fire departments in their service territories to review safety practices that should be used when aerial ladder trucks are in close proximity to energized lines.

The documentation provided for the incident will be placed in the utility's records and this matter will be considered closed.

If you have any questions, concerns, or need additional information, please feel free to contact Aaron Ann Cole or Jonathan Beyer at (502) 564-3940.

Sincerely,



Jeff Derouen
Executive Director



PPL companies

RECEIVED

AUG 28 2014

PUBLIC SERVICE
COMMISSION

LG&E and KU Energy, LLC
Corporate Law
220 W. Main Street
Louisville, Kentucky 40202
www.lge-ku.com

Jay Warren
Senior Corporate Attorney
T 502-627-3203
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Jay.Warren@lge-ku.com

August 28, 2014

Mr. Eric Bowman
Kentucky Public Service Commission
221 Sower Boulevard
P.O. Box 615
Frankfort, Kentucky 40602

Re: Campbellsville Fire Department Injury Incident
14-ES-E-024-KU

Dear Mr. Bowman:

I am forwarding the enclosed incident report prepared by Keith McBride and Brian Claypool regarding the above referenced incident that occurred on August 21, 2014. This report is being submitted as required by Section 26 of 807 KAR 5:006.

Please return a file stamped copy in the envelope enclosed.

If you need additional information concerning this incident, please contact me at (502) 627-3203 so I can direct your request to the appropriate person.

Sincerely,

Jay Warren

JWW/kggh

Enclosures

KPSC INVESTIGATION REPORT

Transmission Line Contact with Injuries

Type of Report

14-ES-E-024-KU

Report Number

Keith McBride – Brian Claypool

Investigators

August 21, 2014

Date of Incident

**Location: Campbellsville University
Intersection of Chandler Ave. and Spring Street
Campbellsville, Taylor County, Kentucky 42718**

Incident Summary

On Thursday, August 21, 2014, at approximately 11:47 a.m., the KU Distribution Control Center (DCC) received notice of a possible contact incident involving the Campbellsville Fire Department.

KU DCC dispatched trouble and transmission personnel to the scene.

Upon confirmation of the incident and injuries, Ken Sheridan, LG&E-KU Director of Safety and Technical Training, notified the Kentucky Public Service Commission of the incident.

Outage Investigation

On Thursday August 21, 2014, at approximately 11:44 a.m., the LG&E-KU Transmission Control Center (TCC) dispatch spoke with East Kentucky Power Cooperative (EKPC) dispatch and confirmed that the Taylor County to Green County EKPC 69KV line operated two times, reclosed and held.

At 11:51 a.m., EKPC dispatch reported that the fault was between W86-Green River Plaza (EKPC Load) and 768-Campbellsville #1 (KU Load).

LG&E-KU TCC dispatch reviewed records and determined that no scheduled work had been planned by or reported to LG&E-KU TCC. TCC relayed this information to the responding line crews.

KU DCC Dispatch received report of a Campbellsville Firefighter in need of immediate assistance at Campbellsville University at approximately 11:47 a.m. At 11:55 a.m., KU DCC relayed this information to LG&E-KU TCC. Upon receipt of this information, LG&E-KU TCC removed the re-closer on the Taylor County 200-614 breaker and requested EKPC to remove the re-closer on the Green County W45-604 breaker.

At approximately 12:00 p.m., KU DCC reported multiple firefighters down and requested that TCC de-energize the Taylor County/ Green County EKPC 69KV line. TCC confirmed the line information and began de-energizing, opening the Taylor County 200-614 breaker and requesting EKPC dispatch to open the Green County W45-604 breaker.

Once field personnel were on-scene and the fault location was determined, TCC began to isolate the fault to restore customers. At 12:45 p.m., the Campbellsville #1 768-625 switch was opened and TCC requested that the EKPC dispatcher close Green County W45-604.

All KU customers were restored at 12:55p.m. At 2:52 p.m. jumpers were cut between the Campbellsville #1 768-625 switch and East Kentucky Mile Lane W27 tap to provide safety clearance to the incident scene and to restore East Kentucky W27 Mile Lane out of Taylor County.

Incident investigation

On Thursday August 21, 2014, at approximately 11:44 a.m., a Campbellsville Fire and Rescue (CFR) crew was operating a 2009 Pierce, quint company aerial truck which included a 95 foot mid-mounted metallic ladder-platform.

The purpose of the event was to assist the Campbellsville University Marching Band with the ALS “Ice Bucket Challenge.”

Once the CFR crew arrived on scene they held a job briefing and discussed the aerial ladder-platform operation and the overhead conductors located in the vicinity.

The 69kV conductors involved were in a vertically constructed position.

The CFR crew setup the 2009 Pierce, quint aerial truck with a mid-mount 95 foot aerial ladder-platform in the intersection of Chandler Ave. and Spring St. Once the four outriggers were in place, the aerial ladder-platform was raised out of the truck’s bed and rotated counter clock wise to a position that was 90 degrees off of the right side of the truck. Once in position, the Firefighters in the platform basket raised the aerial ladder-platform to a height of approximately 20 to 25 feet.

Once the aerial ladder-platform was in the operating position the CFR crew turned the truck off. Firefighters on the ground opened the hydrant and the Firefighters in the platform basket operated the water flow through a nozzle located at the platform basket at hydrant pressure only.

Once the ALS “Ice Bucket Challenge” was completed, the Firefighters shut down and drained the water from the master stream line and started the truck in preparation to operate the truck and bed the aerial ladder-platform.

For an unknown reason, the Firefighters operating the aerial ladder-platform from the basket raised the aerial ladder-platform higher than it was previously set-up. According to a witness, the firefighters continued to raise the aerial ladder-platform straight up until one of the Firefighters standing on the right side of the basket came into contact with the 69kV line causing a large arc.

Witness statements indicate that one of the Firefighters contacted the 69kV line twice and the other Firefighter contacted the 69kV line once.

After the initial contacts the other Firefighters on scene and the first responders arriving on scene completed the rescue of the injured Firefighters out of the platform basket.

Both Firefighters were flown to University of Louisville Hospital and remain in the level 1 burn unit. Firefighter Simon Quinn has been reported as being in fair condition and Captain Tony Grider is in critical condition.

Witness Statements

On August 22, 2014, KU Investigators interviewed Campbellsville Fire and Rescue Capt. Steve Marris and Firefighter Alex Johnson.

KU Investigators also briefly interviewed Kyle Davis, Campbellsville University Director of Campus Safety and Security, who witnessed the incident. Mr. Davis was unable to be interviewed at length at that time and has submitted a written statement sent to LG&E-KU via e-mail.

Steve Marris, Captain-Paramedic
3590 Palestine Road
Campbellsville, Kentucky
Campbellsville Fire and Rescue
Fire Service – 18 years

According to Capt. Marris, the crew arrived on site and performed a job briefing prior to the operation of the aerial truck. Capt. Marris stated that the location and position of the overhead conductors in the immediate area were discussed and noted. Capt. Marris stated that it was further discussed that the aerial truck operation was limited in scope and that the ladder-platform would not encroach the minimum approach distance or come into contact with the overhead lines.

Capt. Marris stated that the aerial ladder-platform was raised out of the bed and rotated 90 degrees off of the right side of the truck. Capt. Marris stated that the aerial ladder-platform was not extended for this exercise.

Capt. Marrs stated that after the ALS “Ice Bucket Challenge” was over, he opened the drain on the right side of the truck and was operating the drain valves on the left side of the truck at the operator panel when he heard the truck’s engine rev up. Capt. Marrs stated that the revving engine was an indication that the aerial ladder-platform was in operation.

Capt. Marrs stated that as he was standing on the operator side panel step, a flash occurred all around him. Capt. Marrs stated that he jumped from the truck. Capt. Marrs stated that as he turned to return to the truck a second flash occurred forcing him back.

Capt. Marrs stated that after what seemed like several minutes, a third flash occurred. Capt. Marrs stated that he regained his senses and composure and assisted with the rescue of the Firefighters in the platform.

Capt. Marrs stated that he did not receive any burns and at no time did he feel that he had received any shock. Capt. Marrs stated that he was transported to the Taylor Regional Hospital in Campbellsville, Kentucky for observation and was released shortly after.

Alex Johnson, Firefighter
100 Otis Lane
Campbellsville, Kentucky
Campbellsville Fire and Rescue
Fire Service – 4 years

According to Firefighter Johnson, the crew arrived on site and performed a job briefing prior to the operation of the aerial truck. Firefighter Johnson stated that the location and position of the overhead conductors in the immediate area were discussed and noted.

Firefighter Johnson stated that it was further discussed that the aerial truck operation was limited in scope and that the ladder-platform would not encroach the minimum approach distance or come into contact with the overhead lines.

Firefighter Johnson stated that the aerial ladder-platform was raised out of the bed high enough to clear the bracket and safety guides on the rear of the truck. Firefighter Johnson stated that the ladder-platform was then rotated 90 degrees and positioned off of the right side of the truck.

Firefighter Johnson stated that Capt. Grider and Firefighter Quinn were on the platform and they were adjusting the water nozzles to produce a fog pattern for the ALS “Ice Bucket Challenge.”

Firefighter Johnson stated that after the event was completed, Capt. Marrs started operating drain valves while he started pulling the safety pins on the trucks outriggers for truck shut down and stowing operation.

Firefighter Johnson stated that he had just pulled the safety pin on the front driver side outrigger, when he heard an arc and saw a large flash near the operator panel and out from underneath of the truck.

Firefighter Johnson stated that he felt a pain in his legs and back and was forced back. Firefighter Johnson stated that when he regained his senses he was standing on the driver side of the truck and was in-line with the ladder and was looking at Firefighter Quinn yelling that Capt. Grider was down.

Firefighter Johnson stated that Firefighter Quinn had knelt down to assist Capt. Grider. Firefighter Johnson stated that as he was making his way back to the truck, Firefighter Quinn stood up. Firefighter Johnson stated that Firefighter Quinn made contact with the line and a second flash occurred.

Firefighter Johnson stated that as he and another Firefighter made their way to the operator panel step to lower the ladder-platform he saw Capt. Grider stand up in the platform basket and observed that he appeared disoriented. Firefighter Johnson stated that Capt. Grider turned and made contact with the line with the left side of his head. This caused a third flash.

Firefighter Johnson stated that others on scene lowered the ladder-platform and extended it to place the platform basket on the ground. Firefighter Johnson was transported to the Taylor Regional Hospital via EMS.

Firefighter Johnson stated that he underwent several tests including blood work. Firefighter Johnson stated that the Taylor Regional Hospital Emergency Room Doctor confirmed to him that he had been exposed to electricity. Firefighter Johnson stated that he was held for several hours until the last test came back normal and he was released.

Firefighter Johnson stated that he still has pain in his back and shoulder and that there is a numb feeling in his legs. Firefighter Johnson also has several blisters on the bottom of both feet.

Kyle Davis
Campbellsville University
Director of Campus Safety and Security
1 University Dr. UPO 788
Campbellsville KY, 42718
Office: 270-789-5556
Cell Phone: 270-403-3611
Statement attached

Measurements / Conditions

69kV Bottom phase @ burn mark to earth – 40ft 6in / Contacted
69kV Middle phase @ burn mark to earth – 47ft 5in
69kV Top phase to @ burn mark to earth – 54ft
69kV Static wire to @ burn mark to earth – 62ft
Burn mark to nearest structure – 83ft 6in (pole north of incident site)

7200 road phase nearest to incident site to earth – 37ft
7200 middle phase nearest to incident site to earth – 36ft 3in
7200 field phase nearest to incident site to earth – 35ft
Neutral nearest to incident site to earth – 28ft 1in

Sunny

Clear

Wind calm

Temp – 90's

Measurements taken by Keith McBride and Brian Claypool, LG&E-KU

Still Hospitalized, Campbellsville Firefighters

Captain-Paramedic Tony Grider

Columbia, Kentucky

41 years old

Firefighter Simon Quinn

Campbellsville, Kentucky

22 years old

Additional Information

Fire Chief Kyle Smith
Campbellsville Fire and Rescue
100 West Broadway
Campbellsville, Kentucky 42718
270 465-4131

Fire Chief Charles W. Shaw (Ret.) – Incident Scene Commander
108 Wakefield Drive
Campbellsville, Kentucky 42718
270 572-6161

Firefighter Cody Woods – Incident Commander
Campbellsville Fire and Rescue
100 West Broadway
Campbellsville, Kentucky 42718
270 465-4131

Kyle Davis - Witness
Campbellsville University
Director of Campus Safety and Security
1 University Dr. UPO 788
Campbellsville KY, 42718
Office: 270-789-5556
Cell Phone: 270-403-3611

DATE OF REPORT: August 28, 2014

END OF REPORT

Below is my statement to the order of events which occurred on August 21, 2014, beginning at approximately 10:30 a.m. Thursday morning.

I was working in my office Thursday morning listening to the local 911 Dispatch Center's radio traffic when I overheard Campbellsville Fire Department inform them they were on Campbellsville University's campus performing a special detail. I was unaware of the fire department's special detail so I left the office to see what they were doing. I arrived at the corner of Tiger Way and Matthew Street to find the fire department's ladder truck being driven by Captain Steve Marrs sitting in the intersection. He informed me they had been asked to assist the band with an "Ice Bucket Challenge". Captain Tony Grider arrived shortly after I arrived. I am unsure when Simon Queen arrived.

The conversation we had upon my arrival was to discuss where this event should occur. They, Captain Marrs and fireman Alex Johnson, had initially thought about doing the challenge closer to this intersection. I had concerns there would be a large amount of water which would flow onto the field making it muddy. Alex Johnson agreed. I called the landscaping director to get his opinion. We concluded the large gravel parking lot across from the Men's Residence Village would be best. The firemen decided to go down the street to the next intersection instead. I am assuming this was to be closer to the hydrant. We still had concerns about the drainage and, I believe Alex Johnson, did mention the power lines at this time. We all concluded after looking over the area it would be ok. The ladder was positioned several feet below the lines facing west down Spring Street. The fireman continued to improve the outflow of the water by adding another spray nozzle. The set up took about 30-45 minutes. Captain Tony Grider along with Simon Queen was positioned in the ladder truck's bucket. Captain Marrs and Firemen Alex Johnson were on the ground.

The band director arrived around 11 am to discuss the event. She first inquired that the person who was going to film the event be allowed to get in the bucket with the fireman. I decided that was not safe for a student and requested that we use the maintenance lift sitting right beside us instead. I called the Maintenance Supervisor Alvin Humphries to assist us by operating the lift. Alvin arrived shortly after my request and agreed to help them out. Alvin began positioning the lift in the middle of the street facing the ladder truck. The student, Jennifer (last name unknown), got in the lift and Alvin raised it up about 10-20 feet with her in it. This was in the middle of the street and not under the wires.

The band arrived shortly before 11:30 to conduct the Ice Bucket Challenge. The challenge lasted about 15 minutes. After the completion of the fundraising event, the students left the area. At this time, when the students had left and were halfway across the field, the maintenance lift had been driven back; I stood directly behind the ladder truck approximately 10-15 feet. To my right and slightly behind me was the band director Jennifer Tinnell. 5-10 feet behind her was Alvin. Steve (looking at the rear of the truck) was on the left side closer to the rear tires next to the sand pile. Alex was in front of the truck on the left side next to the baseball field sidewalk.

I looked up and saw the ladder retracting and (I don't know why) but they were raising it up at the same time. I saw Tony, facing down towards the ground and not looking up, hit the bottom power line with the top of his head. There was no arc. He made direct contact to the line. I did not see Simon in the bucket when this happened. He may have been standing directly behind Tony or on the other side. As he hit the line, I felt the percussion wave and the heat from the blast. I froze where I was standing and ducked down. I looked up and saw Steve scream and run towards me. When the second

blast occurred about 10 seconds later I saw the initial flash from the bucket and the biggest flash come out the side of the stabilizer on the left side of the truck. For me, this was the largest of the three blasts and again I felt the percussion of the blast, and the heat from where I was standing, push me back. I heard Alex scream on the radio to dispatch asking for help and to get rescue to them now! Steve or Alex told them to get KU to shut off the power immediately. After the second blast I began to run up the hill telling the students and the band to get back. When I arrived at the top of the hill I saw Simon stand up in the bucket. It was vague, but I am pretty sure he made direct contact. I am not 100% certain of this. Once the third blast occurred, and the electricity had been shut off Alex was able to drop the ladder.

I continued to direct traffic and pedestrians away from the scene at the top of the hill. I called James Dean the director of the Men's Village to help by making sure all the students in that area were kept clear of the scene.

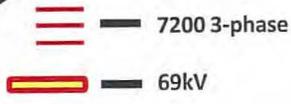
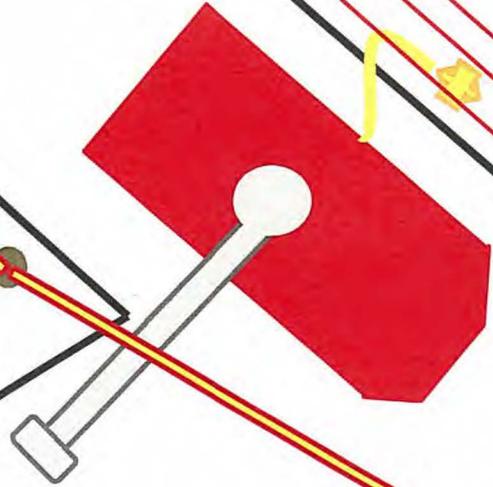
A handwritten signature in black ink that reads "Kyle Davis". The signature is written in a cursive, flowing style.

Kyle Davis
Director of Campus Safety and Security



Chandler Ave.

Spring St.



Not to scale



Note location
of 69kV lines

NOT A KU PHOTOGRAPH



NOT A KU PHOTOGRAPH

































GORTITE®
Roll Up
Doors

Manufactured Exclusively
For



U.S.A.

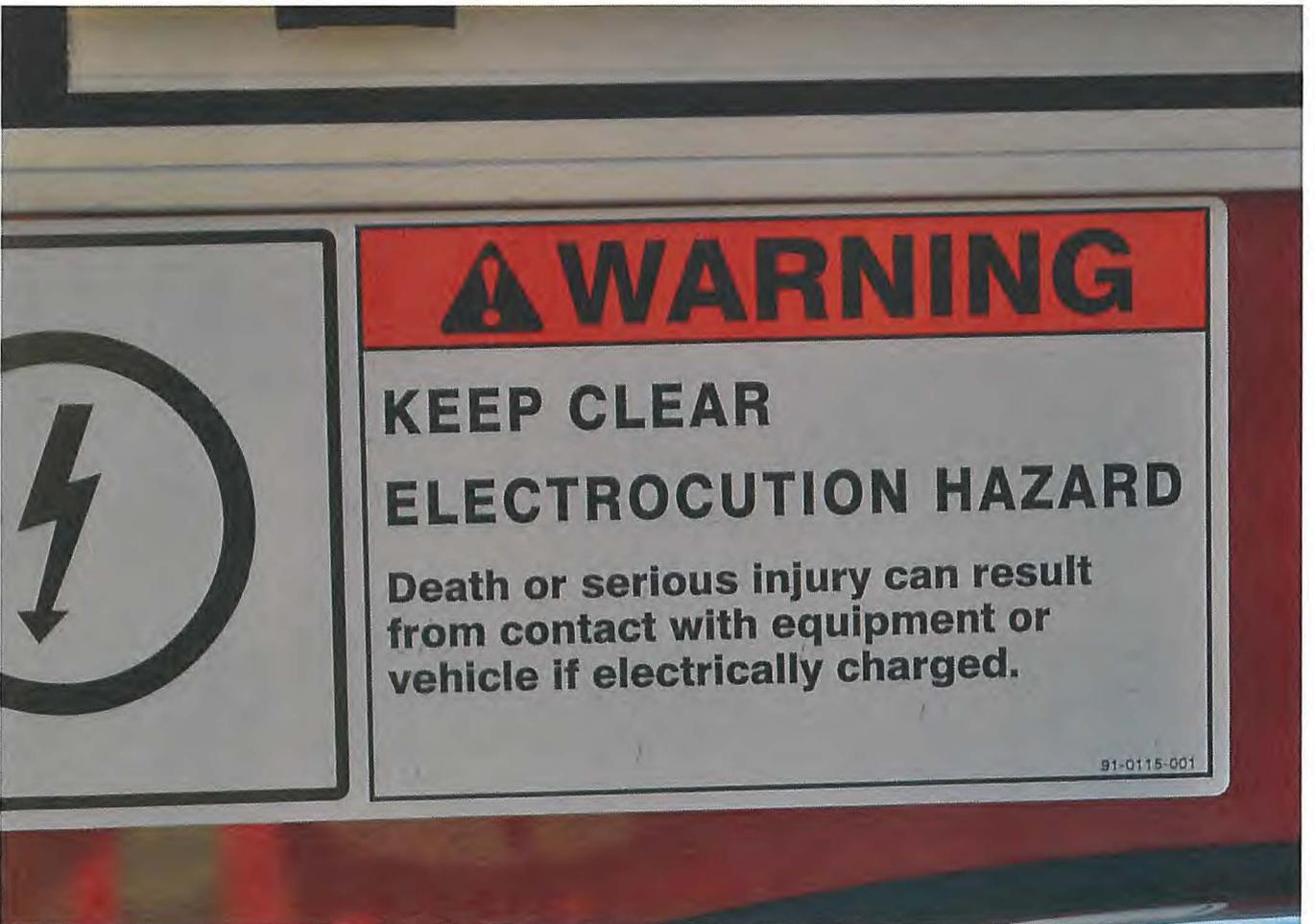
A&A Mfg. Co., Inc.
New Berlin, WI
262-786-1500

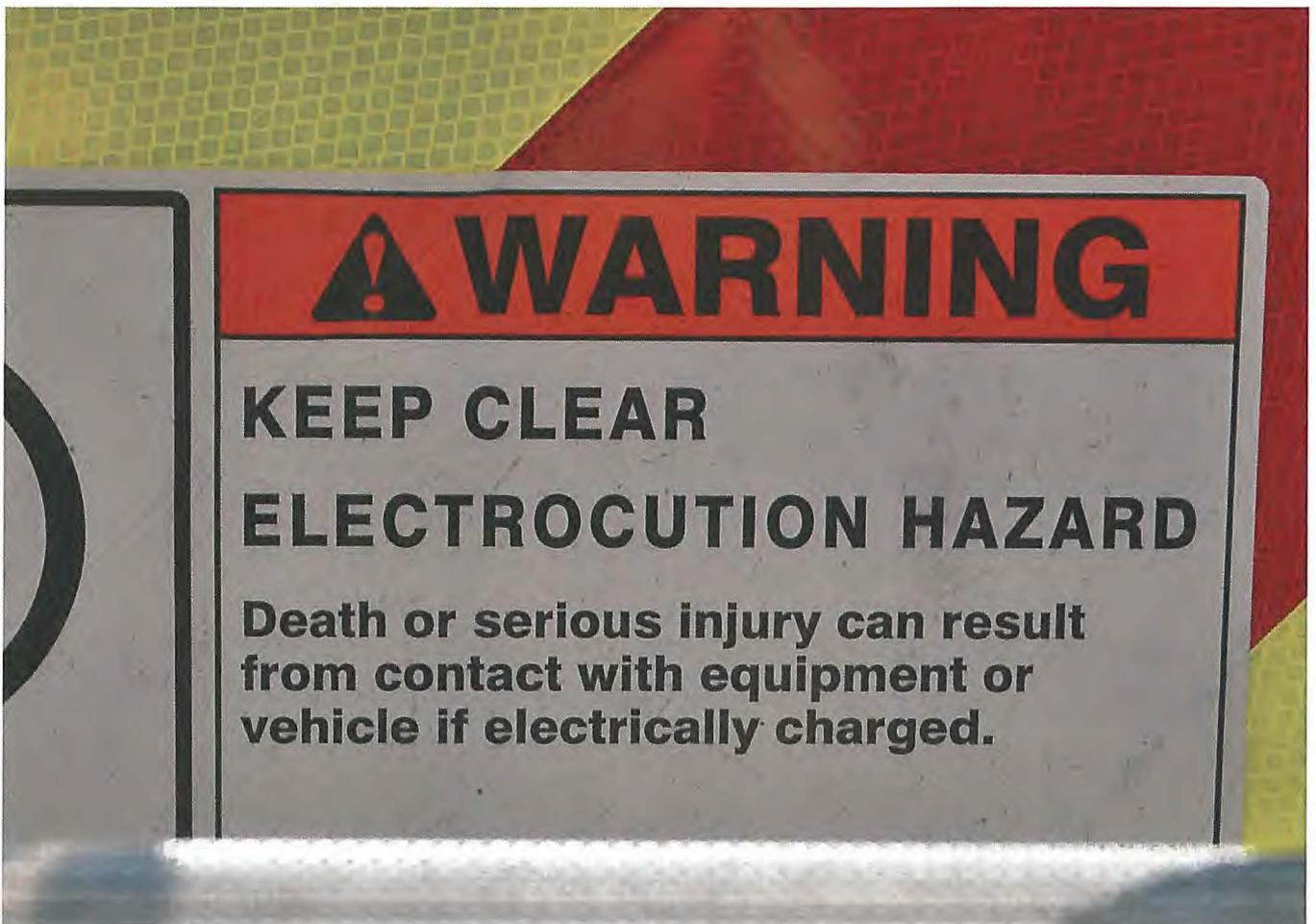
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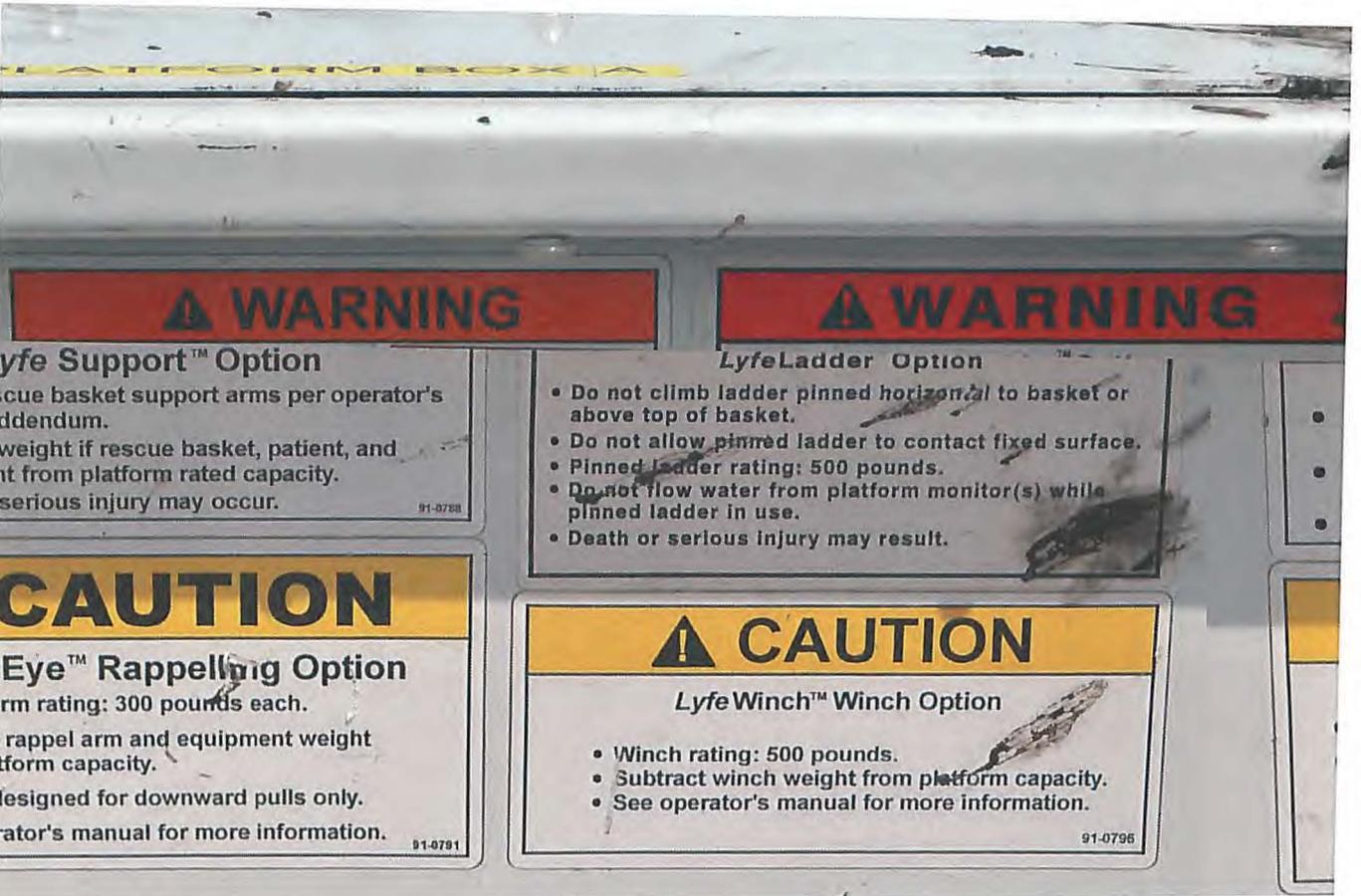


WARNING
 Support™ Option
 support arms per operator's
 rescue basket, patient, and
 from platform rated capacity.
 serious injury may occur.

WARNING
 LyfeLadder™ Option
 • Do not climb ladder pinned horizontal to basket or above top of basket.
 • Do not allow pinned ladder to contact fixed surface.
 • Pinned ladder rating: 500 pounds.
 • Do not flow water from platform monitor(s) while pinned ladder in use.
 • Death or serious injury may result.

CAUTION
 Rappelling Option
 300 pounds each.
 and equipment weight
 platform capacity.
 designed for downward pulls only.
 See operator's manual for more information.

CAUTION
 LyfeWinch™ Winch Option
 • Winch rating: 500 pounds.
 • Subtract winch weight from platform capacity.
 • See operator's manual for more information.



WARNING
 Lyfe Support™ Option
 rescue basket support arms per operator's
 addendum.
 weight if rescue basket, patient, and
 from platform rated capacity.
 serious injury may occur.

WARNING
 LyfeLadder™ Option
 • Do not climb ladder pinned horizontal to basket or above top of basket.
 • Do not allow pinned ladder to contact fixed surface.
 • Pinned ladder rating: 500 pounds.
 • Do not flow water from platform monitor(s) while pinned ladder in use.
 • Death or serious injury may result.

CAUTION
 Eye™ Rappelling Option
 arm rating: 300 pounds each.
 at rappel arm and equipment weight
 platform capacity.
 designed for downward pulls only.
 See operator's manual for more information.

CAUTION
 LyfeWinch™ Winch Option
 • Winch rating: 500 pounds.
 • Subtract winch weight from platform capacity.
 • See operator's manual for more information.

FORM

CONDITION

| 8 | 50 TO 59 | 60 TO 79 |
|------|----------|----------|
| 1000 | 1000 | |
| 200 | 200 | |
| 300 | 300 | |
| 400 | 400 | |
| 500 | 500 | |
| 600 | 600 | |
| 700 | 700 | |
| 800 | 800 | |
| 900 | 900 | |

CONDITION

| 47 | 48 TO 59 | 60 TO 79 |
|-----|----------|----------|
| 100 | 100 | |
| 200 | 200 | |
| 300 | 300 | |
| 400 | 400 | |
| 500 | 500 | |
| 600 | 600 | |
| 700 | 700 | |
| 800 | 800 | |
| 900 | 900 | |

EVENTS

REMOVED TO WITHIN SAFE

USE OPERATION

NOZZLE POSITIONS

HORIZONTAL

VERTICAL

UNLIMITED POSITIONS



⚠ WARNING

Do not operate unless:

- Trained in safe operation of device.
- Know and follow the safety and operating instructions in manufacturer's manuals, employer's work rules, and applicable governmental regulations.
- All personnel on aerial ladder or platform are wearing safety belt properly attached to device.
- Operated within rated capacity.
- Stabilizers properly deployed.
- Device visually inspected.

Death or serious injury may occur.

91-9050

⚠ WARNING

Electrocution Hazard

- Maintain clearance between electrical power lines, and apparatus.
- Allow for aerial sway, rock, or sag.
- Machine not insulated.
- Aerial not protected from electrically charged conductor.

Death or serious injury may occur.

91-0114-000

400

500

60 TO 75

400

500

600

700

800

900

WITHIN SAFE

POSITIONS

VERTICAL

POSITIONS



- Know and follow the safety and operating instructions in manufacturer's manuals, employer's work rules, and applicable governmental regulations.
- All personnel on aerial ladder or platform are wearing safety belt properly attached to device.
- Operated within rated capacity.
- Stabilizers properly deployed.
- Device visually inspected.

Death or serious injury may occur.

91-9050

⚠ WARNING

Electrocution Hazard

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- Allow for aerial sway, rock, or sag.
- Machine not insulated.
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Death or serious injury may occur.

91-0114-000

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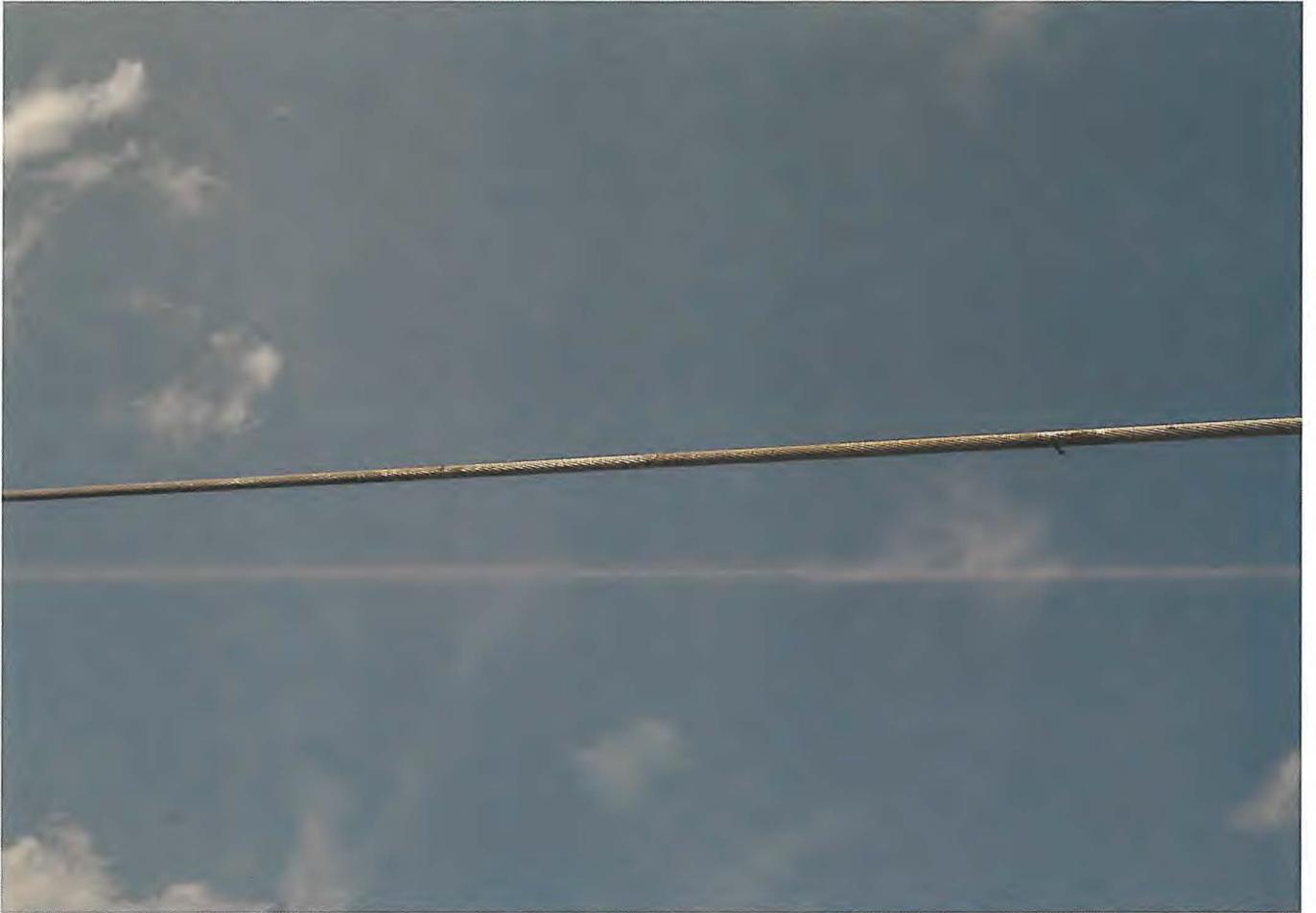
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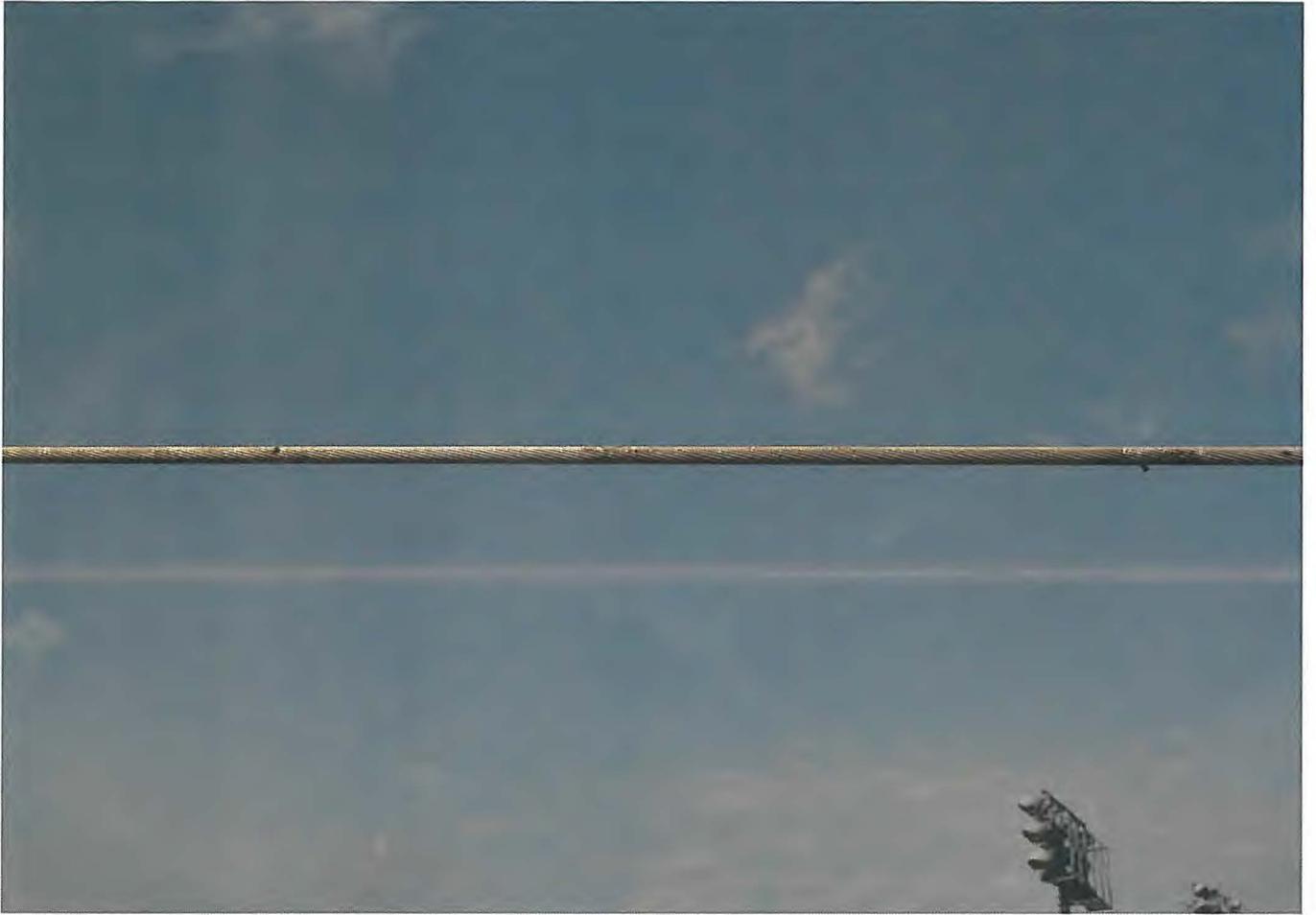


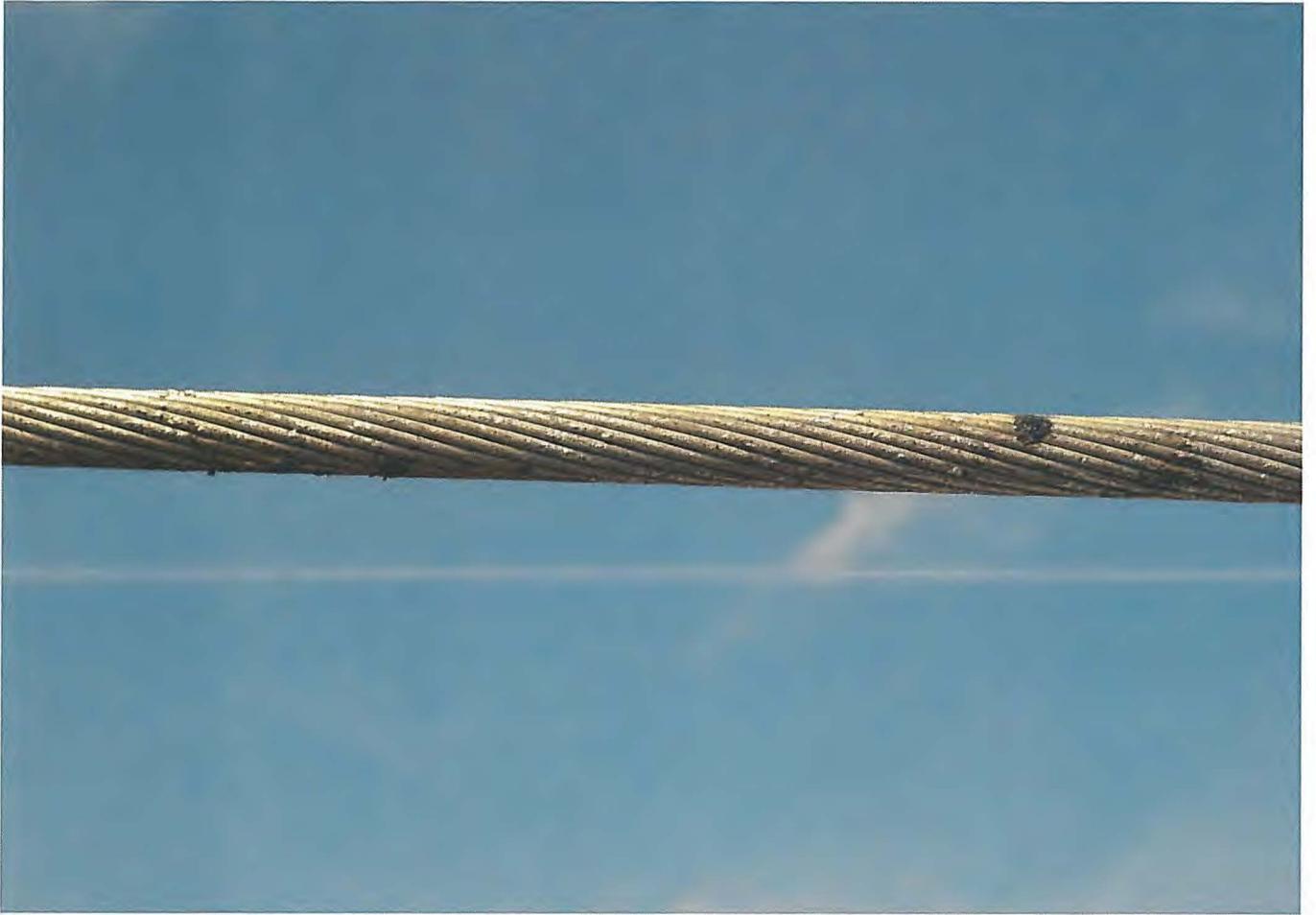


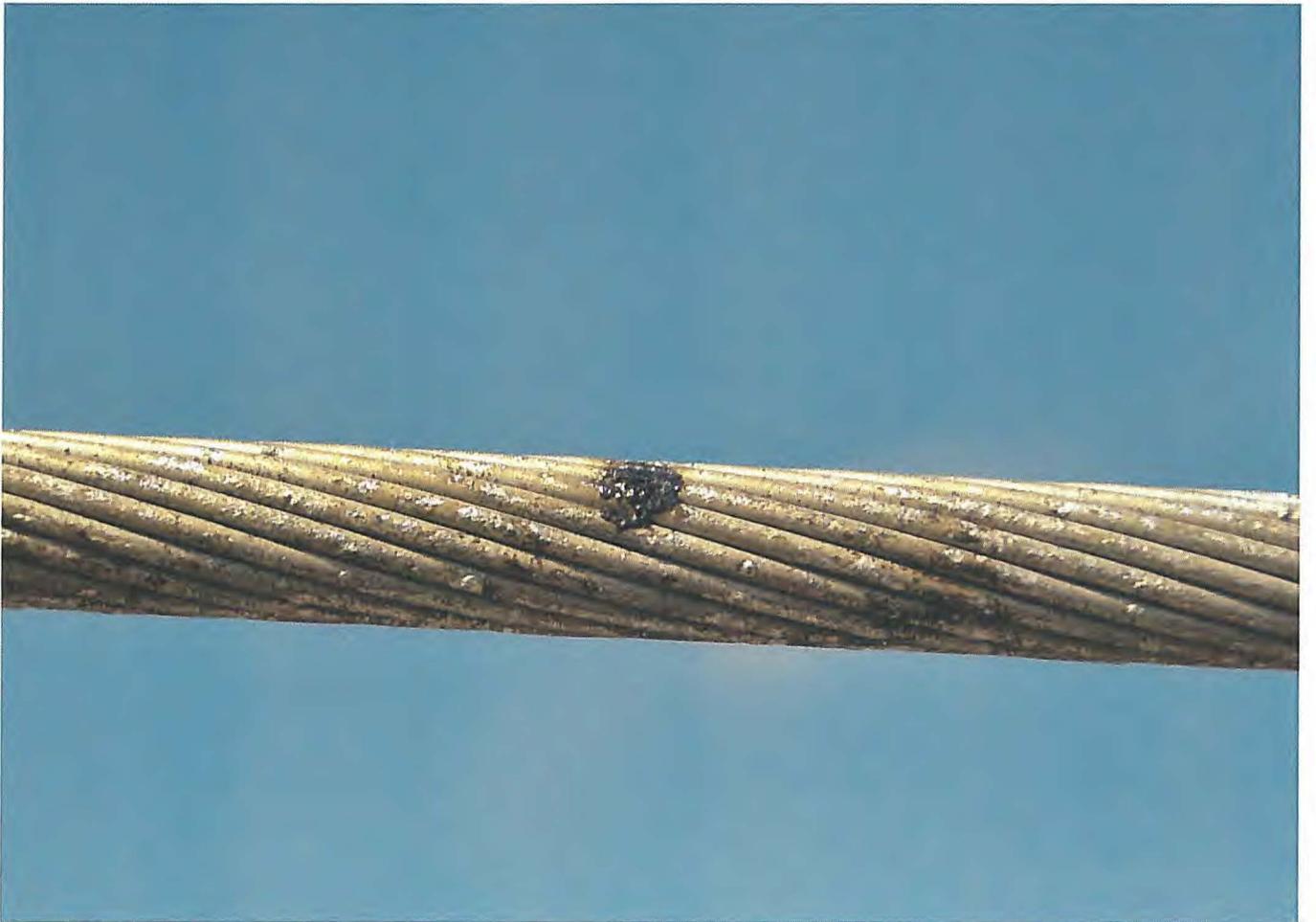
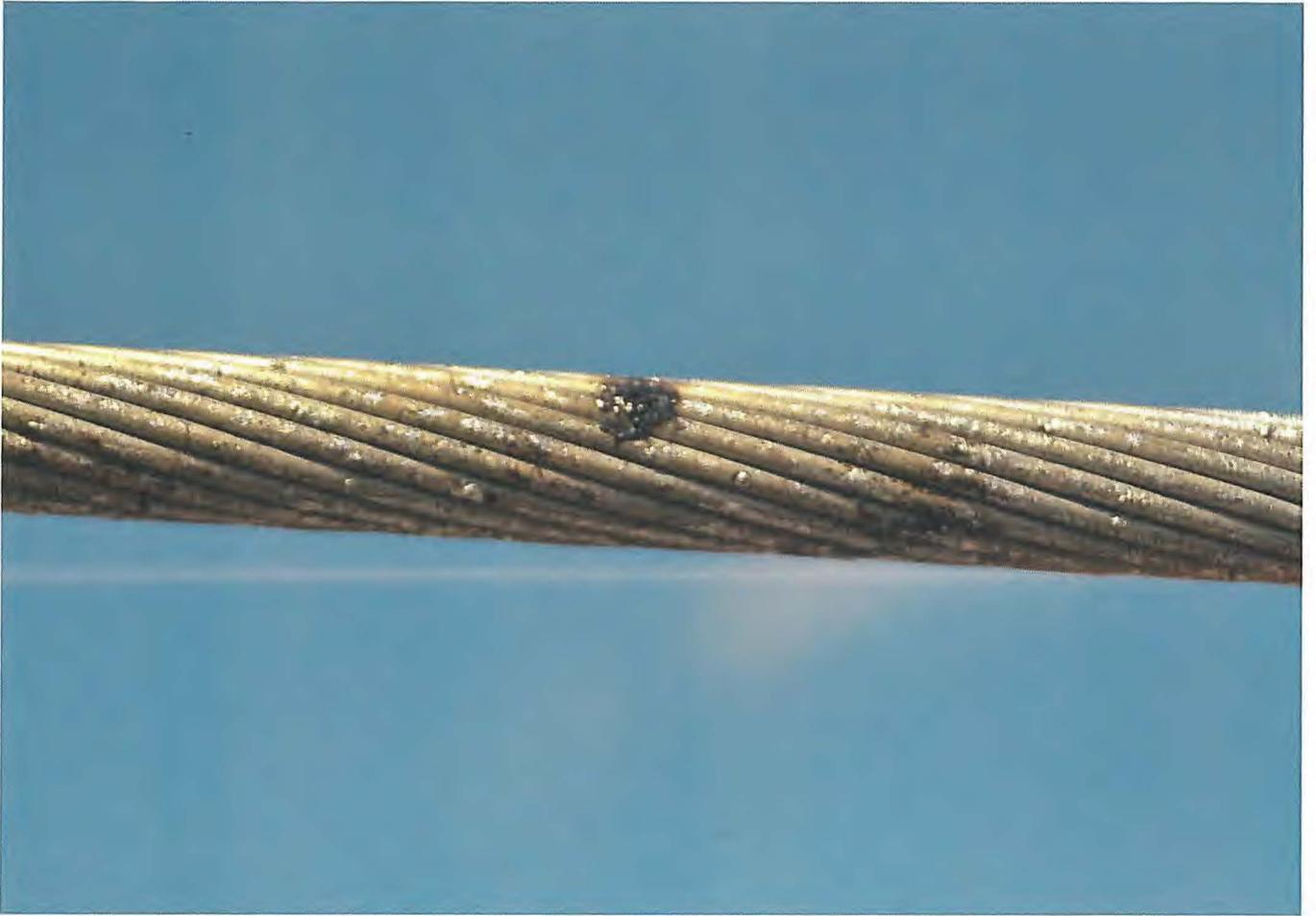


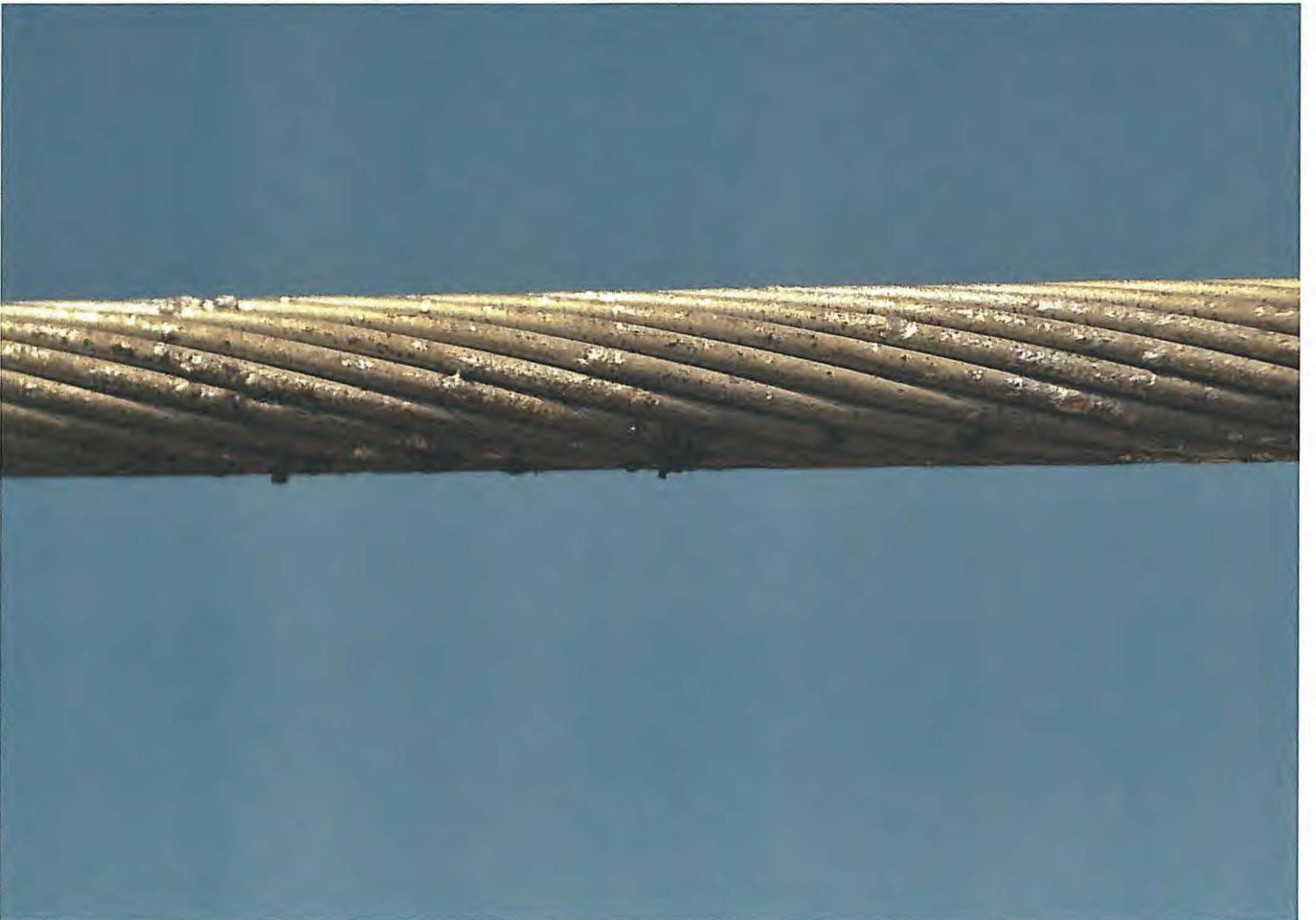
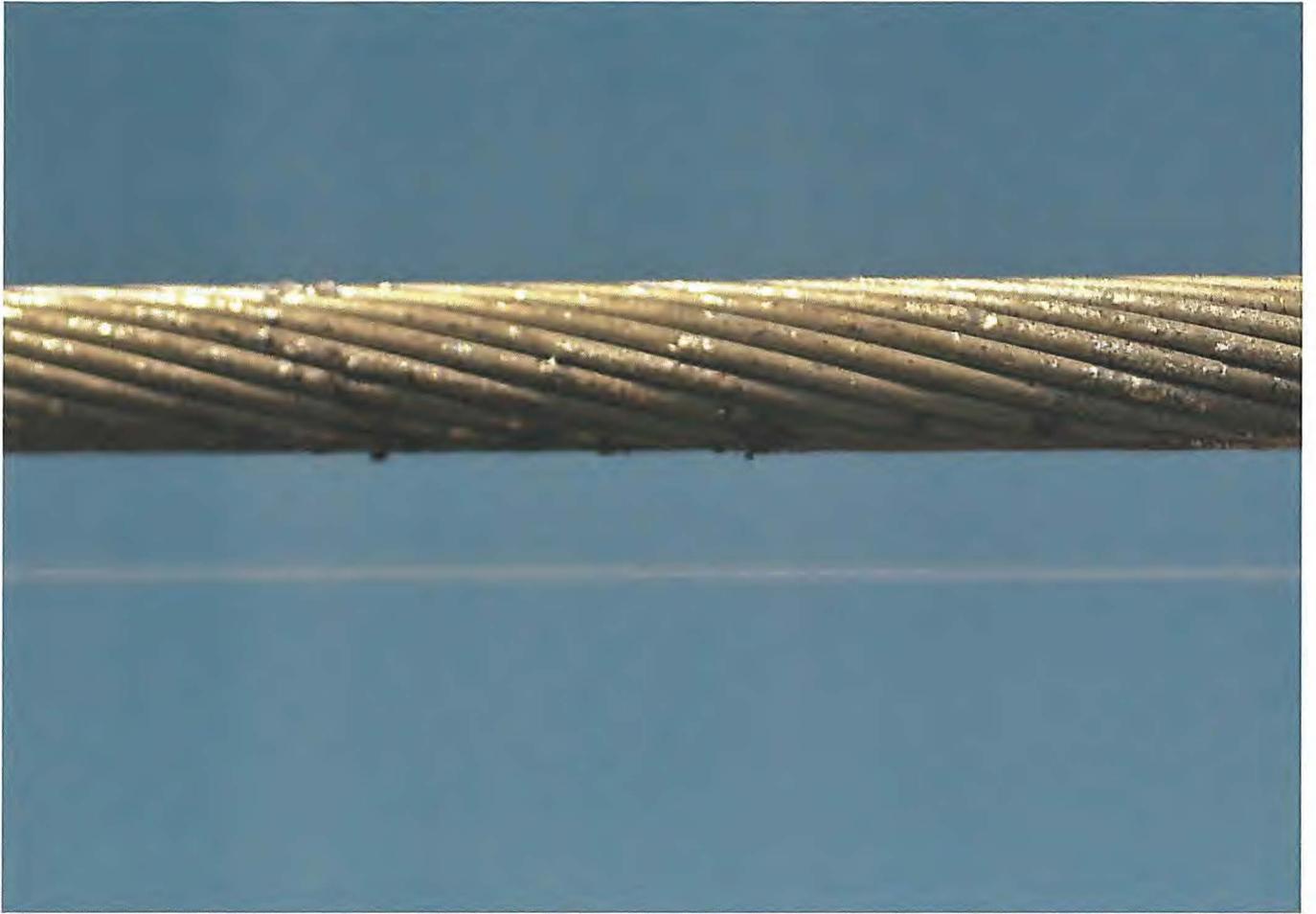


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