



Notice of Joint Safety Committee Meeting - 2020

To: All parties in interest

Date: 11/20/2020

Via: E-Mail Transmission

E-Mail: jweaver@westernlineneca.org

This is a reminder that our next **Quarterly Meeting** of the **California [Red Safety Book] Joint Safety Committee** is scheduled for **Wednesday, December 2, 2020** at **9:00 am** pacific time.

FYI, the meeting on December 2nd is being held via the [GotoMeeting](#) platform and **you will have to log into a computer to participate in this meeting.** Please download the [GoToMeeting](#) app and plan on having a computer/iPad available at 9:00 am in the morning to participate in this virtual meeting.

The **Meeting Minutes** from our last Safety Committee Meeting held on September 15, 2020 are available for download from the Chapter's website: WesternLineNeca.org

Thanks,
Jules W. Weaver
Chapter Manager

MEETING MINUTES
IBEW 47-1245 / WLCC-NECA JOINT SAFETY COMMITTEE
September 15, 2020
Via: GoToMeeting Platform

Present:
Mgmt:

James Stapp
AJ Zartman
Lon Peterson
Raul Guardado
Zach Zuelner
Jeremy Atchison
Kellie Whittemore
Trevor Kirkland
Ward Andrews
Jacob Milhoan
Clayton Loback
Jeremy Hessler
Ben Nelson
George Bradshaw
Lawrence “Kaz” Kazmierski
Danny Ashmore
Ed Antillon
Ron Cochran
Eric Ball
Joseph Kittle
Erich Metzger
Ryan Smith
Kevin Rose
Jacob Christensen
Dennis Oliver
James Coleman
Michaeljoe Goldstein
Mike Johnson
Andy Smoot
Brian Bedell
Jeremy Flanders
AJ Long
Mike Garcia
Josh Klingsman
Milton Toscano
Art Deleon
Jules Weaver

IBEW:

Ralph Armstrong
Ralph Kenyon
Casey Kelley
Rod Peterson
Arnold Trevino

Cal-NEV

JATC:

Don Jamison

Meeting called to order by Chairman Armstrong at 9:30am.

Chairman Armstrong welcomed the group to our second virtual meeting and had everyone introduce themselves.

Previous Minutes:

M/S/C to approve the Meeting Minutes of the Joint Safety Committee Meeting held on **June 18, 2020.**

Review of Accidents & Incidents:

The updated **Accident & Incident Reports** is attached hereto as **Exhibit A.**

Local 1245 - Northern California: as reported by Mr. Armstrong & Mr. Kelley: Mr. Kelley reported on an incident that had just occurred with one of line contractors and noted the incident is still under investigation. Local 1245 noted that they had no additional accidents/incidents to report beyond the accidents or incidents that will be reported on today and those incidents included in the Accident & Incident Report attached hereto as **Exhibit A.**

Local 47 - Southern California: as reported by Arnold Trevino and Rod Peterson:

Mr. Peterson thanked the Contractors for their efforts on the safety front with all the work going on and noted that Local 47 had no additional accidents/incidents to report beyond those accidents or incidents that will be reported on today and those incidents included in the Accident & Incident Report attached hereto as **Exhibit A.**

Contractor's Reports:

The Contractors present reported on the accidents and incidents in the attached **Exhibit A** and some additional incidents or near misses. The following Contractors noted they had no accidents or incidents to report on today:

Ferreira Power West, LLC

Underground Electric Construction Co., LLC

VCI Utility Services

JATC Reports: Director Jamison noted that he appreciated the Contractors relaying accidents and close calls to the apprenticeship and how they are used for educational purposes at the JATC. Mr. Jamison noted that he had no accidents/incidents to report on beyond what has already been reported on today and those incidents set forth in the Accident & Incident Report attached hereto as **Exhibit A.** Mr. Peterson discussed the issue of Apprentices working in buckets by themselves and reminded the group that apprentices cannot perform primary work by themselves and a general discussion followed regarding the crew makeup language in the California Outside Line Construction Agreement and our Red Safety Book.

Observations: Overall there are way too many incidents on the job site and vehicle accidents that are occurring off the right-of-way, a general discussion followed.

Exhibits attached hereto:

Exhibit B – Various Wired for Safety Bulletins from SCE

Exhibit C – Equipment Notices

Old Business:

1. Chairman Armstrong noted that revised Red Safety Book [Red Book] has been printed and is out in circulation. It was also noted that “pdf” copies are available for download on the Chapter’s and Local’s websites.
2. Mr. Weaver gave a brief update on the Safety Wallet – text based certifications system. A general discussion followed.

For the record, the **Red Book Subcommittee** is composed of the following 8 individuals from Labor and Management:

Labor

Ralph Armstrong
Richard Lane
Rod Peterson
Arnold Trevino

Management

Ward Andrews
Hal Lindsey
Chris Larson
Hank Rivera

It was noted for the record that the **8 - IBEW /NECA Safety Committee** members per the California Outside Line Construction Agreement are as follows:

Labor Representatives

Ralph Armstrong
Ralph Kenyon
Rod Peterson
Arnold Trevino

Management Representatives

Jim Stapp
AJ Zartman
Ward Andrews
Jules Weaver

New Business:

1. Mr. Weaver and Director Jamison gave an update on the required State of California Sexual Harassment and DOL Harassment Apprentice Training requirements and how those will be implemented through the Safety Wallet system between Cal-Nevada JATC and EICA. More information will be provided at our next meeting. A general discussion followed.
2. Mr. Armstrong led a discussion regarding the continued impact of Covid-19 pandemic on our Industry and a general discussion followed.

Next Meeting Date and Location:

Wednesday – December 2, 2020 at 9:00am via GoToMeeting platform.

Meeting adjourned at 12:40am

IBEW 47 - 1245 / WLCC - NECA

4th Quarter 2020 Accident/Incident Reports

<u>Date Of Incident</u>	<u>Occupation</u>	<u>Type of Incident</u>	<u>Body Part / Root Cause</u>	<u>Description</u>
Contractor Significant Accidents				
1/3/2020	Outside Crew	Injury	Finger Laceration	January 3, 2020 - A line crew was in the process of loading an empty reel onto a trailer using a crane with mandrel and spreader bar. An apprentice lineman was guiding the mandrel out of the reel, which was still attached to the crane. Due to the weight of the mandrel, it swung away as it was clearing the reel and then swung back. The groundman's reaction was to try and physically stop the mandrel from swinging back, putting his hand between the mandrel and the reel. Although the groundman was wearing proper PPE gloves, the force and impact caused a laceration to his left hand index and middle fingers. Instantly, the groundman felt pain. He removed his glove and noticed that he had ripped open the skin on his finger. The groundman was then transported to the nearest urgent care for treatment.
1/22/2020	Tree Trimming Crew	Fatality	Fatality	Fatality - January 22, 2020 , Update on Significant Safety Event Distributed on 1/24/2020. We reported previously that a worker suffered a serious injury in a traffic accident last week. It is with great sadness that we share the news of his passing over the weekend. Our colleague was part of a crew conducting hazard tree removal in Crestline to support Southern California Edison's wildfire mitigation efforts. Tragically, according to reports, he was struck by a third-party vehicle while removing traffic cones. We extend our deepest sympathies to our colleague's family and friends. Please share this update with your team and reinforce your team's focus on safety so we can all work together to ultimately eliminate worker fatalities and serious injuries.
2/11/2020	Outside Crew	Injury	Bruising & Abrasions	Injury - February 11, 2020 , A crew was assigned to disassemble two critical spare B bank transformers at a substation. Two workers were specifically assigned this task. The tailboard discussion included using the forklift to be positioned under the lightning arrester stand crossarm to support the stand while a transformer helper removed the bolts for removal of the stand. Using this procedure, the two workers successfully removed the lightning arrester support stands on one transformer. However, there was a change in plans when the transformer helper noticed the arrester support stand had lifting eyes. They made the decision to use a sling with the forklift to remove the stands. There was no re-tailboard conducted when they changed plans nor did they notify the foreman that they were going to use a different procedure. Once the forklift was positioned near the lightning arrester crossarm, there was no communication between the two workers when one decided to operate the forklift. The driver of the forklift planned on extending the forklift boom when he inadvertently used the wrong control lever and tilted the forks down, causing injury to the transformer helper's back. The transformer helper was transported to a hospital for evaluation and was found to have an abrasion and bruising to his back. The foreman re-tailboarded with the rest of his crew members emphasizing the need to communicate whenever there is a change in plans from the original tailboard. He also reinforced the need for proper 3-way communication when operating forklifts or cranes. All crews were called to make sure they are using the correct tool for the task, especially when lifting heavy equipment off transformers.
2/15/2020	Traffic Control Crew	Injury	Multiple Bruising Sprains & Strains	Injury - February 15, 2020 , A traffic control crew had a right lane closure utilizing signs, cones and an arrow board. While another crew was pulling wire up across the street, the flagger was standing in the street with a stop/slow paddle to stop oncoming traffic as a vehicle approached. His partner on the other end of the job yelled "Look out" and the flagger was struck by the oncoming vehicle. The electrical crew foreman heard a loud crash, which sounded like a vehicle hitting another vehicle, but when he turned to look, he saw the flagger flying off the windshield and landing in the center median. 911 was called and the appropriate notifications were made. The flagger did get up and walk around; however, workers advised him to stay still until the ambulance arrived. The flagger was transported to a hospital and was released the next day. He is currently undergoing pain management and considering a second opinion.

<u>Date Of Incident</u>	<u>Occupation</u>	<u>Type of Incident</u>	<u>Body Part / Root Cause</u>	<u>Description</u>
2/20/2020	Outside Crew	Significant Injury	Multiple Fractures	Injury - February 20, 2020 , Overhead distribution crews were tasked with replacing three poles and re-conductoring seven spans of wire. The crews arrived on site, tailboarded and began preparing for a late evening outage. Once the outages were taken and lines proven de-energized, the crews began to work on their assigned tasks. One crew, which was tasked with re-framing the crossarms, set up their bucket truck and prepared material for the task. The crew was unable to access the commercial property and decided to work the pole from the street. In order to eliminate potential backfeed, the foreman accessed the roof of an adjacent building to open the cutouts. The foreman successfully walked across the roof (corrugated steel) and opened the cutouts via an extendo stick. While returning from the task, the foreman stepped on a corrugated fiberglass sunlight section of the roof and fell through. He fell approx. 25 ft. to the concrete floor below. He sustained several injuries, including multiple fractures, and is currently recovering in the hospital.
3/9/2020	Outside Crew	Injury	Eye Injury - Flash Event	Injury - March 9, 2020 , A substation operator was switching a planned, approved procedure to in-service a 12 kV circuit breaker (CB). As part of the procedure, the 12 kV line was being rolled from the inner 12 kV bus. After closing the 12kV Bus Parallel CB making a parallel between the No.1 Bank 115/12kV and No. 2 Bank 115/12kV, the Operator closed the 12kV Inner operating bus disconnects intending to make a box loop and then proceeded to open the 12kV Outer bus disconnects intending to break a box loop. A large arc and associated fire were produced when the operator opened the first 12 kV outer bus disconnect. During the flash event, the 12 kV bus parallel CB opened, and the 12 kV capacitor leads burned open, extinguishing the arc. During the initial rack inspection following the event, the 12 kV inner bus B-C section disconnects were found open. The operator initially declined medical evaluation, but later reconsidered as he began to feel irritation in his eyes. The operator was checked by a physician at a local medical clinic and later released. Currently, he is resting at home. Switching was completed by different operators to isolate the damaged equipment and return the station to normal.
3/12/2020	Outside Crew	Significant Injury	Fractured Left Leg Tibia	Injury - March 12, 2020 , A crew was tasked to replace a pole and left the yard at approximately 0630 to try to complete the work before a change in weather conditions. The crew set up and transferred the pole without any incident. The crew stopped work when the rain started, given the ongoing rain forecasted for the day. Cleaning up the work area required loading the pole puller with line truck and heading back to the yard. While loading the pole puller, the worker entered the trailer using step location to make room for the pole puller to tie down for transport. The heavy boom operator was swinging the pole puller into location with help of a spotter on the ground when the worker exited from a rear location. The worker stepped on a side fender when his boot was caught on the lip of the trailer, causing him to fall to the ground and injure his left leg at the shin area. The crew stopped work to attend to the worker and advised him to seek medical attention. The foreman transported the injured worker to a nearby hospital for treatment. After medical assessment, the worker was found to have fractured his left leg tibia. His leg was splinted, dressed and given a soft boot. The worker was released home and is resting and recovering.
3/24/2020	Outside Crew	Significant Injury	Flash Incident Resulting in Burn	Injury - March 24, 2020 , A crew was tasked with installing a new OMNI switch on an energized 16 kV line. The crew tailboarded and no test orders were in place. The crew successfully hung the switch on the pole, in the closed position, with all six jumpers coiled and affixed to the switch arm. Utilizing the tub truck, the two lineman successfully tapped up the field and center phase on the line side of the switch using the rubber glove method. In the process of tapping up the street side phase, a flash occurred, locking out the circuit. The two lineman were able to boom themselves to the ground and exit the bucket truck on their own. The foreman immediately dialed 911 while the other crew members applied burn gel to the affected areas, which appeared to be minimal. Both lineman were transported via ambulance to a local hospital where they were treated and released within 2 hours. Both lineman were in 8 CAL PPE.
4/1/2020	Outside Crew	Injury	Index Finger Laceration	Injury - April 1, 2020 , A crew was sent out on an emergency repair order to change out a set of doubles on a 12 kV transformer. After arriving at the jobsite, the crew tailboarded and began preparation of the new composite crossarm. While prepping the new arm, the worker's ring-cut the lightning arrestor ground attached to the bottom of the crossarm. While ring-cutting the wire, the employee simultaneously moved his left hand. During this process, he ran his left index finger across the blade of the knife, resulting in a laceration to his left index finger. The lineman was utilizing Cut-Resistant Maxie Cut Gloves.

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4/3/2020	Outside Crew	Significant Injury	Vehicle Rollover	Injury - April 3, 2020 , An apprentice was driving in mountainous terrain with a digger derrick while towing composite poles on an extended pole trailer when he experienced brake failure. When the worker noticed his inability to brake, he attempted to slow his vehicle by driving onto a side grade, but he could not decelerate enough as he approached a sharp curve. He collided through a guard rail and rolled his vehicle down a canyon approximately 100 feet from the road. Two other members of the same crew were traveling behind and witnessed the incident. They immediately called their general foreman and instructed him to call 911. They pulled over and ran down the hill to assist. The coworkers kicked out the front windshield and pulled the driver out. Soon after, an ambulance arrived on scene and transported the worker to a hospital. X-rays were performed, and the worker was released the same day.
4/14/2020	Outside Crew	Significant Injury	Hand Punctured - Hydraulic Fluid	Injury - April 14, 2020 , A crew was working on a pole replacement as part of a covered conductor project. An employee was transferring telecommunication conductors and was utilizing a reciprocating saw (Sawzall) to cut through a bolt. Unfortunately, the hydraulic tool circuit was in the "On" position when his downward force caused the saw to pierce the pressurized hydraulic hose. The apprentice grabbed the line to minimize spray. Unknown at that moment, the force of the pressurized fluid penetrated his right palm near his middle finger. The Apprentice Lineman shut off the hydraulic tool circuit and boomed down. After ten minutes, the apprentice complained of a lingering pain in his hand. He took his glove off and noticed a small puncture wound and progressive swelling. He was transferred by ambulance to the nearest hospital. He underwent surgery to clean his hand of fluid and was kept overnight for a follow-up surgery to ensure all hydraulic fluid had been removed.
4/15/2020	Laydown Yard Crew	Multiple Crushing Injuries	Fatality	Fatality - April 15, 2020 , Three workers were on-site at a laydown yard loading trailers for transport. Two workers were loading bundled steel on a flatbed trailer. One worker atop the trailer tripped and fell to the ground. A bundled section of steel then fell off the trailer, landing on him. Emergency services were called, and they provided medical attention. Tragically, the worker later succumbed to his injuries.
4/15/2020	Outside Crew	Injury	Tower Arm Collapse	Injury - April 15, 2020 , Two workers, utilizing the HEC (Human External Cargo) method, were working on ladders in the process of clipping in the lower double bundle phases of a new 220 kV ACCC conductor on existing tower. Utilizing a hoist and sling, the linemen were in the process of raising the new conductor out of the traveler and installing an armor rod in preparation of setting into the shoe when the tower arm collapsed, pinning both linemen between the collapsed arm and the tower body. A lineman working nearby observed the incident and immediately directed the foreman to call 911 and sent his apprentice to meet the emergency responders. He was the first to start the tower rescue. One of the injured linemen was rescued via helicopter off the tower and flown to the main road, where emergency services were waiting. The lineman was transported to the hospital for evaluation. The second lineman was then taken off the tower via helicopter and flown to emergency services. He was evaluated and was determined to have no injuries.
4/17/2020	Tree Crew	Significant Injury	Fractured Vertebra	Injury - April 17, 2020 , A crew foreman was performing compliance tree trimming of a palm tree that was approximately 45 - 50 feet tall. The palm tree was in a customer's backyard and not accessible via bucket truck. The palm tree had a lean/bend at approximately 30 feet off the ground. The foreman did not use an adjustable false crotch while descending the palm. Instead, he placed his climb line over the palm fronds to descend from the tree. While descending, he lost his footing and swung out away from the tree. The shift in weight allowed the climb line to roll off the fronds and the foreman fell approximately 10 – 15 feet to the ground and landed on his back. A safety trainer was on-site and called 911. Emergency Medical Services arrived and transported the foreman to the hospital, where he was found to have a fractured vertebra. The foreman was released from the hospital the next day and is currently recovering at home.
4/23/2020	Outside Crew	Significant Injury	Head Laceration	Injury - April 23, 2020 , A 3-man crew was working on a streetlight system cutover. Lineman 1 was working from the bucket of a streetlight patrol truck to install new duplex conductor. Lineman 1's bucket could be accessed by a door. Lineman 2 was working one span to the east in a separate truck. The foreman was assisting the linemen from the ground. While working at approximately 25 feet in the air, Lineman 1 was attempting to install the new duplex when the bucket door came open and he fell and hit the side of the truck before he impacted the ground. The foreman immediately called 911, pressed the emergency button on the radio, and accessed the AED/first aid kit. Meanwhile, Lineman 2 met the foreman at the back of the truck where the injured employee was sitting up and able to communicate with the crew. The known injury at the time was a laceration to head. The employee was transported by ambulance to the hospital.

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5/14/2020	Tree Crew	Significant Injury	Multiple Serious Injuries	Injury - May 14, 2020 , A crew was performing tree removal and the foreman was ascending the tree to be removed. At about 60 feet up, he leaned back and his work positioning lanyard was not connected. He fell from the tree, landing on his back/neck. The crew alerted emergency services and the foreman was air lifted to the nearest medical center. The foreman sustained multiple serious injuries and underwent multiple surgeries. He is currently in critical/stable condition. Preliminary findings indicate that the climber was using a "2-in-1" lanyard and he may have inadvertently disconnected the wrong side of the lanyard.
5/22/2020	Outside Crew	Injury	Finger Laceration & Crushing	Injury - May 22, 2020 , One week into a new project, a worker was hammering conduit stakes with a sledgehammer. The worker "choked up" on the handle of the sledgehammer, swung and missed the stake. The sledgehammer smashed his right index finger between the hammer and the stake. The General Foreman secured the worksite, provided first aid and then transported the injured worker to the hospital emergency room for treatment where he received 7 stitches. The worker was released and has returned to work.
7/7/2020	Outside Crew	Vehicle Rollover	Minor Injuries	Injury - July 7, 2020 , A Contractor Groundman was driving a Digger Derrick line truck while pulling a utility pole trailer, and as he travelled downhill, he felt a loss in the brake pressure. He steered the vehicle to the shoulder of the roadway to slow the truck down. During this maneuver, the front and rear passenger wheels contacted the edge of the roadway causing the driver to overcorrect and overturn the vehicle onto the passenger side. The truck came to a stop with the trailer intact. The driver suffered minor injuries, was transported to the hospital and released to full duty the same day.
7/29/2020	Outside Inspector Crew	Significant Injury	Wrist & Fingers	Injury - July 29, 2020 , A lineman conducting a relay patrol of a 115 kV line rolled a Polaris-off-road-vehicle. As the Polaris was going sideways, the front right tire hit a boulder on the opposite side of the Right of Way (ROW). The slope of the ROW and the momentum of the Polaris caused the Polaris to hit the boulder, resulting in the Polaris rolling over 360 degrees back onto the tires. The lineman identified that his left hand had hit the ground injuring his wrist and multiple fingers. The lineman immediately reported the incident and injury to his supervisor. The Patrolman arrived and drove the lineman to the nearest medical facility.
8/7/2020	Outside Crew	Significant Injury	Vertebral Fracture	Injury - August 7, 2020 , A crew was tasked to install a 25 kVA transformer, fuse holders, fuse holder arm, and secondary triplex at the rear of a residential property, next to a chain link fence line with a gate. The property had a significant number of trees and the pole was surrounded by a dense canopy of leaves and branches. The crew arrived onsite, assessed, and held a tailboard, then proceeded to set up the equipment. The lineman and an apprentice were tasked to ascend the structure to install protective cover, place rigging, and install a new cutout (fuse) arm and transformer. They utilized a capstan, transformer gin, swivel block and bull rope to install the transformer. The foreman was in charge of operating the capstan, and the cable splicer and another apprentice were assigned to be ground support. The trees and the dense canopy made it challenging for the crew to have a clear line of sight to the pole top and aerial work being performed. Much of the work was performed utilizing verbal communication. The crew successfully installed new cutout arm and transformer with no issues. Once their work was completed, the rigging was removed and the lineman handed down the bull line to the apprentice with the block still attached. As the apprentice took control of the bull line with the block attached, the block rotated toward the gate, the gate released, and the block detached from the bull line. The Apprentice yelled "Headache" to advise ground crew of falling object. As the cable splicer turned to distance himself from the structure, the swivel block struck him on the right lower back and the impact caused him to collapse to his knees. The cable splicer was approximately 6.5 feet away from the structure at the time of impact. The foreman tended to the crewman as he sat and rested for a few minutes, then later was transported to the nearest hospital. The incident resulted in a fractured vertebra.

<u>Date Of Incident</u>	<u>Occupation</u>	<u>Type of Incident</u>	<u>Body Part / Root Cause</u>	<u>Description</u>
8/20/2020	Outside Crew	Significant Injury	Fractured Toe	Injury - August 20, 2020, A transmission crew was tasked with removing underground equipment in a wooden crate from a Conex box and to load it up on a trailer in preparation for transport the next day. A groundman and 6th step apprentice planned to use a forklift to remove and load the crate on the trailer but determined that the wooden crate was stored too far into the Conex box for the forks to get under and lift the crate safely. The apprentice and groundman decided to rig a rope sling around the wooden crate and attach it to the forklift to pull the crate out so the forks could effectively get under and lift the load. The apprentice operated the forklift and, using hand signals to communicate, they positioned the forklift in as far as it could go within the Conex box to rig the rope to the forklift. The forks were approximately 4 to 6 inches off the floor of the Conex box. Once the forklift was in position, the apprentice turned off the forklift to better communicate with the groundman and verify they were ready for the next steps. While the groundman was rigging the rope to the frame of the forklift, the forks came down on the left foot of the groundman. The groundman started yelling to the apprentice that the forks were on his foot and to raise them. The apprentice turned on the forklift and raised the forks off the groundman's foot. Once the forks were off the groundman's foot, the groundman fell to the ground and was assisted by the apprentice operating the forklift and another lineman. The forklift was moved out of the way to provide enough room for the crew to check on the employee and to provide assistance. The foreman and GS were notified immediately. The groundman was transported to the local hospital. X-rays were taken of the groundman's foot, which identified that the groundman had a broken left big toe. After the incident and while the groundman was being transported to the hospital, the crew, under the direction of the foreman, set the forklift back up in the position it was in when the incident happened. It was identified that even when the forklift is turned off, the forks can be lowered if the handle is pressed.
8/22/2020	Outside Crew	Injury	Fall from Elevation	Injury - August 22, 2020, A 5-man crew and regional single-conductor crew were tasked with installing primary cable to a primary metering cabinet. After the tailboard was conducted and equipment was set up, a worker was assigned with bringing 350 cable off the reel to land at the primary metering cabinet. The worker began to use a 4-step ladder to put cover over the chain-link fence in order to feed cable over it. A metro inspector stopped the worker and requested that a taller ladder be utilized. The worker then returned to the task with the extension ladder and rested it against the chain-link fence. When the worker began to climb the ladder, the bottom slid out from under him, causing him to fall from the elevated position on top of the ladder, sustaining laceration to his elbow. The crew foreman called an "All Stop" and attended to the worker using the first aid kit, ensuring to follow all blood-borne pathogen protocols. The crew foreman then transported the worker to the ER. On the way to the ER, the worker complained of pain in his chest and had difficulty breathing. Once at the ER, the worker received four stitches in his elbow and was diagnosed with a bruised sternum. He was released from the ER later that day and was taken home where he is currently resting.
9/4/2020	Outside Crew	Significant Injury	Burn due to Flash	Injury - September 12, 2020, A crew was tasked with replacing a hot elbow on a looped/switched three-phase transformer out of a substation. The crew was comprised of an upgrade foreman, a lineman, and a 5th-step apprentice. The job was set up to utilize the loop switch to de-energize the B side of the transformer so the crew could safely replace all three of the existing load break elbows. The crew successfully completed the elbow change-out and, upon re-energizing, used a 15' hot stick. The transformer failed, causing the circuit to lock out. The upgrade foreman called the switching center and the field supervisor. The lineman and the apprentice suffered burns to the hands, neck, and face. 911 was called, and they were immediately transported to the local hospital before being transferred to Grossman Burn Center. Both are in a stable condition and in good spirits.
9/12/2020	Outside Crew	Injury	Contusion	Injury - September 12, 2020, A transmission line crew mobilized to their work location and conducted a thorough tailboard prior to beginning the task of clipping in the conductor. The clipping process involves lifting the conductor out of the stringing block and installing the permanent hardware between the insulator and conductor. Two journeyman linemen were working out of a 40-ton aerial platform at approximately 100 feet off the ground. Lineman # 1 moved the position of the basket using the remote control (from the basket), while lineman # 2 continued to perform his work. When Lineman #1 went to reposition the basket to slightly adjust his position, the boom moved further than intended, resulting in lineman # 2 becoming pinned between the conductor and the man basket. The crew immediately lowered the basket to the ground, an all stop was held immediately, and the crew was evaluated. After observation from the safety team, lineman #2 was taken to get x-rays as a precaution. Lineman #2 was diagnosed with a contusion and was released to full duty.

<u>Date Of Incident</u>	<u>Occupation</u>	<u>Type of Incident</u>	<u>Body Part / Root Cause</u>	<u>Description</u>
9/23/2020	Outside Crew	Significant Injury	Fingertip Amputation	Injury - September 23, 2020, Prior to wire operations for the day, the crew held a tailboard to discuss job tasks to be performed. The crew acknowledged possible hazards and identified mitigation steps for those hazards. The job was completed without incident. While securing the wire site at the end of day, two journeyman linemen, lineman #1 and lineman #2, were tasked with temporarily removing grips from the conductor on the bottom south phase at a dead-end lattice steel tower. Lineman #2 removed grip from the conductor and set it in the basket. Once the wire was lifted into final position, lineman #1 and #2 were to replace the grips on the conductor. Lineman #1 and lineman #2 moved the basket into position. Lineman #2 then reached down to grab the grip from the floor of the basket, and as he attempted to open the grip, the action sprung back to closed position and pinched the tip of his left pinky finger. Lineman #2 notified the general foreman of the incident. The general foreman contacted safety personnel. Safety personnel arrived, and lineman #2 was given first aid and then transported to a local hospital.
9/25/2020	Outside Crew	Injury	Leg Abrasions	Injury - September 25, 2020, Background: A canyon road repair project required a mesh netting to be installed on a rock wall face. This was to prevent the rocks and debris from falling off the steep rock wall slope and onto the hiking trail below, which also serves as an SCE access road to Transmission facilities. Event Summary: The crew was performing the task of removing vegetation from the rock wall brow in preparation for scaling (removal of loose rocks and debris) and installation of the mesh netting. Measurements of the area on the rock wall brow were required to confirm that there was enough mesh netting. The crew had previously installed handlines at the top of the ridge for crewmembers to safely tether to while working. The crew was in the process of repositioning the handlines for the next phase of work and had a 45-foot gap in-between lines. A crewmember was assigned to measure across the face of the rock wall. The tethered crewmember was traversing the rock wall brow with a tape measure, then came to the 45-foot gap in the handline and decided to untether and free-climb across the face of the rock wall. The crew member lost his footing, fell approximately 32 feet to the ground and landed on a pile of vegetation. Upon initial evaluation, the crewmember was found to have suffered abrasions to the leg and was taken for a medical evaluation. Following medical evaluation, the crewmember was released to return to work.
9/29/2020	Outside Crew	Injury	Cuts & Stitches to the Hand	Injury - September 29, 2020, A crew was tasked to replace a deteriorated pole and day's work was completed without incident. Worker #1 and worker #2 were the first of their crew members to arrive back to the show-up yard where they were to remove personal tools from the aerial lift truck and place them in another truck for travel to another city for the night. When worker #1 opened the bin door to retrieve his personal tools from the truck, a wire grip (336 grip) fell from an elevated portion of the bin and struck him in the head, just above the hair line. Worker #2 immediately attended to his crew member's head wound, controlling the bleeding before worker #1 was transported to a local hospital. Worker #2 notified the foreman of the incident and all proper notifications were made.

<u>Date Of Incident</u>	<u>Occupation</u>	<u>Type of Incident</u>	<u>Body Part / Root Cause</u>	<u>Description</u>
10/28/2020	Outside Crew	Injury	Electrical Contact Arms/Hands	Injury - October 28, 2020, Crews met in the morning at the primary meeting yard and traveled to the job site to conduct a detailed tailboard. The scope was to clip bundled 1582 ACCC wire on M14-T3. There was an energized circuit on the adjacent side of the structure. Two workers had finished clipping the bottom phase and were in the process of removing the grounds in preparation to move to the next task. Due to the angle of the conductor over the tandem blocks, a spreader bar was utilized for installing the Armor Grip System (AGS) unit. The grounds were installed with an 8-foot "grip-all stick" from the tower, outside of the spreader bar. After completing the clipping of the AGS units on the bottom phase, the two workers began removing grounds from the conductor. Once the rigging was removed, the applied grounds were out of reach from the tower. The workers determined that they would need to utilize Human External Cargo (HEC) methods to remove the grounds from the conductor. Worker #1 called for the helicopter and, using a 5-foot "grip-all stick," began to remove the ground. Worker #1 first removed the ground from the outside sub-conductor and released it to swing into the tower. Next, he removed the grounding clamp from the inside sub-conductor and was attempting to release the clamp from the shotgun when he made contact with the conductor and suddenly felt that he had been "zapped." Instinctively, worker #1 released the "grip-all stick," causing it to fall (and come to rest) on the sub-conductors with the clamp touching the outside sub-conductor. Simultaneously, worker #2 was standing on the top of a ladder with his upper body in the tower arm, attempting to pull slack up from the ground cable when he also felt a sudden pain. The supervisor and the onsite inspectors were notified of the incident by radio. Both workers were removed from the tower using HEC methods. They were taken to the landing zone, administered first aid, and driven to the hospital for treatment and observation.
10/15/2020	Outside Crew	Injury	Puncture Wound Hand	Injury - October 15, 2020, A Civil Construction crew was tasked with preparing concrete forms for a Mechanical and Electrical Equipment Room (MEER) building foundation at a substation. The work tasks included mounting steel embeds to the concrete forms by drilling through the steel and forms so that they could be bolted together. A tailboard was held to discuss the work and the individual assignments before the crew started their work. At some point during the work, it was noticed that a form board was cut incorrectly. The incorrect form board was then unbolted from the steel and a new one was cut to be installed. To reinstall the new board, the assembly needed to be moved. After moving the assembly, the crew began to drill a hole in the steel to attach the corrected form. At that point, worker #1 held onto the form to keep the lumber level with the top of the steel, while worker #2 started to drill. Worker #1 misjudged where the drill bit would exit, and the bit punctured his palm. The crew immediately administered first aid. The foreman contacted the supervisor. Worker #1 requested to have his hand examined and was transported to the nearest clinic by the foreman. Worker #1 returned to work the next day. A Safety Stand-Down and a discussion were held with the crew the following day.
10/23/2020	Tree Crew	Injury	Struck by Tree Head & Shoulder	Injury - October 23, 2020, A crew was tasked with the removal of a 100-foot-tall pine tree in support of the Creek Fire Restoration Project. The crew completed their tailboard and began work. After the feller made his face and back cut, he called out to his crew to pull the tree over using approved rigging methods. As the pine pulled over, it came into contact with an adjacent fire-damaged oak tree which broke near the trunk due to the strain placed on it. The oak fell toward the workers escape route, striking him on the hard hat and across his shoulder, causing him to fall and roll approximately 15 feet. The crew responded in accordance with their pre-established emergency response procedures and called 911, rendered aid, and waited for the ambulance to arrive. The injured worker was taken to a nearby hospital where he was evaluated, cared for, and released for recovery. An ALL STOP was put in place at this worksite for the remainder of the day pending an investigation.
10/29/2020	Outside Crew	Injury	Mouth	Injury - October 29, 2020, Once the load was on the ground, the pilot started to lower the hook/ring/shackle assembly on the longline. There was wind, dust, and debris from the downdraft of the helicopter affecting communication between worker #1 and worker #2. Worker #2 thought worker #1 had the ring/shackle assembly in his hands, but only the slings were in his hands and the ring/shackle assembly was still 3-4 feet above worker #1. Worker #2 gave the pilot the signal to release his hook and worker #1 was struck in the face by the ring/shackle assembly. All work stopped and the helicopter was sent back to the Helicopter Landing Zone (HLZ). There was a re-tailboard with the crew and pilot. Worker #1 went to the dentist for evaluation.

<u>Date Of Incident</u>	<u>Occupation</u>	<u>Type of Incident</u>	<u>Body Part / Root Cause</u>	<u>Description</u>
Contractor Circuit Interruption Incidents				
1/16/2020	Outside Crew	CCCI	Operator Error	CCCI - January 16, 2020 , A nighttime line crew was tasked with replacing a padmount transformer. Following their switching procedure, the crew de-energized a section of a 12kV circuit for a planned outage. The crew checked hot reads on the elbows and proceeded with their program. When checking to see whether the elbow de-energized, the worker observed minimal deflection and pulled the elbow using the hot stick method. At this time, an electrical flash occurred locking out the circuit. No workers were injured, and the crew called an all-stop.
1/23/2020	Outside Crew	CCCI	Wire Control	CCCI - January 23, 2020 , A line crew was tasked to replace a 95-foot pole outside of a substation. The pole had six (6) circuits on it: (3) 16 Kv and (2) 4 Kv with 3 primary risers. All circuits except for the Slack 4 Kv were de-energized and grounded. While in the process of shaping the jumper on the grounded Troy 4 Kv circuit, the lineman lost control of the C Phase tap and it inadvertently made contact with the energized Slack 4 Kv above (4-5 feet) the lineman, causing a large flash to occur. The lineman came to the ground and the crew stopped all work. Fortunately, all crew members were uninjured. Impact Inside the Substation. There was no damage to the pole, but there was damage to the conductor and the personal grounds inside the substation. During the inspection following the fault condition, there was found to be some pitting on the line conductor and signs of heating inside of the clam shell of the personal grounds applied to C phase. The personal grounds were taken out of service and will be destroyed.
2/4/2020	Outside Crew	CCCI	Wire Control	CCCI - February 4, 2020 , Two transmission crews were tasked with changing out two H-Frame structures on a 55 kV line. Crew A was working on the structure that had a 16 kV crossing at a 90 degree angle under it, covered with rubber hose and blankets. This structure was located at the upper portion of a hillside. Crew B was tasked with changing out the structure that was lower on the hill and the first structure outside of a substation. While crew A was transferring the final phase of #2 copper conductor into its position on the new structure, the conductor broke. When the conductor fell, it contacted the 16 kV circuit, causing it to lock out. An All Stop was initiated immediately and the appropriate notifications were made.
4/30/2020	Outside Crew	CCCI	Wire Control	CCCI - April 30, 2020 , A wire removal crew prepped the north and south static wires for the static wire removal over a canyon along a 220 kV line. A portion of this crew (one lineman and one apprentice) secured the north and south static wires to the snub poles. The crew also installed a sock & shackle on the static wire, but when they installed the sock to the north static wire, they did not properly complete the installation of this sock because the punch-lock bands were not installed. The next day, 4/29/20, the same wire removal crew properly removed the south static wire. On 4/30/20, the same lineman and apprentice removed the rigging securing the north static to the snub poles and began to prep for removal. The previously installed sock was secured to the 7/8" rope puller, and the rigging and safeties were removed from the snub pole. At this time the static wire secured to the 7/8" rope puller had approximately 3200 lbs. of tension. The lineman and apprentice realized that they had not properly installed the sock (the punch-lock bands still had not been installed). Before they were able to re-install the safeties, so they could then install the punch-lock bands and properly complete the sock installation, the north static wire slipped out of the sock and fell. When the wire fell, it contacted the crane guards that were in place. After initial contact with the guard structures, the static wire then bellied down in-between the guards and contacted the crossing 33 kV and 4 kV lines, causing a circuit interruption and four small fires which were immediately extinguished. Proper fire prevention equipment, tooling, and water resources were onsite and the crews in the immediate vicinity promptly responded to extinguish the small fires. The fire department was contacted, but the fires were extinguished prior to their arrival onsite. Fortunately, no one was injured in this incident.
6/8/2020	Outside Crew	CCCI	Circuit Map Error	CCCI - June 8, 2020 , On June 8th a five-person crew was given the task of de-energizing all cables for a vault replacement. The structure contained three primary circuits and associated secondary cables. The crew tested the primary cable as energized prior to starting the switching program. The crew completed de-energizing and identifying grounding locations on two circuits. Once completing grounding on two circuits, the crew returned to prove that the cable at the work location was de-energized. Utilizing the Live Line Tester, the lineman and hot apprentice tested with no deflection on test points in the structure. When the crew started breaking torque on the second set of 600A components, the crew heard arcing in the component and exited the vault. The structure was cleared and the line relayed shortly after. Upon further review of the vault, it was discovered that part of a third circuit was actually routed through the vault (which did not match the circuit map). Fortunately no one was injured.

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7/1/2020	Outside Crew	CCCI	Work Procedure Error	CCCI - July 1, 2020 , An Electric Transmission Line Contract crew was tasked with replacing a pole on the Smartville-Nicolaus #1 60kv circuit. The crew set up at the work location, tested the circuit and found the circuit was still energized. They verified the tester by: 1) testing the adjacent 60kv and 2) testing the underbuilt distribution circuit. The tester indicated that both the circuits were energized. The crew notified the onsite inspector who contacted the Grid Control Center (GCC) operator that the circuit was testing as energized. The operator confirmed that the section of the circuit within the clearance limits was de-energized and that they were possibly testing induction from an energized 115kv crossing and adjacent 60kv. The crew then grounded the line locking our the circuit. This started a small fire at the ground source. There wer no injuries associated with this incident.
8/24/2020	Civil Crew	CCCI	Operator Error	CCCI - August 24, 2020 , At a substation, the scope of work was to upgrade the existing substation automation. In order to provide an additional path for secondary cables, an additional cable tray was engineered to penetrate two walls in the basement and be supported under the existing cable tray. To prevent the sawcut of rebar or conduits within the wall, x-ray services were requested through Engineering. On August 4, 2020, an x-ray technician conducted a scan of the existing concrete walls and floor where saw cutting and core drilling were required. When the scanning was completed, vertical and horizontal rebars were marked out and no other conductive material was noted. On the morning of August 24, 2020, a tailboard was conducted with the civil contractor, site rep, and checker to review their scope and layout. The worker then prepared the area and proceeded to cut through the existing basement wall from top to bottom with a concrete chainsaw. At approximately 8:30 am, while saw cutting about 5 to 6 inches deep, the saw hit a conduit housing the 16 kV Latchford line. On contact, a flash occurred. The worker was operating from the second rung of a fiberglass ladder and the flash knocked him off the ladder, landing with his feet on the ground. The line re-closed and about 10 to 15 seconds later a second flash occurred. The checker witnessed the first flash, which sent him into the room with the worker just before the second flash. After that, all work immediately stopped on-site. At this point the team left the work area to assess if anybody was injured and verify what happened. The worker was not injured or burned from this event. The team then made the appropriate communication to Maintenance, Operations, and Safety about the incident.
9/3/2020	Outside Crew	CCCI	Equipment Failure	CCCI - September 3, 2020 , A crew was executing a project to replace a deteriorated residential transformer with the aid of district troubleman. A troubleman was assigned to operate a PME-type switch, making and breaking a parallel with an adjacent circuit. After reviewing and verifying all bullets within the Switching Technique, the troubleman communicated with the switching center and received the switching order to close position 1 of the PME. Position 1 was closed using proper rigging without incident. The switching center reviewed the circuit reads and then gave the troubleman the switching order to open position 2 of the same switch, breaking parallel. The troubleman let the equipment soak before returning to the switch to verify successful operation. As he approached, the switch failed internally, causing the doors to blow open, striking the troubleman on the shoulder. The troubleman immediately separated himself from the equipment and performed a self-check. Once he confirmed he was not injured, he contacted the switching center to relay the sequence of events and confirm that the circuit had locked-out. An All-Stop was called and the troubleman gathered to discuss and assess what had happened. Once everyone was re-tailboarded, they proceeded to isolate the faulted switch and restored power to the remaining customers.
9/16/2020	Outside Crew	CCCI	Operator Error	CCCI - September 16, 2020 , Crews were tasked with completing the chipping and removal of concrete encasement off of an energized conduit bank containing 16 conduits (No Test Orders were in effect and a Qualified Electrical Worker(QEW) was on site). This was being performed in preparation for a shoo-fly for a vault replacement. One of the three foreman who was chipping on the concrete encasement, penetrated a conduit and struck the primary cable causing circuit interruption and locking out the circuit. The foreman exited the excavation and the crew called an "All Stop". The QEW on site immediately notified the substation. There were no reported injuries.

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9/25/2020	Outside Crew	CCCI	Wire Control	CCCI - September 25, 2020 , The crew was preparing to remove the top phase conductor of the existing curlew Aluminum Conductor Steel-Reinforced (ACSR) wire. The operator came up on the tensioner to take the tension so that the lineman could remove the wire safeties (sling and conductor grip). As the lineman went to remove the safeties he heard a loud pop. He observed a single aluminum strand of the conductor's outer layer had broken a few inches behind the installed wire grip. A few moments later, the remaining aluminum strands of the conductor's outer later broke. When the remaining aluminum strands broke, the steel core slid out of the banded pulling sock and fell to the ground. When the wire fell, the aluminum strands of the conductor "bird caged" and recoiled back into a 12 kV distribution line. The contact with the distribution line caused the conductor to separate at an existing sleeve, and two of the distribution phases to fall to the ground.
11/2/2020	Outside Crew	CCCI	Operator Error	CCCI - November 2, 2020 , A Transmission crew was working on the Transmission Line Rating Remediation (TLRR) project to complete the dead-ending process at a 220 kV transmission line. The crew was utilizing a 110-foot bucket truck to complete the job. The crew set the bucket truck perpendicular to the 220 kV tower and circuit, and parallel with the 11 kV circuit located approximately 20 feet from the tower. The sliding cover had been installed on all three phases of the 11 kV circuit to protect from an accidental contact during the previous wire stringing operation. While in the process of installing a compression dead-end, the operator of the bucket truck rotated the bucket boom 90 degrees to get a better angle for the compression operation. When the boom was rotated, the knuckle of the boom contacted the 11 kV circuit conductor approximately 60 feet away from the installed protective cover and pushed two phases together, resulting in a relay of the circuit. "No Test" orders were held by the crew, and the circuit did not test, resulting in the circuit "locking out" and de-energizing approximately 3,400 customers. The 11 kV circuit sustained minor damage and required a compression line splice to repair the conductor. All repairs were made and no injuries were reported.
11/2/2020	Outside Crew	CCCI	Wire Control	CCCI - November 2, 2020 , An electrical crew consisting of one foreman electrician and two journeymen was tasked with removing two existing line Circuit Breakers (CBs) along with the bus-tie CB. The foreman and journeyman (JM) #1 were in the rack while JM #2 was preparing tools. After successfully grounding the two-line CBs, bus-tie position, and the transfer bus, the foreman proceeded to the inner operating bus B section. With one end of the ground already connected to the CB grounding halo, the foreman attempted to place a ground on the B Phase of the 12 kV inner operating bus. At the same time, JM #1 was preparing the connection of the A-Phase ground at the CB grounding halo. While attempting to place the ground, the foreman realized the ground cable had become caught on something in the rack. The foreman thought it was possibly the DC parallel box. While the foreman was attempting to free it by pulling the cable with the end of the shotgun stick, the cable became free, resulting in a sudden movement from the released tension. The shotgun stick, with the ground attached, came into proximity of the blade of the bus-tie inner B-Phase disconnect, and a flash occurred. The crew stopped all work and a safety stand-down was held with the workers. There was damage to the 12 kV bus-tie inner operating Bus B-Phase disconnect, as well as to the shotgun stick and ground. No injuries were reported.

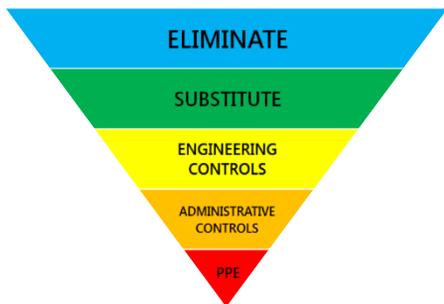
<u>Date Of Incident</u>	<u>Occupation</u>	<u>Type of Incident</u>	<u>Body Part / Root Cause</u>	<u>Description</u>
Contractor Other Incidents				
4/1/2020	Outside Crew	Vehicle Incident	Operator Error	Vehicle Incident - April 1, 2020 , A 5-man crew was tasked with replacing a run of deteriorated CIC from a vault to a 3-phase transformer in support of a 12 kV CIC replacement project. The crew arrived on-site at approximately 07:00 a.m. to prepare for the scheduled outage taking place at 08:30 a.m. They tailboarded on-site, discussing the specific tasks for each person along with notable items including clearance information and the proper testing and grounding procedures, as well as back-feed prevention. Once remote spiked, the deteriorated CIC was successfully removed with the aid of a Grasshopper (tractor), and the new cable was pulled in without incident. By approximately 14:15 p.m, most of the cable had been made up and crew members not making up cable were cleaning the site. The foreman tasked the apprentice with prepping the Grasshopper to be loaded onto the trailer. All cable had already been offloaded from the Grasshopper, so the apprentice just needed to drive it to the trailer. He put his seatbelt on, started the tractor, and lifted the outriggers in preparation to move forward. At this point, he realized that he could not see the clearance between the bottom of the witches hat and the inclined slope in front of him, so he began lifting the boom to see if that would improve his visibility. As soon as he released the controls for the boom-up, the boom jerked to a stop, causing the Grasshopper to shake and begin to tip on the uneven terrain. Despite the apprentice having the instinct to immediately boom down, it was already too late and the Grasshopper rolled on its side. The apprentice was able to unbuckle himself without assistance and radioed to the foreman while walking over to him, explaining what had just happened. The foreman immediately asked if he was okay and needed any medical assistance, to which the apprentice said no. The foreman then called an all-stop and got the crew together to evaluate steps moving forward.
4/27/2020	Outside Crew	Close Call	Back Feed	Close Call - April 27, 2020 , Contractors in the Palm Springs district were tasked with replacing equipment on the Carriage 12kV. Two troublemen switched out a section of the Carriage 12kV beyond pos. 4, PME 4054. Prior to grounding, as the contractors performed their high voltage testing, they detected a pulsating voltage on the line. The crew called an All S.T.O.P. and called the troublemen back. The troublemen tested the line and found the same results. The troublemen recalled what they had learned in the troubleman refresher class regarding generation and interconnection. The troublemen found a house that was backfeeding into a transformer about three miles from where the crew was located. There was a customer battery backup that had not opened when the power was shut off, causing it to backfeed into the Carriage12kV. Once the troublemen cleared the problem the voltage went away, and they were able to continue the job as planned. The crews working in the field did their work in accordance with all policies and rules and used the S.T.O.P. method to prevent what could have been a very serious incident.
8/21/2020	Outside Crew	Rope Failure	Equipment Failure	Rope Failure - August 21, 2020 , A crew installed 0.44 Unitrex rope utilizing a helicopter in preparation to haul back the 3/8's straw line and subsequently install the static and fiber lines. While the crew was performing a haul back, they experienced a failure of the rope between the rope pulling equipment and the nearest structure roughly 700 feet away from the rope pulling equipment, resulting in the rope dropping. It was noted that the failure occurred around the payed-out length of 7,000 feet from the top of the drum. The rope fell into the guard structures protecting the two distribution lines and road at the bottom of the canyon. No injuries occurred.
10/7/2020	Tree Crew	Tree Fire	Wire Exposure	Rope Failure - October 7, 2020 , A compliance tree trimming crew was assigned to clear dry/dead palm fronds from around a secondary triplex wire. The crew used a chainsaw to clear a space in the palm tree skirt approximately three feet above the wire, then proceeded to remove the fronds by hand to expose the secondary wire. As the fronds were loosened and removed, the wire was jostled and sparked, and the palm skirt caught fire. The crewman in the bucket lowered the boom into the customer's yard to retrieve a fire extinguisher from the groundman. However, the palm tree was quickly engulfed in flames and the crew evacuated the work area. The crew also notified the customer and the adjacent homeowner to evacuate. The crew called 911 and the fire department responded. The bucket truck and the customer home suffered total losses and the adjacent home was also damaged in the fire. There were no injuries to the crew or members of the public.

<u>Date Of Incident</u>	<u>Occupation</u>	<u>Type of Incident</u>	<u>Body Part / Root Cause</u>	<u>Description</u>
Customer Accidents/Incidents				
6/18/2020	Emergency MGMT Team	Burn	Hand Burned on Hot Muffler	Burn - June 18, 2020 , An employee was demonstrating how to utilize a fire pump to his coworkers. As he learned forward, he unwittingly place his right hand (not wearing gloves) on the hot muffler of the fire pump injuring his hand. A serious Injury Prevention Team (SIPT) member onsite provided first aid and transported the employee to the hospital for treatment where he was later released to return home.
7/29/2020	Substation Operator	Potential Flash	Operator Error	Potential Flash - July 29, 2020 , A substation operator was dispatched to return the 1B Bank 66 kV CB after MM&D and inadvertently closed the 1B Bank 66 kV Bank Ground disconnects while intending to open the 1B Bank 66 kV Transfer Bus disconnects. No injuries were sustained to the operator. Small pitting was identified to the disconnects. Load was interrupted until a second substation operator arrived to complete the switching to return the 1B Bank to normal.
7/30/2020	SC&M Maintence Crew	Potential Exposure to Fire or Explosion	Equipment Failure	Potential Exposure to Fire or Explosion - July 30, 2020 , While a SC&M Maintenance Crew was working at a substation, a 12 kV Circuit Breaker (CB) bushing failed, dropping a section of the 12 kV Operating bus and associated substation load. Proper Clearances, Personal Grounds and all PPE were in place. The crew had a dedicated electrical checker for the work being performed in the air to replace the line disconnects on the 12 kV CB. The electrical checker performing his duties, noticed smoke coming from the top portion of the adjacent 12 kV CB. The electrical checker immediately notified the crew. As the crew was exiting the switch rack, one of the 12 kV CB bushings failed catastrophically. The subsequent bushing failure and flash damaged the 12 kV CB and adjacent positions and associated equipment.
9/3/2020	Outside Crew	Flash	Equipment Failure	Flash - September 3, 2020 , A crew was executing a project to replace a deteriorated residential transformer with the aid of district troubleman. A troubleman was assigned to operate a PME-type switch, making and breaking a parallel with an adjacent circuit. After reviewing and verifying all bullets within the Switching Technique, the troubleman communicated with the switching center and received the switching order to close position 1 of the PME. Position 1 was closed using proper rigging without incident. The switching center reviewed the circuit reads and then gave the troubleman the switching order to open position 2 of the same switch, breaking parallel. The troubleman let the equipment soak before returning to the switch to verify successful operation. As he approached, the switch failed internally, causing the doors to blow open, striking the troubleman on the shoulder. The troubleman immediately separated himself from the equipment and performed a self-check. Once he confirmed he was not injured, he contacted the switching center to relay the sequence of events and confirm that the circuit had locked-out. An All-Stop was called and the troubleman gathered to discuss and assess what had happened. Once everyone was re-tailboarded, they proceeded to isolate the faulted switch and restored power to the remaining customers.
9/4/2020	Outside Crew	Flash	Burns to hands, neck & face	Flash - September 4, 2020 , A crew was tasked with replacing a hot elbow on a looped/switched three-phase transformer out of a substation. The crew was comprised of an upgrade foreman, a lineman, and a 5th-step apprentice. The job was set up to utilize the loop switch to de-energize the B side of the transformer so the crew could safely replace all three of the existing load break elbows. The crew successfully completed the elbow change-out and, upon re-energizing, used a 15' hot stick. The transformer failed, causing the circuit to lock out. The upgrade foreman called the switching center and the field supervisor. The lineman and the apprentice suffered burns to the hands, neck, and face. 911 was called, and they were immediately transported to the local hospital before being transferred to Grossman Burn Center. Both are in a stable condition and in good spirits.
9/22/2020	Troubleman	Vehicle Collision	Operator Error	Vehicle Collision - September 22, 2020 , A troubleman started his regular shift at 07:00 before also picking up the duty shift starting at 15:30. At 03:45 he was on his way home when he received a wire down call from the DOC approximately 26 miles away from his current location. He proceeded to the wire down location; however, while in route, he received a call from his peer indicating that his assistance was no longer needed and thus proceeded to head back home. At approximately 04:15 (2 miles from the troubleman's home), the troubleman's truck struck a curb and drove through a chain link fence before finally stopping in thick shrubbery. The troubleman immediately called his Supervisor and the DOC to report that he had just been in a vehicle incident and that the driver's side airbag had been deployed. The Supervisor headed to the location and requested that the DOC dispatch paramedics to professionally assess the troubleman. The Supervisor, paramedics, and the police assessed the troubleman at the scene and there were no signs of injury. No Fitness for Duty concerns were apparent besides fatigue that could have contributed to the incident. The employee was released and able to go home to his family.

Something to learn for all lines of work. Safety topics, trends, known hazards and best practices for use in tailboards to help keep yourselves safe.

Situational Awareness: that's a fancy term for being aware enough of your surroundings to identify potential threats and dangerous situations.

Hierarchy of Controls



What's



By being aware of what's going on around us and using the Hierarchy of Controls to get ahead of or properly address real-time threats and hazards, we create a cycle that can result in the safest work environment within our control

Situational Awareness



HISTORY TELLS US...

You are more situationally aware than you might think.

Walking to your car at night. Driving through an unfamiliar part of town. Walking with your family through a crowded venue (remember those days?). Getting cash out of an ATM...these are personal situations in an average day when we are often more aware of our surroundings, scanning for potential threats and dangerous situations. So, what keeps us from transferring that same level of attention to our work life?

Now, before we get too far into this, few things are as frustrating as being lumped in with the masses whose behavior is lacking. So, to those of you who intentionally keep your head on a swivel out there, we applaud you. You are the ones who notice things out of the corner of your eye. You are the ones more interested in scanning the jobsite for hazards throughout the day rather than being head-down on your mobile device. You are the ones who review and keep emergency procedures top of mind at each jobsite. You are the ones who do all this in an effort to create or keep a safe work environment for yourself and those you work with – even when no one else is doing it.

Yes, it might take some doing to be focused enough on your own task but still be mindful of what's going on around you but, again, it's really just a matter of engaging the mindset you use elsewhere. There are some quick wins to help you get used to the idea, like checking in on each other when you're working in high heat, knowing what the Emergency Action Plan is for your specific job that day (and not just relying on what it was for the "last job.") And, there's always asking those "what if" or "what happens when" questions before: moving equipment, managing the controlled load with that tag line, working near a drop zone or working in proximity to energized equipment or circuits.

Personal safety isn't just following policies and procedures...it starts with an awareness of your environment and - within that context - how you apply those policies and procedures while being aware enough to adjust if you need to.

Because, it's a given that even though we may not be able to foresee every eventuality, no one wants to be sucker punched by something they could have seen coming.

No matter the type of work you do, there is always something to learn from shared events.

INCIDENT: Kernville, CA August 2020 | Real Incidents for Your Real Life

A Hot Line Construction (HLC) traffic control subcontractor was tasked to provide flaggers and a lane closure for three HLC crews re-conductoring a 12kV line. The traffic crewmen were actively engaged in the flagging operation, with a flagger to control the flow of traffic.



One of the HLC crews was in the process of setting a new structure, with an SCE troubleman observing the work - a typical joint-work effort. While observing the HLC crew, out of the corner of his eye the troubleman spotted the flagger on his back in the roadway. The troubleman was right next to the HLC foreman and both rushed to the flagger's aid. Upon initial evaluation, the flagger was cold to the touch, no pulse and sustained a laceration to the back of the head from his collapse. The HLC foreman

told a crewman to call 911 and the SCE Troubleman utilized his SCE radio to dispatch emergency medical services to their location.

An HLC apprentice - who happened to be a former Army medic - took control of the scene and performed a medical evaluation while the troubleman retrieved an AED from his vehicle. The apprentice started CPR on the flagger. Once the AED arrived, the foreman placed it on the flagger and after evaluation, the first shock was administered. No response. CPR was administered for approximately 1 minute 45 seconds, followed by a second shock. The flagger gurgled for a second but still, no pulse. CPR was administered again, followed by a third shock.

The flagger gurgled, started to breathe on his own and had a shallow pulse. Once the flagger was revived, a crewman applied gauze and pressure to the head wound. The flagger was combative with seizure-like episodes. Tulare County Fire, Station 5, arrived on-scene and relieved the crew. The flagger was transported to the hospital by ambulance and suffered two additional heart attacks while in transit. He was revived after each episode and admitted to the hospital. As of the time of this publication, the flagger is recovering.



Note: Not images of the actual flagger involved in this incident.

Safety Reminders | Learning From What They Did Right

- ✓ The troubleman was aware enough of his surroundings to notice the dangerous situation. That's situational awareness at its best.
- ✓ The crew, troubleman and apprentice reacted immediately, worked together and used clear communication during the incident
- ✓ There were individuals on the job properly trained in CPR and AED operations
- ✓ The trained individuals clearly paid attention during their training so that when the opportunity arose, they could put their training into action
- ✓ The crew and troubleman knew and followed jobsite emergency protocols and had an accessible AED on-site

How Much Do You Know?

1. If a bystander had an AED and placed it on the patient, whether or not it ultimately delivered a shock, survival increased to 23%, and if an AED was placed and a shock given, the survival rate was _____. For patients who received bystander CPR followed by defibrillation by the EMS services, survival was 15%.
2. The Occupational Health and Safety Administration (OSHA) identifies a workplace emergency primarily as "an _____ situation that threatens your employees, customers or the public."
3. Using electronic devices can seriously impair your ability to be aware of what is going on around you. Look up occasionally to ____-_____ your surroundings and make note of any changes.
4. Most people automatically _____ new situations or environments, but don't always focus on the most _____ information
5. _____ safety begins with an individual's _____ to their environment – no one can defend against danger they couldn't see coming.

Answers: 1. 36% 2. unforeseen 3. re-scanned 4. scan, useful 5. Personal awareness

Additional Resources.

EXCERPT: SCE Accident Prevention Manual, Rule P-14

P-14. What To Do When An Accident Occurs

The following procedures covering the reporting and preliminary evaluation of all accidents shall be strictly observed:

a. Injury to Employees

1. If possible, at least one employee should stay with the injured person, rendering first aid they are qualified to perform until Emergency Medical Services arrives. If only one employee is available, they must summon emergency medical services as quickly as possible even if that means leaving the victim momentarily.
2. In the event of an emergency requiring EMS, supervisors or responding employees must call for medical assistance using available communication devices (phone, mobile phone, radio, etc.). The caller should dial 911 or follow any site-specific instructions regarding when and how to call the 911 emergency operator. The caller should be prepared to give the following information:
 - (a). Name, nature of emergency.
 - (b). Address, nearest cross street, and city.
 - (c). Phone number you are calling from.
 - (d). The caller should stay on the line until information is confirmed.

Employees should follow any site-specific instructions regarding when and how to call the 911 emergency operators.

3. Supervisors, or responding employees, shall report the emergency per site specific or field emergency procedures. For SCE Office buildings this point of contact would be the Edison Security Operations Center. For field operations they should follow relevant OU field procedures.
4. Supervisors, or responding employees, shall report injuries that require EMS to the Watch Office: PAX 44286 or (626) 812-4286. The Watch Office will notify Corporate Safety, Claims/Law, Workers' Compensation and appropriate Business Unit Management.
5. Employees shall report all industrial injuries and illnesses to the work location supervisor as soon as possible.

Here's what SCE's Accident Prevention Manual (APM) says about what to do when an accident occurs.

What's the situation?

- Does everyone know where emergency supplies are located?
- How can I be focused on my work but maintain peripheral vision?
- Did we identify an escape route?
- Does everyone know emergency procedures to follow in various emergency scenarios? (fire, flash, fall, confined space, earthquake?)
- There are lots of moving parts to this job – should we assign responsibilities to keep an eye on certain areas?
- What work is going on above me? Next to me? Behind me?
- Did I communicate this immediate task requires all my attention so they know I am hyper-focused?
- If we're playing music, can we still hear each other? What's the policy on using ear buds?
- When was the last time I scanned my work area or the overall jobsite for changes or other issues?
- Before I do this, did I ask "what if?" so I can plan ahead? Maybe play out potential scenarios before a critical task?
- Are there any specific conditions that might change we should keep an eye on?

Something to learn for all lines of work. Safety topics, trends, known hazards and best practices for use in tailboards to help keep yourselves safe.



What hazards will these inspections help YOU find?



Post-Trip	Pre-Trip	Structure
Device	Equipment	Routine
Connectors	Rigging	Fall Protection
PPE	Tools	
Components	New Equipment	

HISTORY TELLS US...

What you see isn't always what you get.

That's why inspections are so important, because they can shine a light on a potential failure or malfunction that we may not have otherwise considered.

There are rules and procedures that outline the types of inspections and when they are to be performed, which you'll likely say that you follow. Awesome.

But...sometimes the question isn't *if* an inspection was performed, it's how *thoroughly* that inspection was performed. Most of the time we recognize the importance of inspections and give them proper time and effort, but no doubt there are occasions when that isn't the case, and we gamble with our safety.

And what about when an inspection isn't a requirement but just a good practice or the safest, smartest choice? Maybe you used that chainsaw yesterday and all it did was sit in the truck overnight. So, why check it before you use it this time? Well, you give it another once over because you want to be sure that the condition of that tool hasn't changed and that it's safe to use *this* time. You choose to not just assume "it worked yesterday so today should be fine, too" or that the last user left it in good condition.

Also, is it possible - even a little bit - that somewhere in the back of our minds we assign more importance to

performing regular or thorough inspections only when the risk of what we're about to do is or seems high? How many times in a day do we go about the job, not checking seals, hoses, ropes, slings, fluid levels, connections, ladders, unusual equipment sounds or proper tool operation because we don't "need" to? Or because the job is moving at a good pace and to stop and inspect something that looks or always works fine seems like a waste of time? Anyone ignoring worn out PPE?

And, let's not forget the importance of pre-inspections, reviewing job plans, conducting job walks and checking the integrity of structures in advance, both overhead and underground. One could also argue that post-inspections ensure you left something as good or better than you found it, leaving no issues for the next person to find.

If we are serious about taking steps to keep ourselves and those around us safe, we'll connect the dots that inspections (whether required or a best practice) are worth it. They are the right thing to do, and they give you confidence knowing that you did your part in going home the same way you came to work.

No matter the type of work you do, there is always something to learn from shared events.

INCIDENTS: 2018 – Present | A Selection of Real Incidents for Your Real Life

Year	AT-RISK BEHAVIORS
2020	<ul style="list-style-type: none">• A tractor trailer rig was hauling a track vehicle. When the vehicle started to accelerate from a stop, the trailer hitch broke off, exposing what appeared to be a failed welding job.• While using a corded reciprocating saw to cut metal into smaller pieces for disposal, the blade suddenly dislodged, which caused the employee to lose his forward grip (support hand) from the saw. The employee was kneeling, which caused him to simultaneously develop forward momentum, allowing his hand to move in front of the saw. The employee's left thumb was pinched between the saw and the metal debris. Employee was utilizing cut-resistant gloves but sustained a laceration and contusion on his thumb.
2019	<ul style="list-style-type: none">• A Polaris was being used to access structures during inspections. The condition of the roads in this area was good. Once arriving at a structure location, the Polaris was parked on what the employees thought was a flat spot on the road. The parking brake was set, motor turned off and transmission was placed in neutral. The two employees exited the vehicle and within 20 seconds the vehicle started to roll. The two employees tried to stop its momentum by grabbing on the back of the vehicle but the vehicle was too heavy to be stopped and their grip was released. The Polaris came to rest approximately 50 yards down a hill, into some large boulders.• A crew was using a truck mounted butterfly wheel to hoist an insulator. The insulator was being raised to a lineman working in the bucket approximately 30'-40' from the ground. As the insulator was being raised, the knot used to secure the rigging line came apart and caused the insulator to fall to the ground. The crew immediately yelled "in the hole" as the insulator fell. No employees were working in the identified drop zone.
2018	<ul style="list-style-type: none">• While a lineman was working from a bucket, the upper boom raised on its own and the tub was pinned under the crossarm while the boom continued to raise. Upper controls did not respond, so the linemen climbed on to the crossarm while the tub was breaking off the boom.• While a meter technician was checking voltage for a trouble report, the meter exploded and ejected from the A-Base adapter. After inspection, secondary potential leads were found to be old and compromised.• While an employee was using a hydraulic jack hammer, the hose broke and shot high pressure hydraulic oil all over the employee.

Things to think about...

Give yourself a chance to find hazards before they find you.

- Did we properly inspect the condition of the equipment we'll be working on?
- If we can't perform switching at a safe standoff distance, do we need to go upstream?
- What is our plan in the event of this tool or equipment failure?
- Are there any other related connections, components or sources we need to check or inspect?
- Where is the bight for this task and will I be in it? If so, can I be anywhere else and still get the work done safely?
- Have I inspected my PPE to make sure it's in proper condition to protect me against an event that's out of my control? Am I wearing the proper PPE and under garments?
- When was the last time I looked around to be sure nothing has changed or is at risk of changing in my work environment?
- Who else is working this job or working nearby that might be affected by the condition we found?
- Did we confirm rigging, rope or other load bearing tools are properly rated for this task and in good condition?
- How am I prepared to deal with a change in strain? What about the equipment I am working on or with?
- Are there any sources of stored energy we need to be concerned about?
- What is the structural integrity of the equipment, pole, tree or structure I am going to climb? What about the structure I am going to enter or open?
- Is there anything from yesterday's vehicle inspection report that didn't get followed-up on?
- Did we check or verify Transformer Load Management is correct in the field?
- In case of equipment failure, have I created an environment where damage will be minimized?
- Yeah, the tool or equipment worked for this job but were there any indicators its performance is off?
- Before I walk away, did I confirm the device operated as expected?

WIRED FOR SAFETY

October 5, 2020

Primary Hazard Focus:
Working In Wildfire Areas

Fire leaves behind lurking hazards for those who work to restore



Something to learn for all lines of work. Safety topics, trends, known hazards and best practices for use in tailboards to help keep you safe.

HISTORY TELLS US...

The fire may be gone, but hazards are not.

We may not all find ourselves working in wildfire areas during or after a fire, but we are all touched by wildland fires in our state in some way. Whether it's being moved by footage we see on the news, experiencing unhealthy air quality or falling ash in our area, being an evacuee or knowing someone who is, it can hit home for all of us.

And then, there's the environmental and structural aftermath. But, thanks to the incredible work by crews and incident command personnel who work to save our structures and maintain power during fire suppression efforts, we know that as much restoration work as we are faced with once the fire has moved through, it could always be worse.

Restoration has been underway in different areas of our service territory and with all the good work that is going on by crews to support the effort, we couldn't help but take a moment to point out some primary hazards that workers must be aware of while in the burn scar environment. For those who don't do this kind of work, it'll be a quick glimpse into the world of scorched terrain. And, if you do work in scorched territory, maybe it looks and smells different than the average job, but the work is the work, right? Wrong, unfortunately.

Of course, in this environment you'll apply what you know about policies and procedures, off-road driving, overhead hazards, walking through unfamiliar terrain, communication and more....but you'll need to lean more heavily on your situational awareness skills in order to avoid some unfamiliar hazards and traps for sure.

Like, has your crew discussed ash pits? What about widow makers and snags? Our vegetation management partners know all about them, but are they the same in this environment? Are they only a hazard when performing certain types of work in the burn scar? What can you expect regarding wildlife when working in or driving through this environment? Once evacuation orders are lifted, will that affect you at all? What about air quality, mask or respirator requirements and whether an area is safe to work in or not?

These are just a handful of examples that represent unique hazards and concerns crews face during this time. And even though we may not all encounter these same environments or specific hazard types, what can we learn from them and apply in our everyday work or lives? Even if we only glean knowledge of what restoration crews encounter, knowledge is power...and you never know when you may be able to pass it on.



Think. Pause. Then, do.

- In the event I slam on the brakes while driving through the area, are objects in my vehicle secure so they can't act as projectiles?
- What is the "Entry" status for my work area?
- What are the indicators of ash pits?
- Do we have flags with us so we can mark this hazard for others to identify?
- Which type of filtering facepiece respirator is appropriate for our work environment? What about my work-type?
- Homeowners and business owners are returning as the fire moves away, so how will that affect traffic on the main roadways we travel?
- What do we do if we come across a spot fire or still-burning structure?
- Are there any hung-up trees near where we'll be working?
- What is the integrity of this pole or tree?
- What is the best approach to move a rock or log to avoid a snake or other critter encounter? What PPE should I be wearing?
- What might be living in snags and downed woody debris? How can I protect myself?
- What do we do and who do we call if we see an injured animal?

Additional Resources.

Things to think about...

How can you use the Hierarchy of Controls to mitigate these hazards?



Respirators

The attached document provides guidance on use of N95 filtering facepiece respirators for wildfire smoke protection during the COVID-19 pandemic.



Ash pits

Ash pits are holes in the ground filled with ash when a ground fire consumes underground fuels and creates an empty space. They may possibly contain hot embers beneath, may be imperceptible from the ground above and can remain hot for days.

Ash pits are inherent, hidden remnants of a wildfire that are hazards to wildland firefighters and those working in wildland areas after a fire. Those accidentally walking into one may be severely burned, injured or killed.



Snakes

Snakes that used to reside in densely covered forests are making their way to find other means of shelter, sunshine, and sources of food. The burning removes undergrowth plants and opens the canopy, which allows more sunlight to reach the forest floor and may create more basking opportunities for rattlesnakes.



Snags and Widow Makers

Snags are dead, standing trees without leaves or needles in the crowns. They typically have much lower fuel moistures than live, green trees, are subject to rot, burn more readily and fall with little or no warning. Widow makers are rotted (or dead), loose limbs that are subject to falling at any time. Both snags and widow makers present significant hazards to wildland firefighters and those working in wildland areas after a fire.



Displaced Wildlife

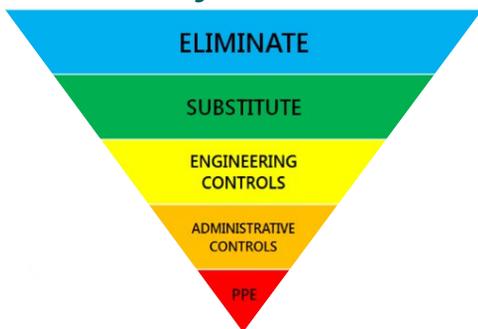
The biggest effect wildfires have on wildlife is by altering the three things animals need most: food, water, and shelter. Tender undergrowth plants and shrubs that provide food are lost, and this loss often results in wildlife moving away to areas where food, water, and shelter are more readily available.



Driving Safety

Conditions are ever-changing on these mountain roads. There are many distractions such as wildlife, road maintenance vehicles, emergency vehicles, utility & contractor vehicles as well as the public. Driving for the conditions and following the law are the most effective methods to staying safe and arriving alive.

Hierarchy of Controls



Wildfire Smoke Protection

As a result of conflicting regulatory requirements, this guidance is provided for the use of N95 filtering facepiece respirators for wildfire smoke protection during the COVID-19 pandemic



Mitigating hazards from wildfire smoke

When the Air Quality Index (AQI) for PM2.5 exceeds 150 and does not exceed 500, employees may use (on a *voluntary* basis) an N95 respirator

SCE's current inventory of N95 filtering facepiece respirators contains models with and without an exhalation valve

Cal/OSHA does not allow the use of neck gaiters or facemasks, when used alone, for protection from wildfire smoke

For voluntary N95 respirator use, employees must read the [OSHA Respiratory Protection Appendix D](#)



Mitigating hazards from COVID-19

The CDC's COVID-19 guidelines include maintaining a six-foot distance from others and/or the use of facemasks without an exhalation valve

The purpose of facemasks is to keep respiratory droplets from reaching others; facemasks with one-way valves or vents can allow exhaled respiratory droplets to reach others more readily, and potentially spread COVID-19

The CDC does not recommend using facemasks with an exhalation valve or vent

Staying protected from wildfire smoke and COVID-19

If you choose to voluntarily protect yourself from wildfire smoke when the AQI for PM2.5 exceeds 150 but does not exceed 500, the following guidance should be carefully observed to ensure COVID-19 precautions are not neglected:

- Wear an N95 respirator **without an exhalation valve**
- Wear an N95 respirator **with an exhalation valve** when working alone and maintaining a six-foot distance from others
- If you must wear an N95 respirator with an exhalation valve around people, wear your facemask or gaiter over the valve or vent
 - The manufacturer of N95 respirators does not permit the taping shut of the exhalation valve
- N95 respirators are not FR rated and must be removed in environments with arc flash potential

This guidance includes the recommendation of 3M – a manufacturer of many of our N95 respirators

! If at any time when wearing a mask, including an N95 respirator, you feel anxious or faint, immediately remove the mask and relocate to a safe area as quickly as possible

Something to learn for all lines of work. Safety topics, trends, known hazards and best practices for use in tailboards to help keep you safe.

Last week one of our colleagues was fatally injured in a head-on collision while traveling on the job. Our thoughts and prayers are with his families at work and home. We grieve with you.

HISTORY TELLS US...

“Let’s do this” and “let’s get this done” are two different mindsets.

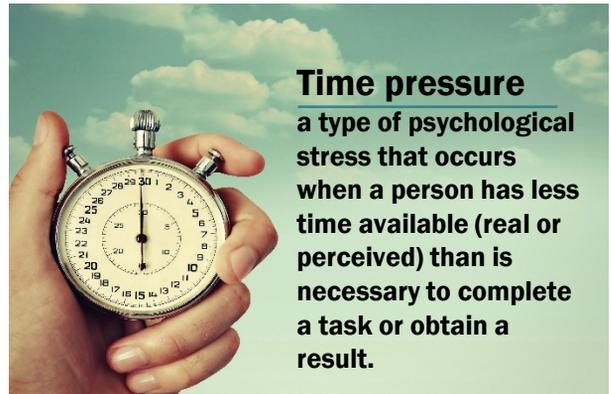
On some level, each of us is controlled by clocks and deadlines. Whether time constraints exist from external sources or are self-imposed challenges, many times the “just get ‘er done” attitude drives decisions. But, since safety is paramount, we have to collectively be comfortable with the possibility the work may be delayed.

Maybe you are cabbied-up until weather clears or the air quality improves, or the work has stopped until the right equipment arrives, or you’re trying to identify the best approach to minimize exposure during a worldwide pandemic, or...the list goes on. Either way, down time can make it *feel* like there’s pressure to quickly get the job done when things are up and running again. And even when there isn’t down time causing delays, some jobs have circumstances that stir that feeling of a time crunch.

As individuals, knowing our triggers is critical – we’ve got to recognize frustration before it can settle in and invite rushing to join it. And, you may know your job well, so in the front of your mind you aren’t worried about making a mistake – that’s often referred to as complacency, which invites inattention. How about being rested enough so you can be aware and alert to problem-solve on the job? If not, fatigue can easily give way to frustration, rushing and complacency – all of which can make existing hazards that much more threatening.

As leaders, the same rules apply but even more so because setting the tone is a critical responsibility, whether you set your example at the top for your overall workforce or on the jobsite, directly influencing the tone and pace of the work. As safety representatives, supporting the workforce on the daily and fulfilling your obligation to remind frontline employees of hazard mitigation is also critical, even if it means being temporarily unpopular to keep someone safe.

And, it’s not just knowing your triggers. Remember that planning and strategizing can help anyone. You plan your work and strategize your approach under normal circumstances, so engage those heavy hitters even more when time is at a premium. No matter your role, when the unexpected hits or when adjustments for workflow or safety



need to be made, what you do and how you do it will impact more than just yourself. This can all apply at home, too, especially with the holidays coming up. They may not be the same this year, which can lead to its own unique stress and challenges.

If all else fails, take a breath. Slow down. If you’re in charge, take the time to listen – you might get some creative ideas. If you’re the big boss, let your crews know getting the job done safely matters more than just getting it done.

We talk about safety coming first; let’s make today - and everyday - the day we actually do it.

What’s important *right now*? Let that drive your decision.

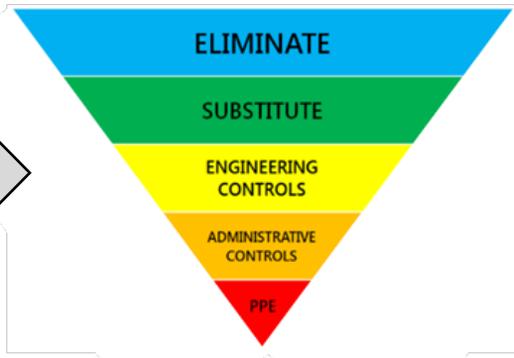
- Does the task require more time than allowed?
- As an influencer, are you unintentionally sending a “hurry up” message? Will those around you confirm you aren’t?
- When you are faced with a detour to your original work scope, how will you handle it? Re-tailboard?
- Is your decision whether or not to use the Stop-Work responsibility influenced by time pressure?
- How do you weigh the best option to take? Fastest way? Safest way? Do you allow one to trump the other?
- Are you in an environment prone to unanticipated distractions?
- Are you working in unpredictable or constantly changing conditions?
- Are all crew members comfortable with offering solutions? Why or why not?

Things to think about...

HOW WOULD YOU HANDLE IT?

And how can the Hierarchy of Controls help you make your decision?

Hierarchy of Controls



Example #1

A vegetation management crew had been tasked with secondary line clearance. A large tree branch had grown against the energized wire causing a visible moderate downward strain. Cutting the branch will release the strain (stored energy), but the exact results are a best guess estimate.

Options:

- Perform the work
- Reschedule the work until an electrical crew can temporarily de-energize the wire to perform the work

Example #2

Two distribution line crews have been tasked with property line pole replacement. Vegetation removal had not been scheduled. A section of a homeowner's fence would need to be temporarily removed and a crane company was standing by to assist with the work. The work was scheduled to be completed in a certain time frame.

Options:

- Perform the work which would require a vegetation crew to clear the work site and fence removal.
- Reschedule the work and crane until the work site can be properly prepared for the work.

Example #3

An underground construction crew has been assigned to remove cable duct encasement in a 6' excavation previously dug by a different crew. When the crew arrived, shoring had not been installed due to a misunderstanding of which crew would install the shoring.

Options:

- Perform the work without the required shoring, sloping or benching.
- Reschedule the work or take the time necessary to create a safe work site.

Example #4

Can you think of an example from your own life? What were your options and would you choose differently if you could? Why or why not?

Example #1 Result: The secondary wire bounced and came down on the saw, causing a circuit interruption. **Example #2 Result:** The foreman decided to call off the planned work and released the crane until the work site could be properly set-up for the planned work, resulting in eliminating the possibility of an incident due to time pressure. **Example #3 Result:** The crew performed the work without taking the time to create a safe work environment, which resulted in a documented safety violation.

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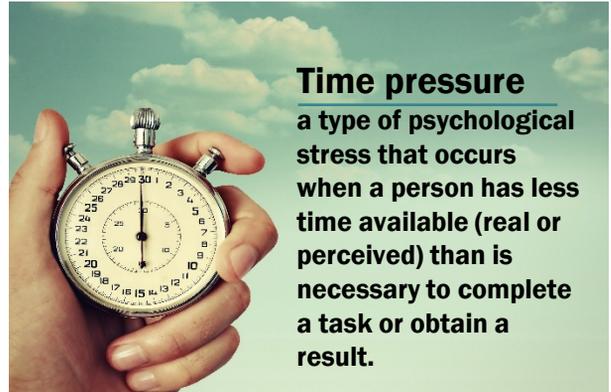
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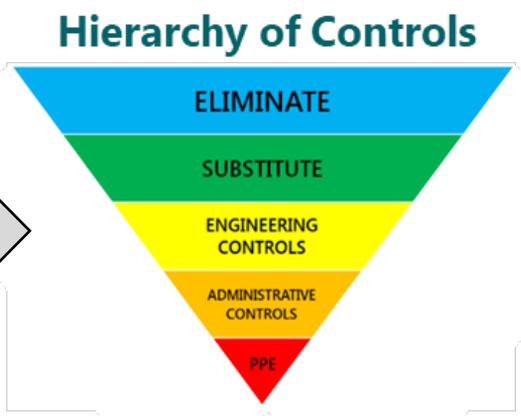
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- When you are faced with a detour to your original work scope, how will you handle it? Re-tailboard?
- Is your decision whether or not to use the Stop-Work responsibility influenced by time pressure?
- How do you weigh the best option to take? Fastest way? Safest way? Do you allow one to trump the other?
- Are you in an environment prone to unanticipated distractions?
- Are you working in unpredictable or constantly changing conditions?
- Are all crew members comfortable with offering solutions? Why or why not?

Additional Resources.

Things to think about...

HOW WOULD YOU HANDLE IT?

And how can the Hierarchy of Controls help you make your decision?



Example #1

A vegetation management crew had been tasked with secondary line clearance. A large tree branch had grown against the energized wire causing a visible moderate downward strain. Cutting the branch will release the strain (stored energy), but the exact results are a best guess estimate.

Options:

- Perform the work
- Reschedule the work until an electrical crew can temporarily de-energize the wire to perform the work

Example #2

Two distribution line crews have been tasked with property line pole replacement. Vegetation removal had not been scheduled. A section of a homeowner's fence would need to be temporarily removed and a crane company was standing by to assist with the work. The work was scheduled to be completed in a certain time frame.

Options:

- Perform the work which would require a vegetation crew to clear the work site and fence removal.
- Reschedule the work and crane until the work site can be properly prepared for the work.

Example #3

An underground construction crew has been assigned to remove cable duct encasement in a 6' excavation previously dug by a different crew. When the crew arrived, shoring had not been installed due to a misunderstanding of which crew would install the shoring.

Options:

- Perform the work without the required shoring, sloping or benching.
- Reschedule the work or take the time necessary to create a safe work site.

Example #4

Can you think of an example from your own life? What were your options and would you choose differently if you could? Why or why not?

Example #1 Result: The secondary wire bounced and came down on the saw, causing a circuit interruption. **Example #2 Result:** The foreman decided to call off the planned work and released the crane until the work site could be properly set-up for the planned work, resulting in eliminating the possibility of an incident due to time pressure. **Example #3 Result:** The crew performed the work without taking the time to create a safe work environment, which resulted in a documented safety violation.

Something to learn for all lines of work. Safety topics, trends, known hazards and best practices for use in tailboards to help keep yourselves safe.

WHAT WE'VE NOTICED

“A successful pole set, whether a normal day-to-day set or during a fire-related event, starts with the tailboard briefing. In the tailboard we ask questions, discover issues, adapt to a new environment, learn from each other and come together as a team to get the job done. Contract crew or Edison crew makes no difference - the approach to a successful, safe pole set using a helicopter must be the same, over and over again.”

- Torbjorn "TC" Corell
SCE Chief Pilot

Top At-Risk Behaviors

Work with helicopters is a staple when it comes to completing remote or otherwise inaccessible work. There are many variables that can influence whether the work is accomplished safely or not... this discipline has many.

Look at the data below for at-risk behaviors observed and mitigated by Edison Field Safety observers so far in 2020.

No. of Observations	AT-RISK BEHAVIORS
5	Load rigging found insufficient and or severely damaged
1	Pilot is at the controls at all times
1	Crew has fire equipment on-site
1	Crew is communicating effectively
1	Ground crew is in a secure area when pole arrives
1	The load is within the working load limit
1	Fuel samples were taken at the start of the day

HISTORY TELLS US...

Location, location, location – that’s not just an important mantra for real estate.

It applies to safe helicopter operations as well. When working with or around a helicopter, your location and that of the material, equipment and other crew members at different points of engagement throughout the job matter for several reasons... and that’s only one aspect of helicopter operations to consider. There’s much, much more.

Any time your job involves thousands of pounds of machinery or load above your head, there is lots to discuss on the average job, let alone jobs in wildfire restoration areas. There are additional concerns, like the increased threat of hazards from widow-maker branches/trees around helicopters, being blinded by soot when working under a helicopter, air turbulence caused by helicopter rotor blades, and the ingestion of particulate matter from helicopter rotor wash.

There is no better place to discuss the safety and specifics of the work than in the job walk(s) and JOINT tailboard before any work begins. Essentially, the nature of this work requires two disciplines. So, settle in and pay attention for a tailboard from the flight crew and foreman of the field work activities. You don’t want to miss a thing.



Multiple crews? A few hundred people to tailboard? Start with crew foremen and hold them accountable to tailboard with their crews.

Comments or questions? Contact: ContractorSafety@sce.com

No matter the type of work you do, there is always something to learn from shared events.

EVENTS: 2018 – Present | A Selection of Real Events for Your Real Life

Year	EVENT SUMMARY
2020 A selection of events	<ul style="list-style-type: none"> A helicopter was ferrying manpower and equipment for crews performing work at various structures. In response to a crew request for support, the helicopter pilot departed the landing zone with the empty long line and hook and, at some point on the way to the worksite, looked out and noticed the empty long line and hook had detached from the helicopter's cargo hook and fallen to the ground during the flight. An aerial search was immediately conducted but the missing empty long line and hook were not found. Later, during a ground search, the empty long line and hook were found in some trees by a dry creek adjacent to a tower. There were no injuries, no property damage and no livestock hurt. A line crew was tasked with installing rope to pull in a ground/communication wire utilizing a helicopter. The rope got hung up at a tower, causing the helicopter to be in danger from the rope breaking and getting caught in the helicopter rotor blades. The pilot had to jettison the rope line and the rope fell within the project disturbance area. No injuries or damages occurred. A helicopter was in the process of setting two poles during an H-Frame replacement when a dirt/gravel bag was inadvertently set on a deenergized conductor, causing the bag to split in half and spill its contents to the ground. A helicopter vendor was providing support to deliver backfill material, poles and crossarms to remote locations. The communication between the pilot and ground crew was poor and caused multiple instances of hazardous situations for the contract crew at the site. The crew's management asked for improvements to be made by the helicopter vendor. SCE, the line contractor and helicopter vendor management met to discuss the necessary changes. At the end of the day when there were no changes made, SCE called for a safety stand down and requested SCE Air Operations provide a different helicopter company to finish the work. While in the process of being flown in by helicopter long line, a crew member's hard hat became unsecured. While releasing the transformer (load), the pilot pulled tension in the line to actuate the hook. This resulted in inadvertently moving the transformer off the mounting bolts and dropping the transformer to the ground. A pilot began the very short flight to transport a pole with crossarm to the landing zone. Within the last 300 feet of the flight, ground support notified via radio that the crossarm had fallen from the pole. The pilot's attention immediately changed from looking at the landing zone to the load, confirming the arm was gone. The pilot set the old pole on the ground and retrieved the crossarm with the grapple. After completing a flight and shutting down the helicopter, an employee exiting the cockpit fell backwards onto the tarmac. While attempting to complete a helicopter pole set, the pole rigged to a long line was being returned from the pole set location back to the landing zone due to the covers on the pole coming loose. As the aircraft placed the butt end of the pole on the ground, unknown factors caused the crossarm to come loose, the rigging to slide off and the pole to drop. No injuries occurred.
2019 A selection of events	<ul style="list-style-type: none"> During a pole replacement a lineman was working on the new pole, and when lifting the old pole butt out of the ground, the load got tangled up. The foreman told the radioman to punch the load and the pilot released the long line instead of just the load, causing the long line with eye ring to drop and graze the lineman on the new pole and barely miss the lineman on the ground. Crews were tasked with replacing Buried Underground Residential Distribution (BURD) transformers on a rear property line with limited access. The pilot began to fly to the first structure with rigging connected to the aircraft. The crew began to connect the rigging to the existing BURD transformer. Once tension was placed on the line, it released at the connection between the helicopter load hook and long line. The transformer had not left the ground prior to the release. As the rigging came down, it struck two of the linemen, injuring one in the forearm and the other on the thumb. Crews were tasked with pole replacements in a canyon area using a helicopter. A lineman and two apprentices were at the location of a 35-foot secondary pole being set with a helicopter. The helicopter approached the area while the lineman and apprentices stood at a safe distance until the pole was near the ground and pre-dug hole. The lineman instructed the apprentices to stand back while he guided the pole into the hole. As he approached the pole, he was struck by a large branch on the right side of his hard hat, causing him to pass out. One apprentice went to him to assist, and the other went to a clearance to wave off the helicopter and was struck by another falling branch on the left shoulder.

No matter the type of work you do, there is always something to learn from shared events.

EVENTS, cont.: 2018 – Present | A Selection of Real Events for Your Real Life

Year	EVENT SUMMARY
2018 A selection of events	<ul style="list-style-type: none"> A lineman had just finished staging a 4-foot and a 12-foot rigging sling to be delivered to a crew working on the tower and tripped over the sling. As the lineman connected the sling to the helicopter long line, the lineman gave the pilot the head signal to "come up." As the helicopter started to elevate, the lineman noticed that he stepped onto the synthetic sling and started to move his foot. The sling was pulled out from under his foot, tripping him. After completing three pole sets with a helicopter, the last task was to fly out a bag of tools and equipment. As the helicopter lifted the load and was moving forward, the bag started trailing in a horizontal position behind as normal, but the load fell from the helicopter. A crew was in the process of rigging a string of existing insulators to a helicopter for removal. As the helicopter attempted to leave the site, the insulator became caught on the structure. The pilot attempted to get the load free of the tower when the transient temperature audio alarm engaged. The pilot jettisoned the load, causing approximately six insulator bells to break.

TAILBOARD TOPICS

Listen, Learn, Discuss, Plan. Get on the same page.

- Are we using a standardized tailboard guide so our information is consistent?
- Is there anyone on this crew that has never rigged for a helicopter before?
- Anyone on this crew who doesn't have experience working under a helicopter?
- Have all job walks been completed? All information communicated to all personnel?
- Everyone understand hand signals? Let's review them to be sure.
- What will be our communication method between the helicopter pilot and those on the ground?
- How will we support the pole once it's been released by the helicopter?
- What are crew members' duties at the pole location and landing zone?
- Did we review the stop work protocol?
- Who checked the load lines? What is their condition?
- At what point is it safe to approach the pole or load being lowered? How can everyone stay out of the bight?
- Is the sono tube (cardboard structure into which concrete is poured to create a smooth-sided column) in place at the set location?
- How will we securely rig the pole or load for the flight?
- Are all tools, essential personnel and radios in place at the pole location?
- How will we confirm non-essential personnel are a safe distance from the landing zone and work area?
- What and how should PPE be worn when working around a helicopter?
- Is the landing zone clear of all debris/loose objects?
- Have we eliminated all known snag points (i.e. covered pole steps, wire clearances)?

HOW MUCH DO YOU KNOW?

1. Good communication must be maintained between the crew _____, _____, ground _____ and _____.
2. Helicopter passengers do not approach or depart aircraft to the _____.
3. A _____ must be readily available during refueling.
4. A joint tailboard consists of a tailboard by the _____ and a tailboard by the _____ of field work activities.
5. The _____ response plan should be communicated to and understood by all workers on the job site.
6. Trash, brush, cans, bottles, paper, cardboard and hole covers are all examples of loose objects that can be blown around by _____.
7. Pre-inspection of the pole hole for proper depth, diameter and readiness for pole is completed during the _____.
8. Following safe work practices, policies and procedures when working with helicopters will keep _____ time to a minimum.
9. All job participants must sign both the _____ and _____ crew tailboard forms.
10. When working with a Congested Area Plan, all work must be within _____.

1. foreman, helicopter pilot, crew, lineman, 2. rear 3. fire extinguisher 4. helicopter pilot, crew foreman 5. emergency 6. rotor wash 7. job walk 8. hover 9. flight, field 10. scope



Even though you have given the same briefing before, remember... it's always brand new to someone involved in the work.

Comments or questions? Contact: ContractorSafety@sce.com

Something to learn for all lines of work. Safety topics, trends, known hazards and best practices for use in tailboards to help keep yourselves safe.

WHAT WE'VE NOTICED

Induction is the result of high voltage lines running parallel to or crossing de-energized and/or grounded conductors being worked.

Due to the significant electromagnetic fields present around energized high voltage electric lines, voltages may be induced onto adjacent de-energized or non-commissioned electric lines. These voltages may be large enough to deliver potentially lethal electric shocks.

Top Opportunities For Improvement

Check out the data below for at-risk behaviors observed and mitigated by Edison Field Safety observers from 2017 to-date in 2020.

No. of Observations	At-risk Behavior
83	• Did not use proper-sized grounds and jumper equipment
67	• Crew did not ground properly (de-energized)
56	• Did not apply and remove grounds with proper method
52	• Equal Potential Zone not achieved during grounding
40	• Approved equipment grounds and ground attachments not utilized
15	• Did not apply and remove grounds with approved live-line tools
13	• Improper use of the grounding log
9	• Lines not tested as de-energized with approved testing equipment prior to grounding
6	• Grounds were not in good condition with service inspection tags
5	• Improper grounding sequence

HISTORY TELLS US...

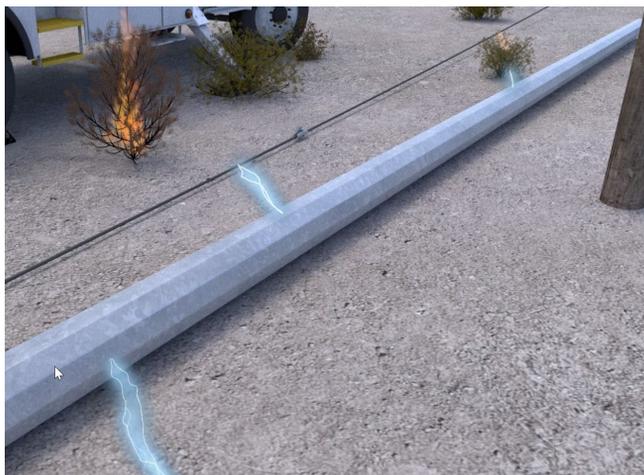
Don't just know your ABC's, know your EPZ's.

When it comes to induction incidents, common causes are inadequate grounding and inadequate establishment and verification of an equipotential zone (EPZ).

So, this begs the question, how well-versed is our workforce on what can cause induced voltage and how exactly induction occurs? And what is the relationship between grounding and mitigating the risk of induction?

Of course there are multiple steps before grounds are applied but the last critical task of testing de-energized reveals the true status of the line. And, as a professional who is aware of your surroundings, you understand addressing the proximity to energized conductors and preventing induction should be an expected tailboard topic during job planning and before any work begins,

whether you're working with transmission or distribution lines. And for those work-types that work near energized circuits but not *with* them, you may not need to know your EPZ's, but you definitely need to know and adhere to your MAD's.



What's our grounding plan for this job? Did we discuss in our tailboard?

Comments or questions? Contact: ContractorSafety@sce.com

No matter the type of work you do, there is always something to learn from shared events.

EVENTS: 2018 – Present | A Selection of Real Events for Your Real Life

Year	EVENT SUMMARY
<p>2020 A selection of events</p>	<ul style="list-style-type: none"> Two linemen received induction shock while removing 4/0 grounds from bundled 220 kV line. After clearing-off of the 66kV La Veta1 line, there were grounds still applied to the line disconnect blades. There was an air gap between the La Veta1 line disconnects and the tie breaker. The checker neglected to take an equipment clearance on the 66kV CB 13 tie breaker. A substation operator noticed the grounds while he was walking out the program in the 66kV switch rack for other work, which led to confusion about the status of the switch rack and to the discovery of the errors. The substation operator notified the operations manager and the program was put into an all-stop. The checker did not log the grounds that were applied to the La Veta1 line disconnects and used inappropriate nomenclature when logging the equipment clearance. The checker, when logging the La Veta1 line and equipment clearance, failed to notice that there are two 66kV La Veta line positions (La Veta1 and La Veta2). All the checker's clearance logging referred to the La Veta line only, which caused the subsequent confusion. Multiple crews were working on the same line and an employee holding a clearance for all work had completed work at location #1 and released the clearance to the sub. A few minutes later, the employee called the sub back to delay the release because grounds were still on the line from the other crew. No switching had begun. After an all-stop, re-tailboarding and removal of grounds, the sub was called back with no further incident. A crew successfully installed shunts on conductor hot spots and was to replace the Optical Power Ground Wire (OPGW) dead-end shoe at the getaway Tubular Steel Pole (TSP). The OPGW tested at 4kV. Grounds were applied. The crew confirmed the tester was in good operating order. The OPGW still tested at 2.5kV after grounds were installed. A second set of grounds was installed but the OPGW still tested too high to replace the shoe so an all-stop was called. A line crew set up to work on a section of a transmission line they thought was de-energized. They tested the line before applying grounds and discovered it was still energized. A crew received the outage on the 12kV 'C' section of the West Operating Bus. Testing with a hot line tester was used for all areas where the grounds were to be applied. The first ground was applied in the incorrect spot and a flash occurred. Nobody was injured and a close call incident took place. The correct spot was the West Bus jumpers. The distance from the West Bus jumper and where the flash occurred was approximately 16 inches. During troubleshooting, employee 1 checked by employee 2 climbed a ladder to perform continuity checks of primary fuses to the No. 1 12kV capacitor bank at a substation. A clearance was not obtained and no personal grounds were applied.
<p>2019 A selection of events</p>	<ul style="list-style-type: none"> Employee made contact with a de-energized, ungrounded line component resulting in an induction injury. A crew set up to test and ground multiple distribution circuits at the pole that was one span away from the pole they were to replace. The crew incorrectly believed that all the distribution on this pole had been de-energized via a switching procedure, but the 149-step switching program de-energized sections of the Boyd 12kV and Fanwood 4kV Feeder & Feedback circuits, which were attached to the pole being replaced. The Faust 4kV circuit was involved in the program but no portion of it was being de-energized, as it was not attached to the pole being replaced. The two linemen went up in the bucket with a high voltage tester and tested all of the distribution lines on the pole, which included the Boyd 12kV, Fanwood 4kV Feeder & Feedback and the Faust 4kV. The two linemen reported that all lines tested de-energized and proceeded to install grounds. They had installed grounds on the Fanwood 4kV Feeder & Feedback conductors then proceeded to ground one of the Faust 4kV phase conductors, which was still energized. This resulted in the Faust 4kV circuit locking out. There was a small arc when they installed the ground on the Faust 4kV. No injuries or damage. Three crews were working multiple poles on a de-energized section of line with a clearance and grounds. The foreman released his clearance with grounds still applied and RCS0123 was closed remotely, which energized the Hurley 12kV into a set of grounds and locked out the circuit.

No matter the type of work you do, there is always something to learn from shared events.

EVENTS, cont.: 2018 – Present | A Selection of Real Events for Your Real Life

Year	EVENT SUMMARY
2018 A selection of events	<ul style="list-style-type: none"> • A transmission employee received an electrical shock while removing C phase jumper on a 220kV line transmission structure. The employee was transported by company vehicle to a medical facility for evaluation. • A lineman was working on an H-Frame structure and received an injury from induction. • Employees responded to car-hit-guy wire and found the guy wire had been previously rolled up and secured at the base of the pole prior to their arrival. The guy wire was buzzing from apparent induction as it was still attached to the top of the pole, passing through energized 66kV line. • While replacing a span of wire, an employee inadvertently made contact with induction-fed de-energized phases. • A lineman was observed not applying his personal protective grounds prior to handling the conductor along with not properly wearing his fall protection harness. • Employees handled a de-energized circuit breaker conductor with no personal grounds applied. • Switched into grounds in substation. • Palm Village 12kV and 4kV load interrupted when 33kV Transfer Bus was energized with grounds closed.

For your reference...

[Serious Injury Communication video: Kramer-Coolwater 115kV Induction](#)

Total run time approximately 15 minutes

Tailboard Topics...

Discussion to get us all on the same page before we begin the work.

- Did we test and validate de-energized before grounding?
- If this job involves a crane, has it been included in our grounding plan?
- Does everyone understand what can cause an induced voltage? How exactly does induction occur?
- When should induction be considered?
- As a crew member, what is my responsibility to help ensure we are properly set up to safely apply grounds?
- Are there situations where you would feel induction would not be a concern?
- Does grounding always eliminate induction hazards?
- What is an EPZ mat used for?
- Does the distance and relationship between the energized and de-energized conductors affect induced voltage?
- We've established an initial EPZ but what if conditions change?
- How will we communicate to all affected personnel when we are ready to remove grounds?
- Is there a given, standard distance for induction?
- Who can induction affect? Workers on the ground, in the air?
- What's our grounding plan for this job?
- How will we communicate grounding is complete before work begins?
- If we are using a grounding rod, is it driven well enough into the ground? Do we need more than one rod?
- Does everyone on the crew understand what EPZ means?
- Where in the field can induction occur? What would induction look like in the field on a 12kV line? What if the 12kV line was running parallel to a 500kV?
- As the foreman, am I prepared to give direction on grounding and provide oversight throughout the job?
- What is my crew's grounding knowledge or skill level?
- Have we documented ground application and removal?
- Did we confirm grounds have been properly applied and removed?

INSPECTION NOTICE

IMMEDIATE ACTION REQUIRED

3M™ PROTECTA® Rebel Self-Retracting Lifelines (ANSI Versions)

3M™ Fall Protection has identified a potential manufacturing issue with a limited number of 3M™ Protecta® Rebel Self-Retracting Lifelines (with galvanized or stainless-steel lifelines) produced between October 14, 2019 and February 25, 2020. There have been no reports of injuries or accidents associated with this issue. This manufacturing issue could result in the SRL not engaging properly but can be easily detected through the pre-use inspection as specified in the Protecta® Rebel Instruction for Use (IFU) document.

Impacted Part Numbers can be found at www.ProtectaRebellInspect.com.

End Users: Please follow the steps listed below.

Step 1: Locate the label on the Rebel SRL to identify the manufactured date (see picture to the right). If the SRL has a manufacture date of 19/10 (October 2019) through to the end of 20/02 (February 2020), continue to step 2. (Please note that regardless of the manufacture date, all SRLs should be inspected prior to every use and by a competent person annually as per the IFU).

Step 2: Pull the lifeline quickly to ensure that the SRL locks up. As per the IFU *“Ensure the device locks up when the lifeline is jerked sharply. Lockup should be positive with no slipping.”* If the SRL locks up properly and passes all other aspects of the pre-use inspection as defined in the IFU, the SRL is acceptable for use. (For a full listing of inspection criteria please refer to the IFU for your respective regions which can be found at www.ProtectaRebellInspect.com). If you find that your SRL does not lock up, take the Protecta® Rebel SRL out of service immediately. Please contact our Customer Service department at 1-833-638-2697 or email us at 3musfpserviceaction@mmm.com and we will arrange to have the SRL inspected and repaired/replaced as per our standard warranty.

Distributors: Upon receipt of this Notice, please contact our Customer Service department at 1-833-638-2697 or email us at 3musfpserviceaction@mmm.com for a listing of the affected Protecta® Rebel SRLs sold to you. If you have any of the affected parts in stock, you should return them to 3M Fall Protection for repair and/or replacement as per our standard warranty. Please forward this Notice to any of your customers who have purchased affected products from you and provide any assistance requested by your customers to complete the process.

3M Fall Protection will post this Notice at www.ProtectaRebellInspect.com. 3M remains committed in providing quality products and services to our customers. We apologize for any inconvenience that this situation may cause you. We appreciate your continued support of 3M Fall Protection products and services.

3M Fall Protection
1-833-638-2697



From: Contractor Safety <ContractorSafety@sce.com>
Sent: Friday, October 30, 2020 6:37 PM
Subject: Safety Bulletin - Collapsible Power Reel

[EXTERNAL]

Edison Workforce,

Part of continuous improvement means we evaluate how we do our work in an effort to keep workers safe.

Please review this [Safety Bulletin](#) with your teams and ensure they understand the hazards associated with Collapsible Power Reels.

Using equipment and tools according to manufacturer instructions is an expectation, and intended to keep everyone safe for who and what they care about most.

Edison Safety

Safety Bulletin | Collapsible Power Reel

This **Safety Bulletin** communicates a best practice safety approach when using a Collapsible Power Reel, also called a Collapsible Butterfly Reel.

In our effort to continuously keep safety top of mind, remember that proper use of tools – per manufacturer instructions – can be key to preventing injury.

What you need to know

Non-wire ropes have elastic properties that when continuously wrapped under tension on a collapsible reel, have the potential to generate hoop stress or internal crushing force on the hub that may exceed the equipment's maximum capacity and cause the rope to snap back – this can result in serious injury

What you can do

Consider these steps:

- Step 1** Locate and ensure the manufacturer's recommended use tag is present and legible. If the tag is missing, illegible, or otherwise unreadable, discontinue use and consult with the manufacturer of the device for proper use and best practices, and secure a replacement tag for the device.
- Step 2** Encourage all field personnel who may be new to or unfamiliar with the Collapsible Power Reel, or other tools and equipment, to consult with their leadership prior to use.
- Step 3** Always operate tools and equipment, including the Collapsible Power Reel, in accordance with manufacturer recommendations.
- Step 4** Do not wait for an incident! Discuss the safe operation of tool and equipment at daily tailboards, and in the Job Hazard Analysis for all work.

Contact your leadership for additional support

Contact EdisonSafetyCommunications@sce.com

October 2020

