

Notice of Joint Safety Committee Meeting - 2021

To: All parties in interest

Date: 12/2/2021

Via: E-Mail Transmission

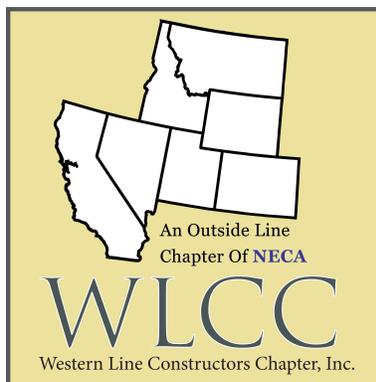
E-Mail: jweaver@westernlineneca.org

This is a reminder that our next **Quarterly Meeting** of the **California [Red Safety Book] Joint Safety Committee** is scheduled for **Wednesday, December 8, 2021** at **1:00 PM** pacific time at **Cal-Nevada JATC Training Center in Woodland, CA.**

**545 Santa Anita Drive
Woodland, CA**

The **Meeting Minutes** from our last Safety Committee Meeting held on **September 15, 2021** 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, 2021
Cal-Nevada JATC – Woodland Training Center

Present:

Mgmt:

James Stapp
AJ Zartman
Lon Peterson
Travis Walser
Raul Guardado
Kellie Whittemore
Ward Andrews
Jeremy Aitchison
Leto Wilkins
Daniel Ashmore
Tony Fuller
Jerad Simmons
Jacob Milhoan
AJ Long
Samuel Deutsch
Chris Larson
Rodney Karr
Greg Gorton
Jeremy Hessler
Chris Burt
Andy Smoot
Pete Carter
Mike Johnson
Mike Lewis
Aaron Strand
Clayton Loback
Trevor Kirkland
Neal Brown
Scott Gillman
Josh Stewart
Jules Weaver - Secretary

IBEW:

Ralph Armstrong - Chairman
Casey Lavin
Armando Mendez
Rod Peterson
Arnold Trevino
Jeremy Newman

Cal-NEV

JATC/Guest:

Don Jamison
Eugene Gloudeman

Meeting called to order by Chairman Armstrong at 1:00pm.

Chairman Armstrong welcomed the group to our first in person meeting in over a year at our Training Center here in Riverside, CA. Mr. Armstrong then had everyone introduce themselves.

Previous Minutes:

M/S/C to approve the Meeting Minutes of the Joint Safety Committee Meeting held on June 16, 2021.

Review of Accidents & Incidents:

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

Local 1245 - Northern California: as reported by Mr. Armstrong, he noted yesterday a SMUD lineman got hit by a traveler and went to the hospital but is stable condition and good spirits. 1245 has no additional accidents/incidents to report beyond the accidents or incidents that will be reported on today and included in the Accident & Incident Report attached hereto as **Exhibit A.**

Local 47 - Southern California: as reported by Casey Lavin, he noted that they had no accidents/incidents to report beyond those accidents or incidents that will be reported on today and those are 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, LLC
Hot Line Construction
Pinnacle Power Services, Inc.*

JATC Reports: Director Jamison noted that a 1st Step Apprentice on his way to work in his personal vehicle and had a head on collision that tragically cost him his life. He then noted there were no other apprentice 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.**

Observations: A general discussion regarding underground work, grounding, safety and training was held. Once again it was noted that there are way too many vehicle/equipment accidents that are occurring off and, on the right-of-way, a general discussion followed.

Exhibits attached hereto:

Exhibit B – Various Wired for Safety Bulletins from SCE
Exhibit C – Various Contractor Safety Talks from SDG&E

Old Business:

1. Chairman Armstrong noted that the revised Red Safety Book [Red Book] is available through the Locals and the Chapter for those needing copies. In addition, “pdf” copies are always available for download on the Chapter’s and Local’s websites. Also, if you have any proposed changes or clarifications to the current Red Book language, please forward them to Secretary Weaver at jweaver@westernlineneca.org.
2. Secretary Weaver gave a quick update on EICA’s Sexual Harassment and DOL Harassment Training Courses available through the Safety Wallet platform and sponsored by the Cal-Nevada JATC program. In addition, the Safety Wallet text-based certifications tracking system was discussed and he also gave an update on EICA’s crane certification program.
3. Secretary Weaver showed a 3D Safety Training Video that is available on the Chapter’s website – front page under Safety and Training that is available to all for viewing and/or download to take to the field. A general discussion followed.
4. For the record, the **Red Book Subcommittee** is composed of the following 8 individuals from Labor and Management:

Labor

Ralph Armstrong
Rod Peterson
Ralph Kenyon
Arnold Trevino

Management

Ward Andrews
Chris Larson
TBD
TBD

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. A general discussion was held regarding the issue outlined in the attached **Exhibit D**.

Next Meeting Date and Location:

Wednesday – December 8, 2021, at 1:00pm at the Cal-Nevada JATC Training Center located in Woodland, CA.

Meeting adjourned at 2:35pm

IBEW 47 - 1245 / WLCC - NECA
4th Quarter 2021 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				
1/6/2021	Outside Crew	Injury	Finger Laceration	Injury - January 6, 2021 , A substation operator and three operator trainees arrived at a substation to take part in a station inspection and validation of the Standard Station Instructions (SSI's). While the substation operator was exiting the vehicle, he greeted the operator trainees from a distance and began to close the door with his left hand, consequently shutting it on his right index finger, which was still in the door jamb. The operator trainees witnessed this action and rushed over to render assistance and first aid to the substation operator. The substation operator immediately notified supervision of the injury and was able to safely drive back on his own to the Switching Center. The substation operator followed the recommendation to go to the Urgent Care, where he received medical attention and three stitches.
1/14/2021	Outside Crew	Injury	Hand Injuries	Injury - January 14, 2021 , A crew was tasked with grounding and disconnecting the overhead to underground section of a 500 kV line in preparation for inspections and maintenance of underground cable. Trucks were positioned at the line drops and bus connections to begin grounding and removing jumpers to the bus connections. Apprentice lineman and journeyman lineman grounded the line drop at their work location and at the bus, making their bracket ground. With an installed bypass, they removed the jumpers from the line drops and tied them off with a rope to keep from adding additional strain to the current transformer (CT) connection. After they completed their task, they removed their bypass and line drop ground, keeping the bus grounded for inspections. It was identified that the jumpers had not been let down far enough to allow a good gap for separation. Apprentice lineman and journeyman lineman installed another rope on the grounded jumper for a better lead to be tied off. Before the journeyman lineman could move the bucket to retrieve the overhead ground for the line drop, the apprentice lineman reached up and made contact with his hand on the line drop above the phase of the de-energized 500 kV line. The apprentice lineman became unconscious and collapsed in the bucket, hitting his mouth on the edge of the bucket prior to landing on the bucket floor. From the ground, the crew foreman noticed that he could no longer see the apprentice lineman and called out to the journeyman lineman. The journeyman lineman swung out the boom and lowered the bucket to the ground. Due to the lack of cell phone reception, the crew foreman immediately drove out of the Western Transition Station to regain cell phone service and called Emergency Medical Services (EMS). The apprentice lineman was moved to a location easily accessible by EMS. The apprentice lineman regained consciousness and was responsive by the time EMS arrived onsite. The apprentice lineman was transported to a local hospital and was kept overnight and released the next day. The apprentice lineman's electrical entry point was his right thumb, and his exit point was his left middle finger.
1/19/2021	Outside Crew	Injury	Fractured Wrist	Injury - January 19, 2021 , A heavy equipment operator and a helper were planning to unload a D5 dozer being delivered to Big Creek in support of the Creek Fire Restoration effort. The operator and the helper held a tailboard discussing the task and possible hazards; snowy and icy conditions were discussed. The operator and the helper were unbinding and unchaining the dozer from opposite sides of the trailer. As the operator was walking alongside the trailer, he lost his footing and slipped on the icy surface. The operator extended his right hand out, attempting to break his fall while landing on the ground. He felt pain in his right wrist and thought it was sprained. The operator got up and continued to put the chains and binders away. The operator told the helper that he had fallen and may have sprained his wrist. The helper did not witness the incident. They observed a scrape and some swelling on the operator's hand but continued to finish unloading the dozer. The helper then drove the operator back to his vehicle. The operator contacted his supervisor then safely drove himself to an urgent care where x-rays were taken. It was determined that the operator fractured his wrist. He received medical attention and was released. The helper drove to urgent care to drive the operator back to the hotel after being released from urgent care. The following day the helper drove the operator back to urgent care to pick up his vehicle.
2/2/2021	Outside Crew	Injury	Finger	Injury - February 2, 2021 , Journeyman Lineman sustained a laceration to his right index finger while working storm damage in Arnold, CA. While picking up a downed / damaged, cut-out, the employees right index finger inadvertently contacted a shard of broken glass still connected to the shattered fuse tube. The employee proceeded to work another location when he realized his finger was bleeding. He immediately reported the injury to his supervisor(s). Temporary first aid measures were taken to stabilize the employee's injured finger and On-Site Health & Safety was dispatched to his location to render first aid. The employee was able to return to work full duty no restrictions.

Date Of Incident	Occupation	Type of Incident	Body Part / Root Cause	Description
2/15/2021	Outside Crew	Injury	Back Injury	Injury - February 15, 2021, A crew was replacing a pole in-between a block wall in the corner of a residential backyard. A worker climbed onto the block wall to get a cant hook onto the pole. As the worker was trying to maneuver the pole butt using the cant hook, the cant hook came loose, which caused the worker to lose his balance, fall backwards and land on his back onto a slab of pavers. After complaining of soreness in his back, the worker was taken for medical evaluation.
2/19/2021	Outside Crew	Injury	Eye Swelling	Injury - February 19, 2021, A six-man crew was assigned a nighttime outage for a commercial customer. Part of the work included pulling in cable, approximately 100' from the panel to the transformer slab. During the tailboard, the crew decided to use the existing 1/2" polypropylene rope in the duct to help with pulling in the runs of cable. The crew set up a Capstan at the transformer pad to pull in the cable. As a worker was operating the Capstan to pull the cable, the polypropylene pull rope snapped and contacted the worker on the cheek and left eye. The crew called an all-stop and went to assist the worker, who immediately felt a discomfort around his eye and cheek. The worker did not wish to seek medical attention; however, the general foreman ruled on the side of caution and transported the worker for medical evaluation. The worker was later released.
4/1/2021	Outside Crew	Injury	Leg Injury	Injury - April 1, 2021, A lineman was completing a reconductor project that included sagging and dead-ending conductor on a structure accessible only by helicopter. The lineman connected to the tower bridge using his fall protection device, then secured the dead-end board (working platform) to the structure and began work. The lineman successfully performed the dead-end and sagging operation. Approximately ten minutes after the conductor tension had been transferred to the dead-end insulators supported on the center phase position of the tower, the existing "U-Strap" (hardware) attachment at the tower failed catastrophically. The hardware failure caused the insulators, rigging and conductor to break away from the tower, which pulled on the dead-end board. This caused the lineman to fall into his fall protection and swing into the tower, which resulted in a leg injury. The injured lineman was transported to the hospital for medial evaluation; it was determined he sustained a deep tissue injury and was discharged the same day.
4/5/2021	Outside Crew	Injury	Laceration	Injury - April 5, 2021, A crew was using a crane to replace a deteriorated pole. When pulling the old pole, tension applied by the crane caused the pole to shake and a portion of the glass insulator broke off, hit the roof of the resident's garage and struck the foreman on his right shoulder. The foreman sustained a laceration and received first aid on-site. Property damage to the resident's garage roof.
4/8/2021	Outside Crew	Injury	Minor Injuries	Injury - April 8, 2021, A 4-man crew was tasked with replacing one span of secondary conductor and a service. The new triplex was pulled into place using a 5" block (rigging) on a fiber sling attached to the pole. The tension was pulled from the ground using a block and a sand line. After the wire was near sag, the lineman working from a bucket moved into position to begin dead-ending at the pole. Once in position, he called to the ground help to slack off on the tension. When the wire began to slack off, the 5" block shifted and hit the control handle of the boom, which caused the bucket to swing, even though the trigger had not been depressed. The lineman quickly hit the Power Take Off (PTO) dump button, but it did not react, and the bucket continued to move. After the third attempt to dump the PTO, the controls shut down the boom and the bucket stopped moving. At the time the controls shut down, the lineman was pinched between the back of the bucket and the secondary conductor (putting pressure on his rib cage). He was able to squeeze his way out of the pinch point, indicated he was all right but out of breath and requested the crew use the lower controls to lower the boom. The crew successfully lowered the bucket to the ground, immediately called an ALL STOP and shut the truck off to assess the situation. Since the crew was working a short distance from the yard, the foreman elected to drive the lineman to the yard to further evaluate the situation and the lineman's condition with their supervisor. As a precaution, it was determined that the supervisor would transport the lineman to urgent care, where he was treated and released that afternoon with no significant injuries or work restrictions. The lineman is doing well with only some lingering soreness in the affected area. Upon on-site inspection after the incident, it was determined that the control handle linkage in the bucket had broken, which caused the malfunction. The truck is red-tagged until repairs are completed and the PTO dump is inspected.

Date Of Incident	Occupation	Type of Incident	Body Part / Root Cause	Description
5/2/2021	Outside Crew	Injury	Head Lacerations	Injury - May 2, 2021 , A transmission patrol crew was tasked with operating and closing a sub-transmission switch on a 66kV line. Due to the busy street corner, with large high-profile vehicles, the pole switch was installed on the pole at 10 feet above ground. The lineman on patrol put on his PPE and used the temporary pole steps to climb the wood pole. He climbed up approximately seven pole steps, about six feet off the ground. The lineman positioned himself to throw the switch: he put his hands on the pole switch handle, squatted down and thrust up into a full-body extension position to close pole switch. As he thrust up into a full-body extension, the temporary pole step and lag on the street side (supporting his left foot) pulled out at an angle. The lineman's foot slipped down and off the temporary pole step, which caused him to lose his balance and fall into a backward rotation - out of his belt – and clearing both his feet. The lineman's hard hat fell off as he rotated backwards, and he hit the concrete sidewalk, headfirst. The senior patrolman on-site pushed the orange button on his handheld radio, which notified the substation of the emergency. A pedestrian, who witnessed the accident, immediately contacted the local police department. The lineman appeared to have lacerations to the back of his head and was breathing, but unconscious. Emergency medical services arrived within a short period of time and treated the lineman, who was then transported to the hospital. The lineman remains hospitalized.
5/18/2021	Outside Crew	Injury	Multiple Injuries	Injury - May 18, 2021 , A crew was replacing a deteriorated pole. Upon setting the pole, a journeyman lineman removed the sling, 17-ton shackle, and pin (1 ½ inches in diameter) used to install the pole. The pin slipped from the lineman's hand and fell. On its descent, it struck an unknown object on the pole and ricocheted towards a worker standing near a vacuum truck, approximately 12–15 feet away. The pin struck the worker (vacuum truck operator) on the hardhat, puncturing the hardhat and flipping the hardhat forward, striking his face. The vacuum truck operator sustained a laceration to the forehead, which required stitches, a skull fracture, and a facial fracture to the cheek/nasal passage. The crew implemented an all S.T.O.P., called 911, rendered first aid, and contacted an SCE representative. After the vacuum truck operator was transported by ambulance to the hospital, the crew re-tailboarded and safely completed the remainder of the pole replacement. The injured worker was hospitalized and released the following day.
5/26/2021	Tree Crew	Injury	Fracture, Amputation	Injury - May 26, 2021 , A compliance tree trimming crew was performing hazard tree removal. The foreman was aloft in the bucket truck preparing to rig a branch/trunk for removal. The groundman was dragging brush into the chipper. While feeding cut branches into the chipper, the rigging rope became caught in the brush being fed into the chipper and was pulled into the chipper. The rope then wrapped around the foreman's arm and the groundman's legs, causing serious injuries to both workers. The groundman was pinned against the chipper, but he was able to use the emergency switch to shut off the chipper. Three additional personnel were onsite. One individual assisted the groundman while another lowered the bucket to the ground to assist the foreman. A third worker called 911 and the fire department was the first to respond. The groundman was taken to the nearest hospital and the foreman was airlifted to treatment. Both injured parties are currently listed in stable condition and have been transferred to a local hospital.
5/28/2021	Outside Crew	Fatality	Head Injury	Fatality - May 28, 2021 , Friday at approximately 0951 hours, a PG&E Electric Distribution Contract employee was fatally injured. A two-man (Foreman and Groundman) crew was tasked with installing ground rods as part of lightning arrestor work in Redcrest (Humboldt). The work location was in an area difficult to access, with steep terrain and a heavy overhead canopy. The crew utilized a John Deere 35G Mini Excavator to access the work location and perform the excavation needed at the site. The crew successfully completed all tasks associated with the project and the Crew Foreman went to get his camera to take pictures of the completed work. The Crew Foreman turned back towards the project site and saw the Groundman jump from the excavator as it was overturning toward the below roadway. The Groundman was struck in the head by the excavator and then pinned down on the ground under the equipment. The Crew Foreman called 911 at approximately 0954. The Rio Del Fire Department arrived at 1020 and performed an extraction of the employee and pronounced him dead at the scene.
7/5/2021	Outside Crew	Injury	Brusing	Injury - July 5, 2021 , A crew was using a paving machine to pave the road within a substation. A worker was walking alongside the paving machine and as it came a stop, he walked up to the machine and grabbed his water bottle. However, the worker did not know his right foot was underneath the screed (heavy plate which drags across the freshly-poured concrete to give it its proper level), which was being lowered by the operator. The worker yelled "my foot" and the operator raised the screed. The worker was taken to sit down and be assessed for injuries. The worker's big toe showed bruising, and he had some swelling and pain up his foot. Proper notifications were made, the injured worker was taken to a nearby urgent care, and it was concluded there were no fractures or breaks. The worker received first aid and was released with no restrictions.

Date Of Incident	Occupation	Type of Incident	Body Part / Root Cause	Description
7/27/2021	Outside Crew	Injury	Electrical Flash	Injury - July 27, 2021, A crew was tasked to work a 1000-MCM cable replacement, which involved changing 1000-MCM aluminum cable to 1000-MCM copper within four vaults, on two 12 kV circuits. After switching was complete and grounds were installed, the crew started work from the farthest vault and worked their way back to the last vault, which was just outside the substation. A foreman and lineman entered the vault to start making up cable components. The lineman had removed 1000-MCM stingers off triple-stacked connectors and hung them over some existing cable, with the other end still attached to the switch on position three. The foreman thought they needed to incorporate their switch into the grounding scheme and closed position three into the bus. However, the bus was energized from the substation through position one on Circuit 2, and a flash occurred. Both individuals were able to exit the vault, and 911 was called. The lineman was transported to the hospital for treatment and is currently in good spirits, awaiting release.
8/9/2021	Outside Crew	Injury	Brusing Possible Fracture	Injury - August 9, 2021, A crew was working a scheduled overhead re-conductor job on a 12 kV line. When setting up the bucket truck, the worker operating the outrigger controls set the outrigger on another worker's foot, which caused bruising and a possible fracture.
8/3/2021	Outside Crew	Injury	Dislocated Finger & Laceration	Injury - August 3, 2021, Prior to outage work, a foreman and a journeyman construction electrician were relocating and staging steel H-frame pieces in a substation for preassembly. Steel H-frames support 66kV disconnects, and the crew was separating and putting cribbing in-between the stacked pieces so the load could be easily re-picked later, when needed. The foreman operated the forklift, lifting one side of a steel piece so the electrician could slide the cribbing underneath. As the foreman raised the forks, the steel slipped and pinched the journeyman's left index finger between the steel and cribbing. The foreman saw what happened, went to the electrician's aid, and instructed the other crew members to call 911 and guide first responders into the substation. The electrician was transported to the hospital, treated for a dislocated finger and laceration, and released later that night.
8/16/2021	Outside Crew	Injury	Leg Injuries	Injury - August 16, 2021, Two crews were tasked with upgrading two single-phase overhead (OH) transformers, installing one single-phase OH transformer, and replacing multiple spans of secondaries on a property line. Due to the extensive work being performed that affected the majority of customers along the tap line, the crews opted to open taps on the source pole to de-energize the primary conductor. Crew 1 began preparing items for the outage down the line. Crew 2 was given the okay to open taps to de-energize the line, take a tap line clearance, and ground the primary in preparation for the day's work. Two workers ascended the pole, successfully opened taps, and grounded the line. When descending the pole, worker 1 reached the communication level and proceeded to climb over the lines, maintaining 100% fall protection. Worker 2 reached the secondaries level and attempted to free-climb over them but lost contact with the pole, fell approximately 20 feet, and sustained head and leg injuries. Emergency services were immediately called, and the injured worker was transported to a hospital where he was treated for a laceration to his head and prepped for surgery on his leg.
8/17/2021	Outside Crew	Injury	Burns/Flash Incident	Injury - August 17, 2021, A crew was tasked with replacing a primary structure (pole); the switching program involved four 12 kV circuits. The troublemen and switching center started the switching program and were ready to have a crew perform their steps of the switching program: open taps on the south side of the pole, breaking a parallel between two of the 12 kV circuits. Two workers in a bucket on the north side of the pole opened the first tap, from the main line running north and south to the buck position running west. When the tap was opened, load was dropped from the structure to two open pole switches, and a flash occurred. The flash caused burns to one of the workers, the bucket truck, and orange conductor cover. Emergency services were called, and the injured worker was transported to a local medical hospital and later released. The troublemen de-energized the structure until repairs were made.
8/23/2021	Outside Crew	Injury	Face Burn, Flash Incident	Injury - August 23, 2021, A four-man crew was assigned several work orders to complete for the day, the first of which was to replace a secondary handhole (in-ground access/splice box). The crew had replaced the handhole and was in the process of restoring connections when a flash occurred. The crew member performing work at the location sustained burns to his face. The foreman and crew immediately applied burn gel and called emergency services. The worker was transported to a local hospital where he received initial treatment, then was later transferred to Grossman Burn center. Proper notifications were made. While a formal investigation remains pending, preliminary information indicates the worker was in the process of connecting the streetlight wire to a connector bar when his screwdriver slipped and punctured the other bar, which caused a phase-to-phase flash.
9/6/2021	Outside Crew	Injury	Hand Laceration	Injury - September 6, 2021, Wearing leather cut-resistant gloves, a worker was skinning primary conductor using a new pocketknife, and the knife slipped. The worker sustained a laceration on his left hand below the thumb.

Date Of Incident	Occupation	Type of Incident	Body Part / Root Cause	Description
9/13/2021	Outside Crew	Injury	Shoulder Strain	<p>Injury - September 13, 2021, A three-man crew was assigned to transfer newly installed, de-energized 1/0 covered conductor from wire stringing rollers (temporary position) on a set of composite double crossarms into new insulators (permanent position). The work location was not vehicle friendly, so the work would be performed from the pole. The crew discussed the work to be accomplished, and one worker climbed the pole and positioned himself underneath the first phase to transfer.</p> <p>In a bench-press position, the worker lifted the conductor out of the roller, successfully seated it on and secured it to the new insulator, removed the roller and lowered it with the handline, and then began to position himself underneath the next phase. The foreman and worker did not discuss any difficulty encountered when transferring the first phase or identify alternative options to complete the same task for the next phase. Now in position, the worker began to lift the second conductor as he did the first one but missed landing the conductor on the insulator, and the conductor swung off the end of the crossarm. The worker hung on to the conductor as it went over his head and suffered a shoulder strain.</p>

Date Of Incident	Occupation	Type of Incident	Body Part / Root Cause	Description
10/4/2021	Outside Crew	Injury	Chest Pain	Injury - October 4, 2021, Working in a mountainous area, a worker notified her point of contact (POC) that she was experiencing chest pain from wildfire smoke in the area. The POC immediately called the worker to check her symptoms and make sure she was okay. The worker emphasized symptoms were not severe and said she was already done for the day, in her vehicle, and beginning to feel better in the air conditioning. The worker and POC checked the air quality index (AQI), which was 260 ppm. When the call ended after 14 minutes, the worker was feeling normal again and had demobilized for the day.
10/4/2021	Outside Crew	Injury	Head Injury	Injury - October 4, 2021, During a morning meeting with workers and supervision at a staging area before leaving for the jobsite, a worker abruptly fell to the ground and hit his head. Co-workers observed the worker was dazed as they assisted him and contacted emergency services. Before emergency services arrived, the worker was coherent and responsive but still confused about what happened. Emergency services transported the worker to a medical center for evaluation. While cause of the worker fainting was unknown, the worker stated he was moving out of his apartment the day before and had not gotten much sleep.
10/11/2021	Outside Crew	Injury	Elbow	Injury - October 11, 2021, When using a hydraulic tamp to compact the dirt around a new pole, a worker hit an object. This caused the tamp to recoil and kickback, which forced the worker's elbow against the wood pole. A sliver of wood penetrated and remained in his elbow. Unable to remove the wood sliver himself, the worker went to an urgent care after work, but doctors were also unable to remove sliver and recommended the worker see a specialist. At the time of the incident, the worker was wearing appropriate PPE, including gloves, a long sleeve shirt, eye protection, and a hard hat.
10/25/2021	Outside Crew	Injury	Jaw Injury	Injury - October 25, 2021, At the end of the day, a crew returned to a laydown yard (temporary material staging area) to load poles and material for work the following day. The crew offloaded trash and began prepping material for the poles to be loaded. When the crew went to load a 45 foot pole, they were unable to obtain a pick point at the pole's center of gravity. The crew could not fit a setting chain underneath it to place cribbing under the pole in order to create a preferable pick point, so they decided to pick the pole from the butt end using a digger derrick truck and pole tongs. While the pole was supported by the truck pole tongs, worker 1 was directed by worker 2 to slide a crossarm underneath the pole to act as cribbing. At that time, the pole came out of the pole tongs and dropped onto the crossarm. The crossarm struck worker 1 under the jaw, which left him dazed and semi conscious.
10/25/2021	Outside Crew	Injury	Laceration / Fracture	Injury - October 25, 2021, A crew was tasked to replace a pole after a fire at the distribution level. Workers 1 and 2 were working from the bucket to remove a distribution tap connection from a 4 kV circuit in order to remove the rest of the pole. While Worker 1 used an impact wrench to remove the two-bolt clamp, Worker 2 was holding the tap-end to the conductor so it would not drop or pop off when the clamp was removed. As the clamp came loose from the wire, it stayed in the socket, continued to spin, and made contact with the tip of Worker 1's left-hand little finger, which resulted in a laceration and fracture of the bone tip. The injured worker was transported for medical treatment and received seven stitches. Immediately after, the injured worker was transported. The crew re-tailboarded and completed the pole replacement without further incident.
11/1/2021	Outside Crew	Vehicle Accident	Fatality	Fatality - November 1, 2021, After performing fire restoration work, crews were caravanning down a curvy, mountainous road back to the laydown yard (temporary material staging area). An apprentice lineman was driving alone in a digger-derrick truck pulling a pole dolly. As the apprentice approached a curve in the road, it is believed the right-side tires came into contact with a boulder sticking out of an embankment. The impact caused the truck to tip on its side through the turn and roll down the embankment; the vehicle came to a stop upside down. Crew members and emergency responders administered CPR, and the crew deployed an AED, but the apprentice lineman was non-responsive. Despite heroic actions to reach the apprentice, remove him from the vehicle, and perform resuscitation efforts, emergency responders pronounced the apprentice deceased at the scene. Our deepest condolences go out to the family, friends, and colleagues of the apprentice lineman, whose lives will forever be impacted. We mourn with them.
11/1/2021	Outside Crew	Injury	Back Injury	Injury - November 1, 2021, A worker finished putting tools away and arranging them in the truck bed, then stepped off the tire and landed incorrectly. After taking a couple of steps, he began experiencing what felt like excruciating pain in his back, went down to the ground, and was not able to get up. The worker contacted his supervision, who then contacted the safety team. The worker was transported by ambulance to the nearest hospital where he was evaluated and released.
11/1/2021	Outside Crew	Injury	Bruised Foot	Injury - November 1, 2021, A four man crew returned to finish cleaning up a large oak tree that had been felled (cut down, as a whole or in pieces) the previous day. Two crew members were loading a tarp full of debris from the site into the bucket of the skid steer. As the workers loaded the tarp onto the bucket, the skid steer operator lowered the front of the bucket downward to make it easier for them. When the bucket was lowered, worker 1's foot was caught underneath, and he immediately signaled to the skid steer operator. The operator lifted the bucket, and worker 1 pulled his foot back, walked away to evaluate the impact of the incident, and noticed his foot had a red discoloration. On site Safety confirmed worker 1's foot was bruised from the impact.

Date Of Incident	Occupation	Type of Incident	Body Part / Root Cause	Description
11/1/2021	Outside Crew	Injury	Arm Laceration / Abrasion	Injury - November 1, 2021, A crew replacing a no access pole on the side of a hill de energized, grounded and floated the overhead conductors off the pole (removed them from crossarms and let them sag), then used tag lines (ropes) to pull and tie them off away from the pole, and create a workspace to replace the pole. The crew then tied a 100 foot rope to the top of the old pole as a tag line, to use in guiding the direction of the pole when they cut it into one large section for removal. Then, a crew member used a chainsaw to cut the pole three feet above ground level and tried using the tag line to guide it, but the pole did not fall in the intended direction. Instead, the pole fell toward and struck the foreman , who was the qualified standing at about a 45 degree angle on the uphill side of the pole. The foreman sustained an abrasion on his right cheek and a laceration on his left arm.
11/8/2021	Outside Crew	Injury	Shoulder	Injury - November 8, 2021, A worker was tightening a ratchet strap to secure a load when the ratchet strap suddenly came loose, and the unexpected motion caused the worker's arm to raise in an awkward way. The worker continued with his task, and after a few minutes felt discomfort/soreness in his shoulder and stopped working.He reported the incident to supervision and was instructed to seek medical evaluation. After medical evaluation, the worker was instructed to ice his shoulder over the weekend and was then released.
11/12/2021	Outside Crew	Injury	Fractured Toe	Injury - November 12, 2021, A two-man crew was flown onto a steel lattice tower to unclip (release) the existing static wire and remove dampeners from the structure in preparation for a static wire reconductor. The crew installed personal grounds, attached the wire stringing roller support bracket to the tower, and removed dampers. Then, they installed a grip and rigging, and unclipped the static wire. As they lifted the wire off the structure and into the roller with a chain hoist, the grip slipped and caused the wire to land on worker 1's left foot. The helicopter pilot was immediately contacted to return to the tower and assist with the rescue. With assistance from worker 2 and the helicopter, the wire was lifted off worker 1's foot and both crew members were promptly transferred back to the landing zone for assessment. Worker 1 sustained a fractured toe.
11/15/2021	Outside Crew	Injury	Dislocated Knee	Injury - November 15, 2021, As part of a project involving helicopter work to replace an H-frame and reconductor multiple spans of wire, three crewmen were tasked to soft-side the conductor on the H-frame. One of the workers climbed the structure, and when he reached the crossarms (arms), he repositioned his fall protection over the arms in preparation to climb over them. Then, he extended his right leg out and placed the arch of his right foot onto the topline of arm so he could rotate his body from underneath the crossarms to on top of the arms. As the worker shifted his weight to his right leg, the pressure of his bodyweight in conjunction with the rolling motion caused his right knee to dislocate. The worker immediately called out for assistance to his pole partners and the engaged observer on the ground called an All-Stop and directed the two crewmen working aloft to assist their crew member. Due to his dislocated knee, the injured worker was unable to climb down the structure, so his crew members radioed the helicopter for assistance and secured a fly harness on their injured pole partner. The injured worker was transported to the landing zone for further evaluation.
11/15/2021	Outside Crew	Injury	Dizzy - Sick	Injury - November 15, 2021, A crew was finishing up a cut-over on a 4 kV line when a worker indicated he was dizzy and not feeling well; at one point he stumbled to the ground. The crew sat him down and gave him water and electrolytes. The general foreman arrived on-site and out of caution took the worker to the local emergency room.
11/15/2021	Outside Crew	Injury	Forehead Lacerations	Injury - November 15, 2021, Using two bucket trucks, a crew was set up to spread energized primary conductors onto hot arms (temporary position for energized conductors) to make room for a new pole set. Crew members working from the bucket successfully fastened a new ten-foot crossarm with its top bolt to the new pole, while a worker on the ground asked the foreman if the pole tag on the old pole needed to be transferred to the new pole. The foreman answered in the affirmative, assumed the worker would accomplish that task after the overhead work was complete, and walked away to complete another task. The worker called up to the crew members in the buckets and stated he was entering the drop zone to remove the pole tag, then entered the drop zone without verifying the workers above heard him. As the worker on the ground was performing his task, the crew members above were adjusting the crossarm to place the bottom bolt through it, when the end of the crossarm hit a hot arm hanging on the outside of one of the buckets. The hot arm dislodged from its position and fell onto the top-front of the worker's hard hat. The injured worker sustained two lacerations to his forehead.
11/15/2021	Outside Crew	Injury	Civilian Taken to Hospital - Unknown Injuries	Injury - November 15, 2021, Two crew members were driving to a job site in damp road conditions, with limited visibility due to fog. They entered a sharp curve at about 45 mph, when their vehicle skidded and swerved into oncoming traffic, and they collided head-first with a small third-party sedan. The driver of the sedan was alone in the vehicle. Airbags deployed on both vehicles. Both vehicles sustained major front-end damage and were towed from the scene. The workers did not sustain any injuries. The third-party driver did not sustain obvious injuries but was taken from the scene in an ambulance.

Date Of Incident	Occupation	Type of Incident	Body Part / Root Cause	Description
11/15/2021	Outside Crew	Injury	Fingers Pinched	<p>Injury - November 15, 2021, Electrical crews were changing out wire reels in support of an ongoing reconductoring operation between two transmission towers. Two workers were in the process of installing a mandrel bar into a 22,000 lb. wire reel that was to be loaded onto a wire boat. The workers lined the bar up to the reel using a 50-ton crane then started pushing it into place by hand onto the reel. During the last push of the bar, one of the workers positioned his hand over the top of the bar and wrapped his fingers over it — in between the bar and the reel. When the mandrel bar was pushed into place, his fingers were pinched between the bar and the reel. The worker was transported to a local hospital, received first-aid for a ¼" laceration, and was released to full duty the same day.</p>
11/23/2021	Outside Crew	Serious Injury	Leg Laceration	<p>Injury - November 23, 2021, A line crew was tasked to replace a pole damaged due to a pole fire and the jobsite was dark when they arrived, so the upgrade foreman sent two workers to retrieve a light standard for the jobsite. A civil crew would assist with a vacuum truck to dig a new pole hole, just south of the existing pole. The line crew framed the new pole, and the civil crew dug the new pole hole using the vacuum truck, all without incident. The new pole hole was approximately ten feet deep by 26 inches wide. When they began to set the new pole, one of the line crew members at the base of the pole helping guide it into position started walking sideways, lost sight of the new hole location, and fell into the hole feet-first. The crew called an immediate all-stop and the crew used the heavy truck to safely remove the worker from the hole. The worker indicated he was physically all right at the time, with no apparent signs of injury. Then, the crew re-tailboarded and replaced the pole without further incident. Approximately an hour and a half later, the worker reported to the foreman that he was experiencing soreness in his knee. The foreman noticed blood on the worker's pant leg, and when they looked at his knee, they found a laceration under the worker's right knee cap. The foreman called an all-stop and transported the worker to the nearest medical center. The injured worker received ten stitches and was released back to full duty.</p>
11/23/2021	Substation Crew	Serious Injury	Hand Burns	<p>Injury - November 23, 2021, The fan general alarm was being activated on a transformer bank at a substation every time the fans were turned on, and Test personnel identified the problem as the second-stage fan-motor contactor. They lifted a wire from the fan motor contactor, tagged it, and logged the condition in the station logbook. They then referred the repair to the maintenance crew. Three days later, two substation electricians arrived to perform repairs. They observed the logbook entry, condition tag, yellow tape identifying the problem component, and the wire lifted from the motor contactor at the transformer. The two-man crew tailboarded and began to remove the remaining wires from the motor contactor, without disconnecting the fan power or validating the circuit was de-energized. As electrician 1 pulled wire #3, energized with 208 VAC (volts alternating current), the wire touched a rivet, which caused a flash-to-ground. The crew stopped work, and electrician 2 called 911 and made appropriate notifications. Burn gel was applied to the injured worker's hand while waiting for emergency services. First responders administered additional first aid and transported the injured worker to a nearby hospital. Work was stopped until another substation electrician arrived and helped electrician 2 make the situation safe. The injured worker sustained a second-degree burn on his left hand.</p>

<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				
3/25/2021	Civil Crew	CCII	Operator Error	CCII - March 25, 2021 , While working on a Rule 20 project (taking overhead conductor underground), an underground civil crew foreman was using a pneumatic tool to install the second of two ground rods about eight feet from the riser pole. The foreman noticed smoke coming out of the manhole and a subsequent circuit lock-out, so he immediately got out of the excavation, called an all-stop, and informed the general foreman, who made appropriate notifications. The underground civil crew had a valid USA ticket in place. The line crew that responded to the incident determined the ground rod had been driven through an encased conduit bank that housed an energized 12 kV line; the ground rod struck the line and caused the circuit to lock out. There were no reported injuries.
4/8/2021	Outside Crew	CCII	Operator Error	CCII - April 8, 2021 , Two substation electricians were assigned to take clearances and apply personal grounds on a 33kV line that was scheduled to be cleared and grounded for a deteriorated pole replacement project. The 33kV switch rack where the electricians were working is a standard operating/transfer bus configuration. In the morning, the electricians successfully applied the 35-foot 4/0 personal grounds to a horizontal section of the overhead bus, approximately 20 feet in the air. At the end of the day, the electricians began the process of removing one of the grounds. One electrician positioned himself halfway up an 8-foot A-frame ladder to remove the ground using a 12-foot grip-all style hot stick, and the other electrician remained on the ground. The electrician removed the clam shell (clamp) of the personal ground from the bus, then vertically lowered the hot stick to the electrician on the ground. In the process of taking control of the hot stick with the personal ground attached, the electrician on the ground stepped back with one foot, lost his footing and lost control of the hot stick. The personal ground contacted the energized 33kV Transfer Bus lead, which caused a flash, tripped the Bus Tie 33kV circuit breaker, and de-energized the Transfer Bus. The crew stopped work and made appropriate notifications. The electricians were able to regroup and complete the project without further incident.
4/28/2021	Outside Crew	CCII	Operator Error	CCII - April 28, 2021 , After installation of a new 115kV line over a freeway (freeway crossing), a crew arrived on-site to remove 10-foot concrete K-rail sections that had been set up to protect the job site from vehicle traffic. The crew consisted of the traffic control foreman, traffic control flagger, crane operator, oiler and flatbed truck driver. The foreman, oiler and crane operator discussed where to set up the crane, how to remove the K-rails and the proximity of the powerlines. The oiler would also serve as the crane spotter. A 70-ton crane had been de-rated to 40-ton by having counterweights removed so it could be used for the job. To start removal of the K-rails on the west side of the freeway lanes, the crane operator staged the crane on the freeway shoulder, in proximity to the energized 115kV conductors; the flat bed semi-truck to haul away the K-rails was staged on the east side of the crane. The crew rigged and began lifting the first K-rail. As the crane operator boomed up and began to swing towards the flatbed, the crew heard three loud, consecutive "booms." The oiler/spotter witnessed the crane's front tire blow off the wheel hub assembly, and the crane operator witnessed a blue flash in the direction of the boom tip and the overhead 115kV line. The crew immediately called an ALL STOP, ensured everyone on-site was accounted for and there were no injuries. The operator set the K-rail back on the ground, retracted the boom to a safe stowed position and made appropriate notifications. As a precaution after the incident, the crane operator was medically evaluated; he did not sustain any injuries and was cleared for duty. The crane sustained damage on the top of the boom and the right front wheel hub and tire assembly. Minimum Approach Distance (MAD) to energized conductor for a non-qualified electrical worker or crane is 15 feet. It was determined the crane must have been within 21 inches of the 115 kV energized conductor, which induced the arc flash. A qualified electrical worker (QEW) was not on-site. The crane was not grounded.

Date Of Incident	Occupation	Type of Incident	Body Part / Root Cause	Description
4/30/2021	Outside Crew	CCII	Equipment Failure	<p>CCII - April 30, 2021, Following the replacement of underground cable from the east 16kV operating bus to the capacitor switcher, two substation operators (SO) received orders to return the #2 16kV capacitors to service. The cable crew was still on property, out of the switch rack. SO1 would perform the actual switching and SO2 would be the checker; both operators verified the switching program. When closing the second disconnect during switching, the operators heard some "spit" (electrical sound) different than normal and then also successfully closed the third bus disconnect. Following the switching, the cable crew heard a momentary crackling noise coming from the #2 16kV capacitor switcher area. The crew communicated this to the SOs, who went over to check the equipment and listen for themselves. However, the noise had stopped. Suspecting a possible blown fuse, the SOs verified the switcher semaphore as open, then checked the fuses for voltage; the fuses checked okay. The SOs and Transmission system operator (TSO) decided to clear the #2 16kV capacitors to further investigate. After checking the #2 16kV switcher open, they proceeded to open the 16kV capacitor bus disconnects and when opening the first disconnect, a flash occurred. SO1 (performing the switching) fell to the ground. The 16kV operating bus and all associated circuits de-energized for approximately 30 seconds. The TSO called the station, verified the SOs were okay and was given the substation status. The TSO implemented STOP work and halted any further switching then contacted his supervisor, communicating that there were still two bus disconnects closed to the #2 16 kV capacitors. It was determined the safest option would be to open the #1 bank 16kV CB and de-energize the east 16kV operating bus, so the two remaining #2 16kV capacitor bus disconnects could be opened safely. This was accomplished without further incident. Preliminary findings indicated there was continuity on the B & C phase of the #2 16kV capacitor switcher while it was open. The capacitor switcher will be inspected.</p>
7/5/2021	Outside Crew	CCII	Operator Error	<p>CCII - July 5, 2021, A crew was tasked to replace a pole. The crew took a clearance on the 4kV line, tested the line with a high voltage tester, received no deflection and applied grounds. After grounding, a circuit interruption occurred. The substation was contacted, and the line was re-energized. The crew had failed to recognize discrepancies in the written switching program, which resulted in the crew inadvertently grounding an energized 4kV line. Duration of the outage was approximately five minutes.</p>
7/19/2021	Outside Crew	CCII	Equipment Failure	<p>CCII - July 19, 2021, A five-man crew was tasked with changing out a deteriorated pole under No-Test Orders (NTO), with fast curve setting (FCS) enabled on the circuit. When they arrived at the jobsite, the crew walked the job, including inspecting the primary conductor all the way to the adjacent structures to ensure there were no splices or visible damaged spots in the #2 strand copper conductor. The crew framed the new pole and dug the new pole hole without incident. To clear a path for the new pole to be set, two workers began spreading the primary conductor. When they pulled a phase out of the insulator and started to move it out onto the hot arm, the primary conductor pulled apart and caused the circuit to lock out. After the circuit interruption, the switching center called the foreman to ask if they were in the clear and the foreman told the switching center what caused the interruption. A troubleman was dispatched to inspect the line and talk with the crew. After the switching center deemed it safe to proceed, the conductor was safely spliced back together, and the circuit re-energized. Upon close-up inspection of the damaged conductor, it was observed that the copper was annealed (heated and cooled), having possibly been struck by a bullet in the past. No property damage or injuries were reported.</p>
8/2/2021	Outside Crew	CCII	Property Damage	<p>CCII - August 2, 2021, A crew was excavating for the installation of a new conduit system, and a worker went to reposition a partially loaded dump truck that was on a slight downhill grade towards the location of the riser pole. The worker entered the cab and, in preparation to place the transmission into first gear, placed one foot on the brake pedal and covered the clutch pedal with his other foot. Simultaneously, he released the air-assisted parking brake, which resulted in the dump truck rolling backwards down the slight grade, towards the riser pole. When the worker realized that he was unexpectedly traveling backwards, he depressed the brake pedal multiple times to no avail, which prompted him to reengage the air-assisted parking brake. Even after he engaged the parking brake, the dump truck continued to move several feet until it came to a rest against the riser pole. When the truck made contact with the pole, one of the crossarms broke, two conductors below the crossarm made contact, and a flash occurred, which caused a circuit interruption. All workers vacated the immediate area. No injuries were reported. Note: it was discovered that the worker moving the dump truck was not the assigned driver and this was his first time moving this vehicle.</p>
8/9/2021	Outside Crew	CCII	Operator Error	<p>CCII - August 9, 2021, A crew changed out a 40-foot pole with 25 kVA transformer to a 45-foot pole with 50 kVA transformer on a 12 kV circuit, without incident. The crew was re-energizing the section of line when a branch line fuse blew and caused the circuit to lock out. The foreman and crew failed to identify and review transformer name plate data prior to installation, to ensure transformer voltages were correct for the circuit.</p>

Date Of Incident	Occupation	Type of Incident	Body Part / Root Cause	Description
8/16/2021	Outside Crew	CCII	Operator Error	CCII - August 16, 2021 , A crew was in the process of removing a leaning limb from a 90-foot eucalyptus tree that sat to the side of an energized line (distance was greater than 20 feet). When the limb was being lowered, a large, unexpected gust of wind caught the limb and pushed it into the conductors. A substation circuit breaker tripped and de-energized the line. Proper notifications were made, and a troubleman was dispatched to examine the conductors. There were no wires down. No injuries.
8/16/2021	Outside Crew	CCII	Operator Error	CCII - August 16, 2021 , A telescoping grapple saw (TGS) crew was working on a tree removal when the operator identified the tree was too big to safely and successfully remove with the 60-foot TGS equipment. Through their general foreman, the operator requested a climbing crew to assist with the tree removal, and the climbing crew was routed to the TGS location. As the TGS crew waited for the climbing crew, the TGS operator and crew decided to try and remove the top of the tree themselves. The operator cut a piece too large for the TGS to handle, which caused the system to lock the operator out of the controls — a safety mechanism to prevent any damage to the machine. The machine then cut the large tree-top loose and it struck nearby power lines, which caused an outage.
8/23/2021	Outside Crew	CCII	Property Damage	CCII - August 23, 2021 , A foreman successfully removed the first tree-top of a co-dominant tree, then the crew began to remove the second tree-top. The crew miscalculated the length of the second top and did not use a mechanical advantage to pull it, so as the tree-top came over, it went off-course, and the uncontrolled tree-top impacted the service drop and a communication line.
8/30/2021	Outside Crew	CCII	Operator Error	CCII - August 30, 2021 , A crew was tasked to replace a deteriorated pole and transformer on a 12 kV circuit, which had recently been cut-over from a 4 kV circuit. The sketch map called to replace the pole as part of the original 4 kV circuit, but the work order packet had been updated with multiple notations and redlines to highlight the changes made between the original pre-field and the completed 12 kV cut-over. The crew completed the pole replacement work without incident. However, the crew replaced the pole and installed a new 4.8 kV transformer, as depicted on the sketch map, instead of re-installing the existing 12 kV transformer. The crew foreman had No Test Orders (NTO) on the 12 kV circuit and when they attempted to energize the 4.8 kV transformer, the transformer installation caused the branch-line fusing (BLF) to operate, which resulted in an unplanned outage. Proper notifications were made and a troubleman assisted the crew in returning the line to normal operation. No injuries or property damage.
8/30/2021	Outside Crew	CCII	Equipment Failure	CCII - August 30, 2021 , Without incident, a crew replaced a 45-foot dead-end pole on a 12 kV circuit. The crew used a boom-mounted lift arm attached to a digger truck to hold up the conductors when removing the old pole, and when they returned the conductors from the lift arm to the crossarm, the lift arm mounting bracket broke. As a result, the lift arm fell to the side of the digger boom and the conductors slapped together mid-span, which locked out the circuit. The crew called an all-stop, proper notifications were made, the line was inspected and re-energized, and the crew completed the pole replacement without further incident.
9/13/2021	Outside Crew	CCII	Operator Error	CCII - September 13, 2021 , A crew was tasked with replacing and reframing multiple structures in preparation for a reconductor project on a section of a 16 kV circuit. As part of the approved switching program, the crew was to open jumpers. A troubleman on-site gave the approval to open jumpers then the foreman advised the crew to check amperage on the line and proceed with opening the jumpers. The crew was advised that they had no load on a section of line to be opened by the Troubleman onsite. The Crew was directed to install effective cover and amp check each conductor prior to opening. The crew checked amperage of each conductor and identified 1-3 amps each phase, but did not relay their readings to the foreman, then opened the jumpers to complete their step of the switching procedure. After the work was complete and the crew was coming down, a customer advised that they experienced a power outage they were not advised of. The foreman and troubleman reviewed the switching procedure to verify the correct open point, and the foreman identified that they had opened jumpers at the incorrect structure, which resulted in an unplanned outage.
9/13/2021	Outside Crew	CCII	Operator Error	CCII - September 13, 2021 , Four crews were tasked with re-framing multiple poles and replacing multiple spans of conductor on a 4 kV project. As a training opportunity, a worker from one of the crews was instructed to connect the high voltage side of a transformer to the de-energized and grounded circuit in preparation for energizing later in the day. In error, the worker connected the high voltage side of the transformer phase to phase, instead of phase to neutral, which was the rating of the existing transformer. After completion of the work, they energized the 4 kV tap line and checked multiple meters at houses along the circuit to verify the power was on. Everything seemed to operate as expected, no indication of incorrect voltage was found, and all crews drove back to the yard. Later that day, a trouble crew responded to a bad transformer call and found that the high side of the transformer was connected incorrectly. The transformer was replaced without incident.

<u>Date Of Incident</u>	<u>Occupation</u>	<u>Type of Incident</u>	<u>Body Part / Root Cause</u>	<u>Description</u>
9/20/2021	Outside Crew	CCII	Operator Error	<p>CCII - September 20, 2021, A crew started pulling conductor to a 12 kV regulator at a substation but could not complete the task due to missing paddles for the connection. Two weeks later, the crew returned to the substation to finish the 12 kV regulator connections. The incorrect paddles were sent for the connection, but test crews provided instructions on installing the conductors onto the U bolt (hardware) connectors. Line and load were verified with test crews, and they instructed the crew on the connections. The crew made all connections under Test direction and instructions and Test visually verified that the "L" was the line side, and the "S" was secondary. So, the crew was instructed to land the bus to the "L" and the breaker side to the "S". Later that day, the crew was notified that when conducting an in service of the 12 kV regulator the crew had installed, a circuit interruption was caused.</p>

Date Of Incident	Occupation	Type of Incident	Body Part / Root Cause	Description
9/20/2021	Outside Crew	CCII	Operator Error	CCII - September 20, 2021 , A crew was tasked to replace a deteriorated pole on a 12 kV circuit. The old pole was a double dead-end single circuit (with an angle); the replacement pole was a 50' composite pole. The crew framed the new pole and moved it into position next to the existing pole, which was energized. The crew applied some protective cover to the conductors but did not use hot arms (extension arms) to spread the conductor. The foreman and another worker went up in the bucket to the communication level while another worker positioned the new pole. As they set the new pole, the bare (uncovered) composite crossarm made contact with a rubber blanket (protective cover), which pushed the cover over and exposed energized components. The new crossarm made contact with the energized conductor, which caused a flash and locked out the circuit. No injuries.
10/11/2021	Outside Crew	CCII	Operator Error	CCII - October 11, 2021 , A crew was tasked with removing and replacing a deteriorated pole. The foreman and a troubleman on-site reviewed the work order package to identify all circuits to be de-energized and grounded. Opposite the 66 kV circuit, they identified an unknown circuit, which no one was able to identify using the circuit maps. Prior to starting the job, the foreman asked the troubleman about the unknown circuit and the troubleman stated it might be one of two possible 12 kV circuits. The crew took all precautions by testing the overhead circuits to verify each one was de-energized. Two workers working from a bucket verified NO VOLTAGE, as indicated on the test meter on all three phases. During the equipotential zone (EPZ) grounding process, the crew was using an eight-foot hot stick to apply their 4/0 grounding cable to the circuit, when a flash occurred. An all-stop was immediately called and prior to beginning restoration, the crew re-tailboarded to discuss the necessary safety precautions to avoid being between the primary and neutral while repairing the line. The crew received the go-ahead to begin restoration and restore power. Upon initial investigation, it was determined that when testing the unknown circuit, the crew switched the dual tester to the wrong position — they turned the tester knob to phase testing instead of voltage testing. Making that change gave them a false de-energized reading of NO VOLTAGE.
10/18/2021	Outside Crew	CCII	Wire Control	CCII - October 18, 2021 , To keep a transformer in service, but de-energize a section of line to reconductor eight spans of wire, a crew installed isolators on the East side of the pole. The crew set up the wire puller and installed the temporary rollers (that guide the conductor) on the crossarms. This was a planned wire-for-wire pull, and pre-forms were used to connect the outgoing conductor to the new, incoming conductor. At the start of the pull, one of the pre-forms got bound up in the roller and when it was dislodged, the motion shock loaded the pole, which caused the conductors to slap together on the West side of the pole — the energized section of the line — behind the isolators the crew had installed. This resulted in a circuit interruption.
10/28/2021	Outside Crew	CCII	Improper Testing	CCII - October 28, 2021 , Over the last two months, two crews had been working a cable replacement project. One night, both crews were tasked to replace the 12 kV getaway (first out of the substation) cable run from the substation to the vault. The new cable had been pulled in prior to this night's work, and crews worked together to perform switching that would de-energize the run of cable. Crew 1 was to work in the vault to remove old cable and make-up/land new cable on Position 4 of the gas switch. Crew 2 was to work in the substation to remove old cable and make-up and install new pot heads (cable termination hardware). Worker 1 in the vault tested at Position 3 of the gas switch and received a zero voltage (no deflection) reading as worker 2 in the vault and the foreman observed. Worker 1 was in the process of removing a 200 Amp elbow with a four-foot hot stick when a flash occurred and locked out a 12 kV circuit; no-test orders were in place. Following the flash, the two workers immediately exited the vault. The foreman made sure all crew members were all right and in the clear, went to the clearing switch and isolated the faulted cable, and then called the duty supervisor. An all stop was called and crews 1 and 2 were brought together to discuss the incident. Remaining work was assessed and crew 1 was relieved for precautionary reasons. Crew 2 made repairs. Although the workers involved in the flash did not sustain any burns, worker 1 mentioned some eye irritation and, as a precaution, was medically evaluated and released. This Incident could have resulted in more serious injury and/or fatality.
11/8/2021	Outside Crew	CCII	Wire Control	CCII - November 8, 2021 , With the 12 kV under-build still energized, a crew was grounding the de-energized 33 kV circuit above it. The 12 kV conductors were covered, and the long ground was installed to the earth. As one of the workers in the bucket was moving up past the energized 12 kV to position himself and attach shunts to the 33 kV line, the shunt hanging on a hook outside of the bucket came uncoiled and slipped below the bottom of the bucket. This exposed the grounding clamps of the shunts to the two phases of the energized 12 kV beyond the protective cover. The ground shunt made contact with the 12 kV, which resulted in a circuit interruption. The foreman had no test orders; the outage lasted approximately five minutes. No injuries or damage to the circuit.
11/15/2021	Outside Crew	CCII	Operator Error	CCII - November 15, 2021 , A crew successfully off-loaded the top section of a lightweight steel pole. When off-loading the bottom section of the pole, the boom operator inadvertently swung the boom tip of the digger derrick truck into the street-side phase of the 16 kV line, which caused the circuit to lock out, and a small spot fire to ignite at the base of the truck outrigger.

Date Of Incident	Occupation	Type of Incident	Body Part / Root Cause	Description
Contractor Other Incidents				
1/14/2021	Outside Crew	Work Procedure Error	Operator Error	Work Procedure Error - January 14, 2021, A line crew was in the process of performing tie-ins on streetlights when they inadvertently cut into a 600-pair AT&T communications cable. The crew used a reciprocating saw (Sawzall) to window a facility assumed to be innerduct (CIC). Shortly after cutting into it, they noticed copper fibers coming out and realized they had in fact cut into a 600-pair AT&T cable, causing damage to multiple services. No injuries resulted from the incident and the communications facility has since been repaired. Based on second-hand information and supposition due to the appearance of subsurface installations at previous work locations, the crew assumed the 600-pair AT&T cable was a CIC. This led the crew to cutting into the facility and ultimately led to the WPE.
2/15/2021	Outside Crew	Property Damage	Operator Error	Property Damage - February 15, 2021, A groundman was attempting to back a 10-wheel dump truck and vac trailer combination into the yard, adjacent to the Del Monte Substation (with a spotter), when the driver-side front wheel came into contact with a transformer (T-71925) inside of the adjacent yard. The contact caused damage to the transformer's radiator, causing oil to leak from the transformer (slow leak). The workers immediately placed buckets under the area of leakage and are capturing any/all oil. The crew Foreman immediately contacted his GF, Safety Representative, and PSC. During the investigation, it was discovered that the UFM had backed his crew truck, towing the dump trailer through the substation gates, utilizing a spotter. They then parked and dropped the dump trailer in the yard's rear, in front of a tilt deck trailer. The Foreman then pulled the crew truck out of the yard and parked it on Figueroa St. Once the Foreman completed that task, his groundman then maneuvered the 10-wheeler, towing the vac trailer, and positioned the truck and trailer, so he could back in through the yard's gate, utilizing a spotter. Due to the gate's narrow opening (11'-10"), the truck and trailer were pulled forward to reposition the trailer. While backing, the spotter, was checking both sides as the driver was reversing through the gate. Once the trailer successfully made it through the gate, the spotter, stationed at the rear of the trailer on the passenger side of the combination vehicle. As the driver watched his spotter through the passenger side mirror, he contacted the driver side front wheel and the step-down pad-mounted idle transformer (T-71925) radiator, causing damage. Later, it was also discovered that the transformer had large cement barricades surrounding it. The Thursday before the incident (02/11/21), the Foreman decided to remove those barriers, so he would be able to fit additional pieces of equipment.
2/25/2021	Outside Crew	Fallen from Elevation	Wood Pole Failure	Fallen From Elevation - February 25, 2021, A lineman was assigned the removal of service, cable TV, and phone cables off a property line pole in preparation to set a new pole. Before climbing the pole, the lineman performed a visual inspection and conducted a sound test using his hammer. The lineman ascended the pole, removed the service, and then descended to the phone and cable TV level. Once he detached the phone cable, the lineman felt the pole begin to lean to the south before continuing to slowly fall. The lineman was able to maneuver to the high side of the pole before the pole came to rest, when the arms touched the ground. The lineman was able to unbelt from his fall protection and step off the pole, onto the ground, without sustaining any injuries.
3/9/2021	Outside Crew	Property Damage	Civilian Drunk Driver	Property Damage - March 9, 2021, A crew was tasked with a deteriorated pole replacement on a city street during a night outage. Traffic control crews set up an approved road closure on northbound lanes, which included message boards, arrow boards, barricades, cones and active flagging personnel. Traffic control flaggers directed the crew into their work location within the closed #1 and #2 lanes. The semi tractor-trailer with pole trailer was parked in front of the work area and occupied the #1 lane; a bucket truck was parked off-set within the #2 lane behind the crew's work area, which barricaded the work area for safety while conducting work. The crew completed their tailboard and, while awaiting their clearances, began framing the new structure on the ground. One of the flaggers identified a solo vehicle traveling northbound in the #2 lane at a high rate of speed toward the parked semi tractor-trailer. Before the flagger could react, the third-party driver proceeded through the barricaded road closure, continued in the #2 lane, then slowly started to swerve into the #1 lane where the driver collided head-on into the front of the parked semi tractor-trailer. A flagger and the crew secured the scene and tended to the third-party driver. The other flagger contacted local authorities and the crew foreman contacted his management; all appropriate notifications were made. The third-party driver was taken into custody for driving under the influence. The semi tractor-trailer was towed away and red tagged out-of-service for full inspection. No worker injuries.

<u>Date Of Incident</u>	<u>Occupation</u>	<u>Type of Incident</u>	<u>Body Part / Root Cause</u>	<u>Description</u>
3/30/2021	Outside Crew	Close Call	Equipment Failure	Equipment Failure - March 30, 2021, A groundman and general foreman (GF) were tasked with the delivery and pre-set of a 500 kVA three-phase padmount transformer to support a new business installation. Before leaving the yard, the GF conducted a tailboard to address job hazards (including equipment failure), the crew inspected the vehicle and tested the boom. The crew also conducted a pre-lift of the same size transformer to ensure all equipment was operating correctly and planned for tight conditions at the work location, including limited vehicle placement options. The crew arrived safely at the job location, held a second tailboard, and set up the vehicle so the transformer could be offloaded and moved to the passenger side, just to the front of the vehicle. The transformer weight was 6,100 pounds, well within the lifting and angle capabilities of the boom. After lifting the transformer off the truck bed, the operator began to move the load towards the front of the truck. As the operator was nearing the location of the transformer placement, the sand line suddenly broke, which caused the transformer to fall onto the front fender of the vehicle and hit the ground. There were no personnel in proximity to the impact. The crew called an all-stop, ensured all personnel were safe, assessed the situation, contained the transformer oil and hydraulic fluid leakage and contacted supervision. No injuries. All required notifications were made in a timely manner.
4/12/2021	Outside Crew	Close Call	Pilot Error	Close Call - April 12, 2021, A helicopter arrived on-site with a new 45' pole tethered to the 50' long line used to transport the structure; the line crew on the ground safely received and guided the pole into the installed SONO tube. Then, without communicating to the ground crew or receiving the cut signal from the crew, the helicopter pilot released the load. When the crew became aware of the premature release, they immediately secured the new structure. The helicopter pilot continued to the designated landing zone (LZ), detached the 50' long line, hot fueled (fueled while aircraft is running) and proceeded back to the helicopter's home base. The line crew had secured the pole with ropes, manually manipulated it into place, safely completed the installation, then returned to the LZ where they made appropriate notifications. No injuries.
4/21/2021	Outside Crew	Property Damage	Operator Error	Property Damage - April 21, 2021, A line crew was assigned to complete a wood pole replacement. The foreman conducted a tailboard prior to the start of work to discuss hazards and mitigations, visually inspected the pole and performed a sound test at both the base and four-foot level of the pole to check integrity of the structure. The foreman decided it was safe to continue. A lineman boomed up to begin removing the span guys and primary conductors. When he released a span guy (without first securing the pole), the wood pole broke below ground level and fell onto an adjacent residence. The crew conducted an ALL STOP, ensured site safety and made appropriate notifications. Upon further inspection of the pole (about four feet below ground level), a third-party utility conduit bored through the middle of the pole was discovered. The third-party conduit through the base of the wood pole is believed to have caused significant deterioration of the pole below grade. Property damage was sustained by the residence, the pole was removed safely from the home and damages will be repaired. No injuries.
5/6/2021	Outside Crew	Helicopter Accident	Weather	Helicopter Accident - May 6, 2021, A crew was in the process of un-clipping a static wire using a helicopter in a Class A external load configuration via skid platforms on either side, and was transporting linemen to tower structures. The helicopter took off from landing zone (LZ) to prepare for un-clipping of the static wire with one lineman on the left-hand skid platform. En route from the LZ to the first tower, the helicopter was struck by a dust devil, causing a loss of control. The pilot stated, "he maintained control to the best of his ability to land the helicopter," resulting in a hard landing and a reportable accident per FAA regulations. No injuries were sustained by the pilot or the lineman.
5/28/2021	Outside Crew	To Be Determined	To Be Determined	Pole Instability, Crew & Public Safety - May 28, 2021, SCE Leadership was recently made aware of several contractor resources, throughout the organization, were installing new anchors utilizing an anchor extension in place of the 10-foot anchor rod. There are also indications that some contractors may have cut or altered the length of the 10-foot anchor rod to shorten the depth at which it was buried. SCE is taking immediate action with the contractors to identify these structures and correct this issue in the field, in addition to requiring the contractors to perform internal fact finding and corrective action plans. This work practice creates a significant safety risk to our crews and to the public. To mitigate this risk, there are actions that our foreman, planners, and inspectors can take to identify this type of anchor installation in the field.
7/12/2021	Outside Crew	Close Call	Operator Error	Close Call - July 12, 2021, Inside a substation, a worker was driving a forklift to move old equipment to a new location. When driving in reverse, the right front tire hit the personal ground that tied the overhead conductor to the ground system at the base of the supporting pole. As a result, the ground cable was pulled on and its overhead connection strained, which caused the bus conductor support to break and the conductor to fall to the ground.
7/12/2021	Outside Crew	Vehicle Accident	Operator Error	Vehicle Accident - July 12, 2021, A worker was driving westbound up a narrow road and could not see over the hood of the truck due to going uphill. The driver turned wide to clear a secondary pole on the south side of the road, a spot where the road narrows from approximately 18 feet to 12 feet. The driver felt a jolt, heard a thump sound, and realized the truck was off the road but was unable to regain control of the vehicle. The vehicle rolled approximately 25 feet onto its side and got lodged against a tree. No injuries were reported.

Date Of Incident	Occupation	Type of Incident	Body Part / Root Cause	Description
7/26/2021	Outside Crew	Close Call	Operator Error	Close Call - July 26, 2021, An operator was relocating an excavator, driving with the excavator boom elevated along an established project access road. The operator did not notice the temporary service drop (a low-voltage line) running across the road to an on-site job trailer, and the boom made contact with the line. This put tension on the line and the adjacent poles on either side of the road, which caused the temporary power pole on the southwest side of the road to break, the temporary power pole on the northeast side of the road to dislodge, and the temporary power line to break.
7/26/2021	Outside Crew	Property Damage	Operator Error	Property Damage - July 26, 2021, A crew was tasked to replace a 70-foot 66kV transmission pole by setting and transferring SCE lines to a new, adjacent 110-foot pole. The crew would also set a 50-foot pole and transfer another other utility's 34.5kV underbuild. Without incident, the crew set the new pole adjacent to the existing, topped the existing structure to approximately nine feet above ground, transferred conductor to the new pole, and completed work on the new 50-foot structure one span away. The crew then returned to the old pole to remove the remaining nine-foot section. Despite multiple "no parking" signs posted within the work area, a third-party vehicle had been parked there for approximately three days, and the crew had worked around the vehicle. The crew made multiple attempts to have the vehicle towed from the location but due to various complications, the car was never towed. The crew exhausted all avenues to identify the owner of the vehicle without success, so they made the decision to remove the remaining nine-foot pole section with the third-party vehicle still directly next to the pole. The crew attached rigging and additional tag lines to maintain control during removal of the old pole section. As the crew was extracting the old pole, it broke below-grade due to significant rot damage. The pole break caused minimal shock loading, which caused the pole section to bounce around and, unfortunately, it made contact with the third-party vehicle. The crew called an all stop, made notifications to their direct supervisor and contacted the other utility to verify there were no active outages at the location or within the area.
8/9/2021	Outside Crew	Close Call	Operator Error	Close Call - August 9, 2021, A worker was driving inside a substation near the north end of a cable trench, which runs north to south, parallel to the east wall. The driver made a sharp right-hand turn too close to the trench, his rear passenger tire drove over the top of the trench cover, and the cover collapsed. The rear tire partially fell into the trench.
8/16/2021	Outside Crew	Close Call	Unsafe Act	Close Call - August 16, 2021, A two-man digging crew was tasked to dig for an anchor install on a section of a 12 kV line. The crew verified the active dig ticket and utility paint markings at the location. As the crew excavated using hand tools, they encountered a significant amount of tree roots and hard pan (extremely compacted soil) within the excavation site. In the process of breaking up the hard pan at approximately a two-foot depth, the head of the spade shovel struck and broke an unidentified, privately owned duct, which contained energized 480 V conductor. A small flash occurred when the head of the spade shovel made contact with the conductor housed in the ducting. The crew member immediately moved away from the area and his crew members made sure he was okay. No injuries were reported. The foreman immediately made proper notifications to have the conductor de-energized.
8/30/2021	Outside Crew	Property Damage	Operator Error	Property Damage - August 30, 2021, A worker was driving on a narrow mountainous roadway, and when he made a tight right turn, he was blinded by sun glare. Blinded by the glare, he missed the upcoming left curve and, instead, ran his vehicle into the hillside to his right. The worker's vehicle rolled over after traveling 25 feet along the hillside.
8/30/2021	Outside Crew	Property Damage	Operator Error	Property Damage - August 30, 2021, When removing a deteriorated pole, the crew used the grabbers of the line truck to help shake the pole loose. The pole made contact with a nearby brick wall and a few top bricks were knocked loose, the mortar around the bricks broke free, and the wall slightly shifted side-to-side.
9/6/2021	Outside Crew	Close Call	Heat Exhaustion	Close Call - September 6, 2021, On a hot summer day, a worker was conducting a pre-construction survey with a small team of specialists. While walking down a mile-and-a-half road, the worker indicated he had a headache and was hot, and he was observed as having a blush-red face. The worker had walked a half mile from his parked vehicle, where he had cold water and food.
9/6/2021	Civil Crew	Property Damage	Operator Error	Property Damage - September 6, 2021, When potholing by hand to locate a marked half-inch plastic gas service and a three-inch conduit that was capped off, a worker struck and damaged the plastic gas service with his shovel.
9/6/2021	Outside Crew	Vehicle Accident	Driver Error	Vehicle Accident - September 6, 2021, When a worker was commuting to a project site, a small animal ran across the road as the worker approached a sharp corner. The worker pressed hard on the brakes and tried to avoid the animal. This caused his vehicle to swerve out of control, and the worker over-compensated to the opposite direction to try to correct the swerve. As a result, the vehicle skidded, then rolled about three times before it landed in a ditch.

Date Of Incident	Occupation	Type of Incident	Body Part / Root Cause	Description
9/20/2021	Outside Crew	Property Damage	Driver Error	Property Damage - September 20, 2021, Two crews completed their work replacing and reframing poles, and reconductoring on a mountain top. About a half mile into the crews' descent down the dirt road, the brake system of a digger truck pulling a pole trailer started to lose air pressure. The driver had the vehicle in the lowest gear while descending the grade but was unable to stop the vehicle using the brakes. The vehicle picked up speed and the driver pulled the parking brake, but the vehicle did not stop. The driver was turning a steep corner and tried to exit the vehicle but was unable to do so. The digger and trailer went over the shoulder, rolled, and landed about 30 feet past the shoulder and down the hill. The driver was shaken up but uninjured. The caravan of crew members secured their vehicles and assisted the driver out of the digger. Proper notifications were made.
9/20/2021	Outside Crew	Property Damage	Operator Error	Property Damage - September 20, 2021, A skid-steer tractor was relocating to a different location, and the worker driving the follow vehicle at five mph fell asleep. The vehicle went off the road on downhill terrain and traveled about 25 feet before it came to a complete stop.
10/4/2021	Outside Crew	Property Damage	Driver Error	Property Damage - October 4, 2021, In the morning, after completing night work, a worker was driving a bucket truck on the freeway back to his work base, when a third-party driver abruptly cut in front of him and caused him to veer onto the freeway shoulder. The vehicle's right front tire caught the loose gravel/dirt of the embankment and pulled the bucket truck off the shoulder, and over the embankment. As a result, the bucket truck nicked a streetlight, ran through a chain link fence, flipped and rolled approximately 70 – 80 feet, landed on the passenger side, then came to a stop at the bottom of the road. No injuries. The third-party driver that cut off the worker continued driving and did not stop.
10/4/2021	Outside Crew	Vehicle Accident	Civilian Driver Error	Vehicle Accident - October 4, 2021, A crew had successfully completed a pole replacement and was in the process of cleaning up. Both lanes of traffic were open and worker vehicles were on the shoulder with cones in place, when a third-party driver drove into the cone zone and struck the open door of the parked, unoccupied bucket truck. No injuries. The bucket truck sustained minor damage to the door and the third-party vehicle sustained moderate damage on the passenger side.
10/11/2021	Outside Crew	Close Call	Operator Error	Close Call - October 11, 2021, A worker needed to move the plastic insulating cover on a distribution conductor that was to be tied-off overnight due to high winds. As the worker was using a handline to slide the cover over, the conductor moved up and came into contact with the boom on the digger derrick truck, which was being used as a guard structure.
10/11/2021	Outside Crew	Close Call	Civilian Nut	Close Call - October 11, 2021, When performing an inspection of transmission assets along a main street, a worker heard someone yelling at him from across the street. A man was accusing the worker of spying on him, telling the worker "he would not let him take his rights away." The man continued to verbally harass the worker and approached him on a bicycle. The worker continuously told the man he was inspecting the power lines, then, from his bicycle, the man attempted to punch the worker as he passed by him. The worker discharged his dog spray, hitting the man in the cheek, neck, and shoulder area. The man fled out of view down the street, and the worker reported the incident to his supervisor and the police; the police were unable to locate the man.
10/18/2021	Outside Crew	Vehicle Accident	Driver Error / Speed	Vehicle Accident - October 18, 2021, A four-man crew had completed the day's work without incident and as part of their post-job tailboard, they identified the route of travel, discussed that low gears were to be utilized on all line trucks due to roadway decline, and directed the traffic control crew to lead the convoy and open a locked gate at the bottom of the roadway. At the bottom of the roadway the convoy had to make a left turn to get to the gate. As the digger-derrick truck with pole trailer attached approached the left-hand turn, the speed of the vehicle increased. As the driver entered the turn, the driver saw the traffic control vehicle stopped in the roadway, preparing to open the closed gate. The driver applied the brakes but was unable to safely slow the truck's speed. To avoid a collision with the parked traffic control vehicle, the driver maneuvered the digger-derrick truck with pole trailer to the right shoulder, where the vehicle exited the right side of the roadway and overturned on the downhill slope. No injuries.
10/18/2021	Outside Crew	Close Call	Civilian Speeding	Close Call - October 18, 2021, Early on a Saturday morning, two crews were in the process of replacing three poles inside a large traffic control area, when a traffic control worker radioed the crews that a third-party vehicle traveling at a high rate of speed was entering the established road closure/work zone. Crew members in the vicinity were able to clear the area of the road just before the third-party vehicle collided with the rear end of a parked traffic control vehicle being used as a barricade to protect the working crews. The impact from the collision sent the parked traffic control vehicle rolling down the roadway approximately 200 feet and over a concrete median, until it came to rest against an adjacent power pole. After the collision, the third-party driver exited the vehicle and appeared to be leaving the scene on foot but crew members who were checking on the driver persuaded the person to stay on-scene. A second traffic control worker on-site called 911 and reported the accident; California Highway Patrol officers arrived on-scene within five minutes.
10/25/2021	Outside Crew	Vehicle Incident	Driver Error	Vehicle Incident - October 25, 2021, A worker was driving back to his work base when he took his eyes off the road and did not realize that traffic ahead of him had come to an abrupt stop. As a result, the worker rear ended the vehicle in front of him, which caused that vehicle to rear end the vehicle in front of it. No injuries were reported from the parties involved.

<u>Date Of Incident</u>	<u>Occupation</u>	<u>Type of Incident</u>	<u>Body Part / Root Cause</u>	<u>Description</u>
10/25/2021	Outside Crew	Vehicle Incident	Driver Error	Vehicle Incident - October 25, 2021, A worker was driving approximately 30-35 mph to a company work location, when he approached a curve in the road and suddenly lost control due to wet and slippery conditions. This caused him to drive off the road and fall into a ditch.
11/1/2021	Outside Crew	Property Damage	Operator Error	Property Damage - November 1, 2021, A skid steer (Figure 1) operator and spotter were processing soil for backfilling. As the operator drove the skid steer over the small stockpile of soil (approximately two and half feet high), he drove onto a soft portion of the stockpile , which caused the skid steer to become unbalanced and tip onto its side.
11/8/2021	Outside Crew	Vehicle Incident	Collision Avoidance	Vehicle Incident - November 8, 2021, A worker was traveling approximately 35-40 mph on a two-lane road conducting pre-field work activities, when a third-party off-road (side-by-side) vehicle approached on his passenger side and, without notice, abruptly moved into the worker's lane. To avoid a collision, the worker moved away from the vehicle, which caused him to hit a wooden pole on the shoulder of the road.No injuries. The truck sustained damage to the front bumper, grill, and lights.
11/8/2021	Outside Crew	Property Damage	Wrong Plan Depth Shown	Property Damage - November 8, 2021, A worker with a spotter was operating an excavatorwhen a two-inch conduit with lighting wire running in it was struck and damaged. The plans showed the conduit to be at a depth of four feet, but the actual depth was only twenty inches.
11/8/2021	Civil Crew	Property Damage	Improper USA	Property Damage - November 8, 2021, A two-man crew digging for the installation of a new anchor was using hand tools and a jackhammer, due to the very hard soil. The Underground Service Alert (USA) ticket indicated "No Conflict" (no utilities in that area).At approximately four-feet deep, the crew struck a conduit-in-cable service, which damaged the secondary electric cable feeding a residence. After all notifications were made, it was decided to install a new secondary hand hole to allow access for the needed repairs to the secondary cable.A line crew was called to the location to assist. When digging to widen the hole for the hand hole installation, a one-inch gas service to the house was nicked.
11/8/20201	Outside Crew	Vehicle Incident	Collision Avoidance	Property Damage - November 8, 2021, A three-man crew was caravanning down a windy mountain road to a landing zone where they would stage material for upcoming helicopter work. The foremen led the way down the road, followed by a worker driving a digger derrick truck with the pole trailer and material, then the other crew member last in line driving the bucket truck. The crew made their way slowly down the windy road then turned onto a main road, and as the crew was approaching a bridge, the foreman and digger derrick truck driver noticed traffic backing up. The foreman began to slow down and checked his rearview mirror to ensure the crew member directly behind him was also slowing down, which he was. As the digger derrick truck started to slow, the foreman saw a small car cross over the double yellow, pass the bucket truck,and jump in front of the digger derrick truck. The worker driving the digger derrick applied the brakes and as the truck was slowing, smoke came out from the wheel areas. The brakes failed and the digger began to pick up speed toward the slowing traffic. To avoid collision, the driver tried to slow the vehicle by driving it against the guard rail,and after the guard rail ended, there was a small hill that he was able to turn into. As the truck turned into the hillside,it turned onto its side on the road. The driver was unharmed and there were no injuries.

<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				
5/2/2021	Civil Crew	Significant Injury	Electrocution	Significant Injury - May 2, 2021 , Around 0100, a two-man civil crew were electrocuted while providing civil support to a PG&E electric crew, in response to an emergency resulting from from a compromised pole. Preliminary investigation indicates the electrocution occurred when the PG&E digger derrick contacted an energized overhead conductor. The two employees are being observed and recovering at the Arroyo Grande Community Hospital.
9/7/2021	Utility Crew	CCII	Wire Control	CCII - September 7, 2021 , Two (2) SCE linemen were working in a bucket, making up taps for a deteriorated pole replacement, when a flash occurred. The flash occurred as the lineman slid the TACO (conductor cover) back, away from the dead end, which allowed the de-energized 4kV dead-end tap to spring into the energized over the arm.
10/11/2021	Utility Worker	Property Damage	Driver Error	Property Damage - October 11, 2021 , On his way back from conducting a vehicle patrol at a generating station, a worker drove his vehicle into a ditch, just right of the crossing over the ditch.
10/26/2021	Substation Crew	CCII	Operator Error	CCII - October 26, 2021 , As part of an outage on the 16 kV South Bus at a substation, a wiring crew replaced existing secondary cables for a relay upgrade project. Approximately one week later, substation operators arrived at the substation to clear the 16 kV North operating bus. The acting operator confirmed with the site representative that the crew was ready to proceed and ensure all workers exited the MEER building (control room) until all switching was complete. An inoLect tool (programmable, remotely-operated machine) is used for racking circuit breakers (moving into and out of final position/energized or de-energized status) at this station. Switching orders were issued to begin the switching, and two 16 kV lines had already been successfully moved from the North to the South Bus. The operators moved the spare 16 kV circuit breaker (CB) and rolled it into the South 16 kV position. No obstructions were noticed in the CB cubical. The operators connected the inoLect tool and then retreated outside the MEER building to safely operate the inoLect controller. The operators were wearing approved PPE. The operator gave the inoLect the command to rack-in the 16 kV CB, and after some CB movement, a relay operation occurred. The operators heard the relay operation and made contact with the system operator to report their findings. Following the incident, an all stop occurred with all parties. The station was de-energized for everyone's safety and the CB was removed from its cubicle. Shortly after the incident, it was observed that a secondary raceway cover (metal plate that holds wires in the cubicle so they are not exposed) may have made contact with the C-phase bushing while the CB was being racked-in. A crew made all necessary repairs to bring the circuit back into service the following day, without further incident.

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

Primary Hazard Focus: Situational Awareness

SAFETY OBSERVATIONS



LOOK AROUND.
LOOK AHEAD.
STAY AWARE.

2021 Observations through August

Top Opportunities For Improvement

11	Observer not engaged
5	Unmarked drop zone
3	No three-way communication
3	In the line of fire

HISTORY TELLS US

Situational awareness is a fancy term for being aware enough of our surroundings to identify potential threats and dangerous situations, and we do that all the time. We often tell ourselves and our family members to pay attention when walking to our cars at night, driving through unfamiliar parts of town, navigating through venues, and getting cash out of an ATM — because you never know what can happen. But what about when there is no clear or present danger? How acutely aware do we need to be then? Well, if we are interested in preventing incidents, it pays off to regularly scan our environment.

Consider the information discussed in the tailboard — like who’s doing what and how/where they’ll do it. We can take that information with us as we move through the jobsite, and all the while remember that jobs are dynamic and may experience changes in work scope, a procedure, or an approach. So, when we regularly assess what’s changing/has changed, or what wasn’t a hazard when the job started but is now or could develop into one, we stay aware of potential threats and dangerous situations. The next layer is how and when are changes communicated. Is it a no or low-impact change that can be validated through three-way communication, should we have an informal conversation before implementing the change, or does it merit a new tailboard? This also applies to visualizing the work ahead — how does what we are doing now impact what we’ll do down the line? And it’s not just about regularly assessing our surroundings to *stay ahead* of potential threats — we might become aware of and be able to assist with something happening real-time.

So, it might take some doing to be focused on our own tasks yet be mindful of what’s going on around us but, again, it’s really a matter of engaging the mindset we already use elsewhere. For those who need help jumpstarting their situational awareness, check in on a crew member when you’re working in high heat or review the Emergency Action Plan for your specific job that day (and don’t just rely on what it was for the “last job”). Then, there’s always asking those “what if” or “what happens when” questions before loosening or tightening hardware, moving equipment, bringing tools into the minimum approach distance (MAD), managing a controlled load with a tag line, working near a drop zone, or working in proximity to energized equipment or circuits.

Remember, personal safety isn’t just following policies and procedures...it starts with assessing our environment and — within that context — how we apply those policies and procedures while being aware enough to adjust if we need to.

We may not be able to foresee every eventuality, but no one wants to be sucker-punched by something they could have seen coming...if they’d only paid attention.

We can’t predict the future, but we can look ahead and decide how to best approach it.

- Does everyone know where emergency supplies are located?
- Who else might be affected by this change in circumstance, status, or condition? Who will make them aware?
- 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 — how 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?
- What wasn’t a hazard but is a hazard now or could develop into one?
- 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?
- Have a gut instinct that something isn’t right? Stop and talk about it.

Ask yourself: Ever been a time you wished you would have been paying attention? How would it have affected the situation outcome?

Exhibit B



A SELECTION OF INCIDENTS & CLOSE CALLS | 2020 - PRESENT

Year	Incident Summary
2021	<ul style="list-style-type: none"> A worker was walking from one crew to another in an area where road conditions transitioned from very dry to damp, with patches of ice due to shade by several trees. The worker inadvertently stepped onto a small area of black ice and fell to the ground. He suffered discomfort in his lower right ankle. A crew was using two line trucks to replace a pole, and a worker used the remote controls for the wrong truck, which caused sudden movement of a hot arm and resulted in a circuit interruption. A worker was assisting with framing a pole on the ground and when he moved to reposition himself, he tripped over a crate behind him and fell backward. The worker tried to brace himself with his arm, which resulted in straining his left wrist. A worker didn't see the change in elevation, tripped, and hyper-extended their knee. When a worker was installing bearing braces using a three-pound hammer, twice he missed his target and struck himself in the left wrist and back of his hand. A worker lost awareness of the elevated sidewalk, tripped over the curb, and landed on their side, wrist, and head. A worker was accidentally struck on the head by a closing toolbox lid. While a worker was installing a second set of grounds, he was asked to perform a second task, which led him to work outside of his equal-potential bracket grounds. No injuries or equipment damage. A worker was using a clay spade pneumatic tool to install a ground rod in an open trench, when he noticed smoke coming out of the manhole 25 feet away. It was discovered the ground rod had been driven through an encasement and struck a 12 kV cable. A worker stopped welding overhead and brought the rod holder (with the welding rod still in it) down to chest-level and held it there in his right hand. He flipped the welding hood up to visually inspect the weld, but his safety glasses were fogged up. So, the worker removed the safety glasses with his left hand; his right hand was still holding the welding rod/holder at chest-level. The worker wiped his head on his left shoulder, then swung his head down and to the right, which caused his left eye to make contact with the hot end of the welding rod.
2020	<ul style="list-style-type: none"> When worker 1 was exiting the crew cab of the foreman's pickup, he didn't see worker 2's hand there, and accidentally closed the door on it. This pinched a few fingers on worker 2's hand, but he said he was okay and refused medical attention or urgent care. A safety representative was notified, and the worker followed up on his own for self-care directions. While maneuvering a bucket into a working position to close primary taps, the secondary conductor was inadvertently pushed into the primary conductor, mid-span. No injuries. Proper notifications were made. While pumping water out of an underground structure, a worker tripped over the hose, fell, and landed on their shoulder. While worker 1 was finishing cable make-up in a splice box, worker 2 (outside of the splice box) accidentally kicked a dome light into the splice box, which struck worker 1 in the head. During routine compliance tree trimming, a worker was holding a small branch with his left hand and using his right hand to cut the branch with a handsaw. The worker completed the cut in a backward motion toward his body, and the momentum of the motion allowed the blade to continue through the branch and make contact with his left finger. There was little-to-no bleeding from the cut; the ground crew sent up a first-aid kit and the worker applied a bandage, finished trimming the small tree, then came down. Another crew member transported the injured worker to a local hospital where he received five stitches for the 3/4-inch laceration. Proper notifications were made. While maneuvering a pole to be set, the pole broke free and a worker's left hand was pinched between the pole and line truck. The worker sustained a broken left pinky finger. When pruning a property-line tree, a worker's hard hat and shoulder made direct contact with a weather-proof secondary line. No injuries.

Think about it: When was the last time you reviewed the guidelines for calling on emergency services for help? There may be more recommended times than you think.

Comments or questions? Contact ContractorSafety@sce.com



A SELECTION OF INCIDENTS & CLOSE CALLS | 2020 – PRESENT, cont.

Year	Incident Summary
2020, cont.	<ul style="list-style-type: none">• At night, a crew was framing a pole near a ten-foot-deep hole that had been dug previously for the new pole set. A worker miscalculated his surroundings and stepped backwards, slid down to the bottom of the exposed hole, and landed on his feet. The worker was safely helped out of the hole and declined further follow-up. The crew re-tailboarded, calling attention to being alert to their surroundings, paying close attention to the task at-hand, working safely, and the importance of not being in a hurry. Work was completed without further incident.• A crew member was spotting for the backhoe operator while clearing debris from a vault excavation. The crew member was standing right beside the outrigger of the backhoe as it was removing an oversized piece of debris from the excavation, when the weight of the debris being lifted shifted in the bucket of the backhoe and caused the outrigger to lift off the ground and move. When the outrigger came back down, it pinched the crew member's big toe on his right foot.• Bucket controls were inadvertently actuated while transferring communication lines and caused the bucket to push on the pole. This resulted in strain on the conductors, which broke the pole across the street.• When rolling up guy wire, the worker lost control of the wire's end and it sprung back into his face, which resulted in some cracked and fractured front teeth.

DEADLINES AND IMPORTANT DATES

September 17, 2021 Leader Safety Culture Training Requirement

By September 17, 2021, all Safety Tier 1 High Risk (HR) Contractors who have worked or plan to work at least 25,000 hours/year for SCE must upload into ISN their Leader Safety Culture Training documentation. Documentation is for all leaders overseeing employees conducting Safety Tier 1 work for SCE. Click [here](#) for link to the guidance document at SCE.com

ADDITIONAL RESOURCES

On A Conditional Contractor Plan (CCP)?

Contractor Safety has made a minor modification to the [Conditional Contractor Plan \(CCP\) form](#) that incorporates additional sections for when a prime contractor is proposing to use a conditional subcontractor. This will allow the prime contractor to provide their rationale and oversight plan.

How will the new Safety Classification and Learning (SCL) model affect 60-day incident reports?

SCE has implemented a change to how serious injuries and incidents are classified. As of this month, the new SCL model replaces the Life Threatening/Life Altering (LT/LA) classifications previously used by SCE. Here's a [10-minute overview of the model](#) and how it affects the way you will complete the 60-day incident reports. To illustrate the specifics of the different SCL model classifications, a [7-minute "Examples" video](#) is also available, which features real incidents from both our contract and internal workforce.

Take action: Contact your Contractor Safety Advocate, Edison Representative, or Safety Advisor if you need support.

FOR YOUR REFERENCE | Excerpt: SCE Accident Prevention Manual (APM)

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

APM 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.

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-scan 4. scan, useful 5. Personal, awareness

Think about it: What does your company policy say about emergency response?





Find potential hazards before they find you.

What potential hazards will these inspections help YOU find?

- Routine
- Pre-trip
- Post-trip
- Device
- PPE
- Fall protection
- Connectors
- Components
- Equipment
- Rigging
- Tools
- Structure

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. Well done. 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 best 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?

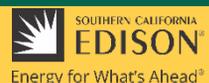
And let's remember the equal importance of pre-inspections, reviewing job plans, conducting job walks, and checking the integrity of structures in advance, both overhead and underground. One could also argue that post-inspections ensure you left something as good or better than you found it, leaving 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 us confidence knowing that we did our part in going home the same way we came to work.

Ask yourself. Ask each other.

- Did we properly inspect the condition of the equipment we'll be working on?
- What is our plan in the event of this tool or equipment failure?
- Are there other related connections, components or sources we need to check or inspect?
- 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?
- Did we confirm rigging, rope or other load-bearing tools are properly rated for this task and in good condition?
- Have we followed-up on repairs for faulty vehicles or equipment?
- How am I prepared to deal with a change in strain? What about the equipment I am working on or with?
- 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?
- In case of equipment failure, have I created an environment where damage will be minimized?
- Did we check or verify Transformer Load Management is correct in the field?
- 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?

Self-check: Am I holding up my responsibility to thoroughly conduct this inspection?



A SELECTION OF INCIDENTS & CLOSE CALLS | 2019-PRESENT

Year	Incident Summary
2021	<ul style="list-style-type: none"> A crew replaced a 45-foot dead-end pole on a 12 kV circuit. They used a boom-mounted lift arm attached to a digger truck to hold up the conductors when removing the old pole, and when they returned the conductors from the lift arm to the crossarm, the lift arm mounting bracket broke. As a result, the lift arm fell to the side of the digger boom and the conductors slapped together mid-span, which locked out the circuit. The crew called an all-stop, proper notifications were made, the line was inspected and re-energized, and the crew completed the pole replacement without further incident. During a visual inspection to utilize current transformers (CT) for a new bus differential relay installation, a worker found some CTs were not shorted (no shorting screws or jumpers), with the 12 kV circuit breaker (CB) still in service. The worker cleared the CB and performed CT testing to validate the CTs were damaged; the CB remained out of service. All other CBs were visually inspected to verify shorting screws and jumpers were installed on unused CTs. A crew was using the jib of a tub bucket truck to set a composite pole. The pole was approximately three feet off the ground, with a tag line (rope) at the butt of the pole for control, when the jib failed, and caused the pole to fall to the ground. The pole weighed 1,200 lbs. and the jib is rated for 1,500 lbs. No injuries or property damage. To pump approximately 50 feet of standing water out of the leakage shaft in a dam, a crew was set up to use a rented diesel-operated generator to power a 50-horsepower submersible pump. Using a contracted 37-ton crane, the crew began lowering the pump and its attached power cable into the a 100-foot (4' x 4' x 100') leakage shaft. During the lowering process, a worker from the five-man crew entered the shaft to guide the pump down through various landings (standing platforms). The pump was not energized during the lowering process. When the pump was lowered down to the 100-foot level, the pump was energized to begin pumping out the remaining water. Immediately after the pump was energized, the part of the power cable that transitioned from the top of the shaft downward began to arc against the manhole steel bracing. The arcing continued for several seconds, with sparks falling into the shaft before a member from the crew opened the breaker spliced into the power cable. The crew immediately radioed the worker inside the shaft, received acknowledgement that he was all right, and told him they were extracting him right away via the winch attached to the tripod over the opening of the shaft. No injuries. Investigation to follow on why the cable failed. In preparation to replace a pole, a worker removed a span guy and the pole fell over onto customer property. The pole was found to be rotted below grade. Working from a dead-end board (working platform) on a transmission tower in a remote location, a worker successfully dead-ended and sagged conductor. Approximately ten minutes after the conductor tension had been transferred to the dead-end insulators supported on the center phase position of the tower, the existing "U-Strap" (hardware) attachment at the tower failed catastrophically. The hardware failure caused the insulators, rigging, and conductor to break away from the tower, which pulled on the dead-end board. This caused the worker to fall into his fall protection and swing into the tower. Medical evaluation determined the worker sustained a deep tissue injury, and he was discharged the same day. A worker was assigned the removal of service, cable TV, and phone cables off a property line pole in preparation to set a new pole. Before climbing the pole, the worker performed a visual inspection and conducted a sound test using his hammer. The worker ascended the pole, removed the service, and then descended to the phone and cable TV level. Once he detached the phone cable, the worker felt the pole begin to lean to the south before continuing to slowly fall. The worker was able to maneuver to the high side of the pole before the pole came to rest, when the arms touched the ground.
2020	<ul style="list-style-type: none"> When a crew was lifting a 1,000 lb. suspension hold-down weight up to an arm on a lattice steel structure, the rigging eye on the weight failed. This caused the suspension hold-down weight to make contact with the tower lacing as it fell to the ground. The crew immediately called an all-stop. No injuries or equipment damage. A crew was tasked with pressing dead-ends from an elevated position within a man-basket adjacent to a newly constructed lattice tower. While a worker was operating a 100-ton hydraulic press, the high-pressure hydraulic line ruptured and sprayed a stream of pressurized hydraulic fluid onto the worker's upper left thigh, approximately the same area where his climbing harness leg strap was positioned. The pressurized fluid hit both the leg strap and his leg, soaking the worker in hydraulic fluid. After being lowered to the ground, the worker inspected the affected area of his leg and there were no visible signs that the liquid had penetrated his skin, but the worker sustained a minor bruise.

Ask yourself: What can I do to leave this in better condition or good working order for the next person?



A SELECTION OF INCIDENTS & CLOSE CALLS | 2019-PRESENT, *cont.*

Year	Incident Summary
2020, <i>cont.</i>	<ul style="list-style-type: none"> When installing spacers between towers in a motorized spacer cart, the drive shaft on one of the spacer carts broke mid-span. Attached to the conductor with double safety straps (one on each sub-conductor), the worker in the broken spacer cart exited the cart, sat on the conductor, and waited for the helicopter to assist with removal/replacement of the broken cart. When the worker removed one side of the spacer cart with assistance from the helicopter, the weight of the spacer cart shifted to the sub conductor on the opposite side and resulted in an unbalanced wire. When the spacer cart was completely removed, it created a wave in the wire. The worker could see the wave travel up to the tower and then come back at him. As a result of the wave, the worker's balance shifted, which caused him to roll under the conductor (both safety straps still in place). The helicopter was called to quickly return and pick up the worker. The other crew members in the spacer carts below talked him through the operation over the radio. An all stop was immediately called, and the spacer task was ended for the day. A worker was cutting conductor using a battery-operated cutter when a sudden snap occurred mid-cut, and the worker was struck in the mouth by flying debris. A witness said it was a big three-to-four-inch piece of metal that broke off the cutter and struck him, which meant the pin that attached the top blade into the housing must not have not fully seated prior to the cut. While using a corded reciprocating saw to cut metal into smaller pieces for disposal, the blade suddenly dislodged, which caused the worker to lose his forward grip (support hand) from the saw. The worker was kneeling, which caused him to simultaneously develop forward momentum, allowing his hand to move in front of the saw. The worker's left thumb was pinched between the saw and the metal debris. The worker was wearing cut-resistant gloves but sustained a laceration and contusion on his thumb.
2019	<ul style="list-style-type: none"> Two workers in a Polaris conducting inspections in a remote area arrived at a structure and parked the Polaris on what they thought was a flat spot on the road; road conditions were good. The parking brake was set, motor turned off, and the transmission was placed in neutral. The workers exited the vehicle and within 20 seconds the vehicle started to roll. The workers tried to stop its momentum by grabbing on the back of the vehicle, but the vehicle was too heavy to be stopped, and they lost their grip. 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 worker in the bucket approximately 30-40 feet 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 workers were in the identified drop zone.

CRITICAL OBSERVABLE ACTIONS (COA)

COAs are visible actions or conditions that mitigate a primary hazard. This week's Critical Observable Actions (COAs) focus on vehicle, equipment, and tool inspection to help identify potential hazards.

Which COAs apply to your work?

- Pre-trip inspection and Circle of Safety
- Chains and tie-downs are right for the job, used correctly, and in good shape
- Vehicle has been inspected, prior to use (documented)
- Trailer connections are sound
- Trailer has been inspected and confirmed to be in good condition
- The hydraulic system of the truck appears in good condition
- Non-slip safety feet on each ladder
- Ladder won't fall and in good shape
- There is effective cave-in protection in place
- Personal fall protection and equipment is in good condition and worn correctly
- Rigging has been inspected, is tagged, and is in good working condition
- Rigging sufficient for the weight of the load
- The load is not flown over crew members, pedestrians, etc.
- Operator has completed pre-flight
- Equipment is inspected and in good condition
- Equipment capacity is sufficient for the load in its present configuration
- Operator is certified and qualified
- Equipment operated according to manufacturer design
- Crew uses the Pause and Peer Check process
- The crew has confirmed the structure is safe to climb (visually and physically)
- Crew uses the Pause and Peer Check process

Think about it: Who else is working this job or working nearby that might be affected by the condition we found?



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

Primary Hazard Focus: Wildfire Areas



HISTORY TELLS US

The fire may be gone, but hazards are not. We don't 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, falling ash in our area, being an evacuee, or knowing someone who is, it can hit home for all of us.

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 a fire has moved through, it could always be worse.

When fire burns through mitigation efforts, crews that perform restoration work always rise to the challenge, even when often faced with unique primary hazards that present themselves only 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. 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 constantly scanning your environment and staying aware in order to avoid some unfamiliar hazards and traps.

For example, 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 wildfire restoration. And although 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 empower someone else.

Think, pause, then do.

- 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?
- 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?
- 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 in order 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?

Think about it: If you don't feel the atmosphere is safe to work in, what do you do?



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

Primary Hazard Focus: Wildfire Areas

TAILBOARD TOPICS

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



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.



Snakes

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



Respirators
The attached bulletin provides guidance on use of respirators, including N95 filtering facepiece respirators, for wildfire smoke protection.



Displaced Wildlife
The biggest effect wildfires have on wildlife is 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 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.



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, 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.



Safety Bulletin

Protection from Wildfire Smoke Regulation

This **Safety Bulletin** applies to all workers who may be exposed to wildfire smoke for more than one hour per shift. This bulletin communicates revisions to SCE's Protection from Wildfire Smoke safety protocol.

Background

The California Occupational Health and Safety Administration, or Cal/OSHA, approved a permanent regulation which now has requirements for emergency utility operations when the AQI for PM2.5 exceeds 500. These are different from non-emergency operations.

Non-Emergency Operations Requirements

1. If you are engaged in **non-emergency operations**, nothing has changed from the previous protocol. You will be alerted when the AQI for PM2.5 exceeds 150 and will be encouraged to wear N95 filtering facepieces on a *voluntary* basis.
2. When the AQI for PM2.5 exceeds 500 **and** you have been enrolled in SCE's *mandatory* Respiratory Protection Program, you are required to put on the appropriate respirator that you have been issued for smoke particle filtration. Otherwise, you must reduce your smoke exposure by sheltering in a building/vehicle with filtered air or leave the area.

Emergency Operations Requirements

1. If you are engaged in **emergency utility operations or are assisting firefighters** to access the fire area, you will be alerted when the AQI for PM2.5 exceeds 150 and will be encouraged to wear N95 filtering facepieces provided to you on a *voluntary* basis.
2. When the AQI for PM2.5 exceeds 500, you are *strongly* encouraged to use your N95 filtering facepiece on a *voluntary* basis and may continue to work in the area until you are notified that the local PM4 air sampling reading has exceeded 1,250 micrograms/cubic meter (ug/m3).
3. If you are notified that the local PM4 air sampling reading has exceeded 1,250 ug/m3 **and** you have been enrolled in SCE's *mandatory* Respiratory Protection Program, you are required to put on the appropriate respirator that you have been issued for smoke particle filtration. Otherwise, you must reduce your smoke exposure by sheltering in a building/vehicle with filtered air or leave the area.

General Reminders

- You are encouraged to report to your supervisor without fear of reprisal if you notice the air quality is getting worse, or if you are suffering from any symptoms due to the air quality
- If you properly wear an N95 filtering facepiece, it can reduce the amount of smoke particles inhaled
- You must take the one-time Protection from Wildfire Smoke training if this bulletin applies to you
- STOP work if you believe it is necessary to keep you and your coworkers safe



Last week a colleague of ours was fatally injured in a mountainous road vehicle incident.

Our thoughts and prayers are with his families at work and home. We grieve with you.



HISTORY TELLS US

There's regular driving, then there's off-road driving.

It's a given that the general skill set of everyday driving is transferrable to rural, mountainous, and off-road driving, but those who traverse challenging landscapes — especially in larger, high-profile vehicles — understand a heightened level of awareness and responsibility are required to ensure safe travels...and that goes whether traveling alone, as a crew, or in a caravan.

Driving in settings or conditions other than typical city streets can be intimidating, especially when "everyone else" knows how to do it. So out of the gate, two critical elements must be present: 1. Crew members have got to speak up if they are new and need first-time training or if they are seasoned drivers but could use refresher training, and 2. All levels of management have got to create an environment that makes it okay for their people to ask.

From there, like everything else on the job, it takes time, mentoring, and peer or self-checking to ensure proficiency. Among the top strategies to safe rural, mountainous, and off-road driving are familiarity with the vehicle's four-wheel drive and braking systems (air or hydraulic?) and awareness of the vehicle length, center of gravity, and turn radius.

And it doesn't stop there because in addition to vehicle operations and characteristics, there are other considerations such as the terrain, vehicle order when entering and exiting the location, the best communication method between vehicles, and the criticality of minimizing and/or eliminating distractions while driving — to name just a few.

For example, before going off-road, ever wondered about the condition of the road? Is it paved, dirt, soft soil, gravel? For what reasons would a driver stop driving and walk to check out the path ahead? How about around a bend? Is there a crew member who can ride with me or tell me what to expect when driving off-road? Which vehicle will be the scout vehicle to check road conditions? Did I/we perform a thorough inspection of the vehicle(s)? How do we drive through narrow roads?

As with other aspects of the work we perform, let's learn from the long list of past incidents and tragedies — and not repeat them.

Before your next trip...

- What type of braking system does this vehicle have?
- How will we communicate between vehicles?
- What is the safest route to the work location?
- Does supervision know my/our anticipated driving route?
- What do we need to consider if we are transporting load when off-road?
- Have we scouted the route/road conditions? What hazards were identified?
- If we are going to caravan to or from the jobsite, in what order will we drive our vehicles?
- If our work location is very remote, how will we communicate with supervision or emergency services?
- Are our radios and satellite phone charged up?
- What will the weather be, and will it adversely affect road conditions?
- What emergency items should I/we take?
- Any crew members unfamiliar with driving in rural, mountainous, or off-road conditions?
- Have we inspected our vehicles?

Ask yourself: How comfortable do I truly feel driving in rural, mountainous areas? What should I do?

A SELECTION OF INCIDENTS & CLOSE CALLS | 2019 - PRESENT

Year	Incident Summary
<p>2021 9 incidents, 1 fatality</p>	<ul style="list-style-type: none"> • A three-man crew was caravanning down from a windy mountain road onto a rural main road. The foremen led the way down the road, followed by a worker driving a digger derrick truck with the pole trailer and material, then the other crew member last in line driving the bucket truck. As the digger derrick truck started to slow because traffic was backing up, a small car crossed over the double yellow, passed the bucket truck, and cut in front of the digger derrick truck. The worker driving the digger derrick applied the brakes and as the truck was slowing, smoke came out from the wheel areas. The brakes failed and the digger began to pick up speed toward the slowing traffic. To avoid collision, the driver tried to slow the vehicle by driving it against the guard rail, and after the guard rail ended, there was a small hill that he was able to turn into. As the truck turned into the hillside, it turned onto its side on the road. • A worker was driving alone on a mountainous road in a digger derrick truck pulling a pole dolly. As he approached a curve in the road, it is believed the right-side tires came into contact with a boulder sticking out of an embankment. The impact caused the truck to tip on its side through the turn and roll down the embankment; the vehicle came to a stop upside down. Crew members and emergency responders administered CPR, and the crew deployed an AED, but the worker was non-responsive. Despite heroic actions to reach him, remove him from the vehicle, and perform resuscitation efforts, emergency responders pronounced the worker deceased at the scene. • As a worker was coming into a tight right turn when driving on a rural road, he did not see the upcoming left curve in the road because of sun glare and continued straight ahead. This caused him to run the vehicle off the road and into the hillside to his right, and the vehicle rolled over. • A worker was driving on dirt road about three mph when the worker felt the front end of the truck starting to slide into a ditch. The worker stopped the truck, and the truck slid into the ditch and rolled onto its side. • A grapple truck backed into a ditch and rolled onto the passenger side. A tree prevented a complete rollover. No injuries. • Lift truck rolled over on the passenger side while making a left turn on paved roads. No injuries. • When setting up a 16-ton crane on a narrow, mountainous road to guard a 12 kV hot crossing, the crane tipped over. The crane boom tore through all three energized phases on the 12 kV circuit and the fiber optic line in the same span. Fuel from the overturned crane was released. No-test orders were in place, but the line did not relay. • A bucket truck rolled onto its side as dirt gave way beside a ravine. No injuries. • Two workers drove a Polaris (off-road vehicle) looking for a structure. The dirt road got really sloppy, so they parked and hiked to the structure. After the work was complete, they hiked out and turned the Polaris around so they could drive out head-first instead of back out. The driver was going two-three mph and braking down the road, when the back end started to slide in the mud, and the Polaris tipped over onto its side. No injuries. • A worker was driving his personal vehicle along a deceptively icy rural road, when the car in front of him abruptly braked, which caused him to do the same. The surveyor then lost control of his vehicle and hit a berm on the side of the road, which caused his vehicle to roll on its side. No injuries.
<p>2020 11 incidents</p>	<ul style="list-style-type: none"> • When driving down a canyon road from the jobsite, a driver lost control of his vehicle, then over corrected, which caused it to roll onto its side. No injuries. • Attempting to avoid collision with a road hazard (several deer in his lane of travel), a worker failed to maintain control of his vehicle and the vehicle rolled onto its side. • When driving on a rural road, a tractor/trailer overturned. No injuries.

Ask the crew: Anyone on the crew not experienced in rural, mountainous, or off-road driving?



A SELECTION OF INCIDENTS & CLOSE CALLS | 2019 – PRESENT, *cont.*

Year	Incident Summary
<p>2020, <i>cont.</i> 11 incidents</p>	<ul style="list-style-type: none"> • A worker driving a digger derrick truck and trailer on a rural road swerved off the pavement, which caused equipment being hauled to roll over on its side. • When driving on a mountainous road a worker came across a road marked for 4x4 vehicles only. As the worker drove down the steep road in their company 4x4 vehicle, the vehicle lost traction due to the soft, silty soil. The worker lost control of the vehicle, could not stop, and the vehicle went straight into an embankment, which caused the vehicle to rollover. The worker exited the vehicle and waited on the side of the road for assistance. No injuries. • A worker was conducting a patrol on a right-of-way, when he rolled a Polaris. • While a worker was driving a three-axle bucket truck around a downhill curve, the truck went off the road and into a ditch. • A worker was hauling a man-lift on a trailer and as he drove on a sloped, banked curve at his destination, the trailer tire blew, the trailer tilted heavily to one side, the trailer hitch broke loose, and the trailer rolled over. No injuries. • When driving down a mountainous road, a digger derrick truck experienced brake failure. The driver tried to slow the truck by driving onto a grade but could not slow the vehicle enough as he approached a turn. He went through a guard rail and rolled the digger derrick approximately 100 feet down a canyon. • Two workers were driving downhill at approximately 27-30 mph, and on a sharp turn the dump bed on the truck started to roll as they came out of the turn. As the driver attempted to gain control, the truck to swayed more vigorously and rolled down the embankment. Both workers were medically evaluated and released with minor bruising and scrapes. • A crew was hauling a Polaris snow vehicle on a trailer to an emergent job requiring the off-road vehicle. When traveling at a low speed, the driver hit a depression in the road, which caused the trailer to dislodge from the companion vehicle. The trailer and Polaris broke away from the safety chains and ran into a snowbank, which flipped the trailer and Polaris onto their side. No injuries.
<p>2019 6 incidents</p>	<ul style="list-style-type: none"> • When a worker was en-route to a work order, he approached an area that he knew was frequently flooded and would be iced over due to freezing temperatures in the area. He drove his truck to the right to avoid the hazard but hit black ice he did not see. As he hit the ice, the truck lost traction, slid onto the dirt shoulder, and rolled over onto the passenger side. No injuries. • While driving in snow and icy conditions back to their work location, a bucket truck hit black ice and the driver lost control, which caused the truck to roll onto its side. One worker was medically evaluated for precautionary measures. • A two-man tree crew was slowly driving down a dirt road in a bucket truck, when the rear right wheel went into a lopsided (ditch) portion of the roadway, which caused the truck to tilt toward the driver-side and rollover. Oil spilled onto the roadway. • A crew was driving in a mountainous area for fire restoration work when a fire truck and digger derrick truck needed to pass each other on a dirt road. The digger derrick truck moved over to let the fire truck through, and when the driver observed the fire truck was about to make contact, he went up the side of the embankment, which caused the truck to tip over. • When performing inspection work, a crew was traveling on a road sloped up on the passenger side and down on the driver’s side. The road sloughed off from under the rear wheels, which caused the truck to roll downhill. • The driver was not able to maintain control of the vehicle while navigating a tight turn. This resulted in the vehicle rolling. No injuries to the driver or public.

Ask each other: What rural, mountainous, or off-road driving experiences have we had or heard about that we can learn from?

Comments or questions? Contact ContractorSafety@sce.com



ADDITIONAL RESOURCES



HOLIDAY SAFETY

HOLIDAY WORK AND WEEKEND SAFETY

- Slow down, re-tailboard and re-focus on the task at-hand
- Take action to mitigate any hazards by making use of safety tools, including the Pause and Peer-Check process and Hierarchy of Controls
- When driving, allow enough time for travel so you are well-rested and alert
- Know the weather and road conditions ahead of your drive
- Minimize distractions while driving and don't multitask while behind the wheel
- Slow down and practice defensive driving

Off-Road Driving Safety Video

Check out this [Off-Road Driving Safety video](#) to learn more about strategies to help you drive safely through rural, mountainous, and off-road terrain.

Updated Contractor Incident Evaluation Report

As of October 22, 2021, Contractors are to submit incident reports using the updated [Contractor Incident Evaluation Report](#). A range of updates from transitioning to the new [Safety Classification and Learning \(SCL\) model](#) to internal processing/reporting improvements are reflected in this new report.

Plan ahead: What do I need to do — or not do — to help ensure safe travels?

Operating Experience

Bucket Truck Rollover | 7/6/2020

INCIDENT SUMMARY

Incident Overview

While returning from the jobsite, an E-Crew foreman was driving a 3-axle double bucket truck. On a downhill curve, the passenger side rear axle outside dual went off the blacktop, pulling the truck into the ditch where it rolled onto the passenger side.

The foreman stated that prior to going off the road he had to adjust the driver side mirror due to the wind pushing it out of alignment. The foreman lost consciousness and suffered a concussion; he was assisted out of the vehicle (through the broken windshield) by a passer-by. The driver was transported to the hospital by his District Manager.

Apparent Causes

- The driver did not maintain awareness of vehicle position on the road due to distraction.

Contributing Causes

- Driver side mirror fasteners did not keep the mirror in place.

Corrective Actions

- An event summary with key takeaways was developed for discussion with all personnel in the work crew during pre-job briefings and tailboards for all SCE jobs where similar vehicles are used.
- This Operating Experience document, based on the event summary, will be shared with T&D, Generation, and Transportation Services.



Fig. 1. Bucket truck position following incident



Fig. 2. Road shoulder where event occurred

WHAT YOU CAN DO

Ask Yourself: What actions can I take to prevent this incident from occurring?

- ✓ Perform a pre-inspection of vehicle to identify any deficiencies (such as loose mirrors) and make repairs BEFORE driving the vehicle
- ✓ Keep your eyes on the road at all times – focus on road conditions and other vehicles, especially on curves and winding roads
- ✓ Stop the vehicle if anything distracts your focus on the road (loose mirror, phone calls, objects rolling on the floor) – think about how a distraction could prevent you from going home to the people you love and hobbies you enjoy



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Contractor Safety Talks

Special Points of Interest:

The State and County's Coronavirus controls are evolving but we will continue to demonstrate safe work practices for the safety of our employees and customers.

For SDG&E's current COVID-19 guidelines, please see the latest communication on the ISN bulletin board and also communicated via email from Supply Management.

Did you know?

SDG&E recently revised their minimum requirements for contractor tailboards regarding fire mitigation. Please see ISN bulletin board.

Employers have the legal responsibility to identify and control, to the best of their ability, workplace hazards to protect workers.

Hazard Identification and Awareness



The goal of a safe workplace is to prevent incidents and injuries from happening. To prevent incidents and injuries from happening, employees must thoroughly recognize, assess, and control hazards.

The best way to recognize, assess, and control hazards is with a Job Safety Analysis (JSA) briefing or Tailboard. This allows you to determine what hazards are present at the worksite. A proper JSA or Tailboard should answer all questions as it relates to when hazards are going to be encountered, how to mitigate and/or control them, and if necessary how to isolate them. This allows the employees to assess the level of risk for the hazards identified. Once identified, hazards should be addressed based on their potential to inflict serious injuries or potentially fatal incidents.

FAQ

Q: How do I learn more about hazard identification and awareness and where can I find additional information on JSAs or Tailboards and SDG&E's expectations?

A: Go to Cal OSHA [1926.952](https://www.dir.ca.gov/OSHA/1926.952.htm) "Job Briefing"

OBSERVATIONS FROM THE FIELD

Over the last 30 days SDG&E safety observers performed jobsite inspections on almost all SDG&E jobsites and observed 25,568 construction activities. Of these there were 288 at-risk conditions documented and corrected in the field. Of the at-risk conditions observed, 78% were low risk, with the majority of them involving proper use of PPE and work environment. There were 63 medium at-risk observations and 0 high risk observation during the month.

At-Risk Observations (August 2021)	At-Risk Behaviors
288	The majority of at-risk conditions were in the Work Environment category with several findings regarding housekeeping, barricades/warnings, and work area hazards.

NOTABLE AT-RISK OBSERVATIONS

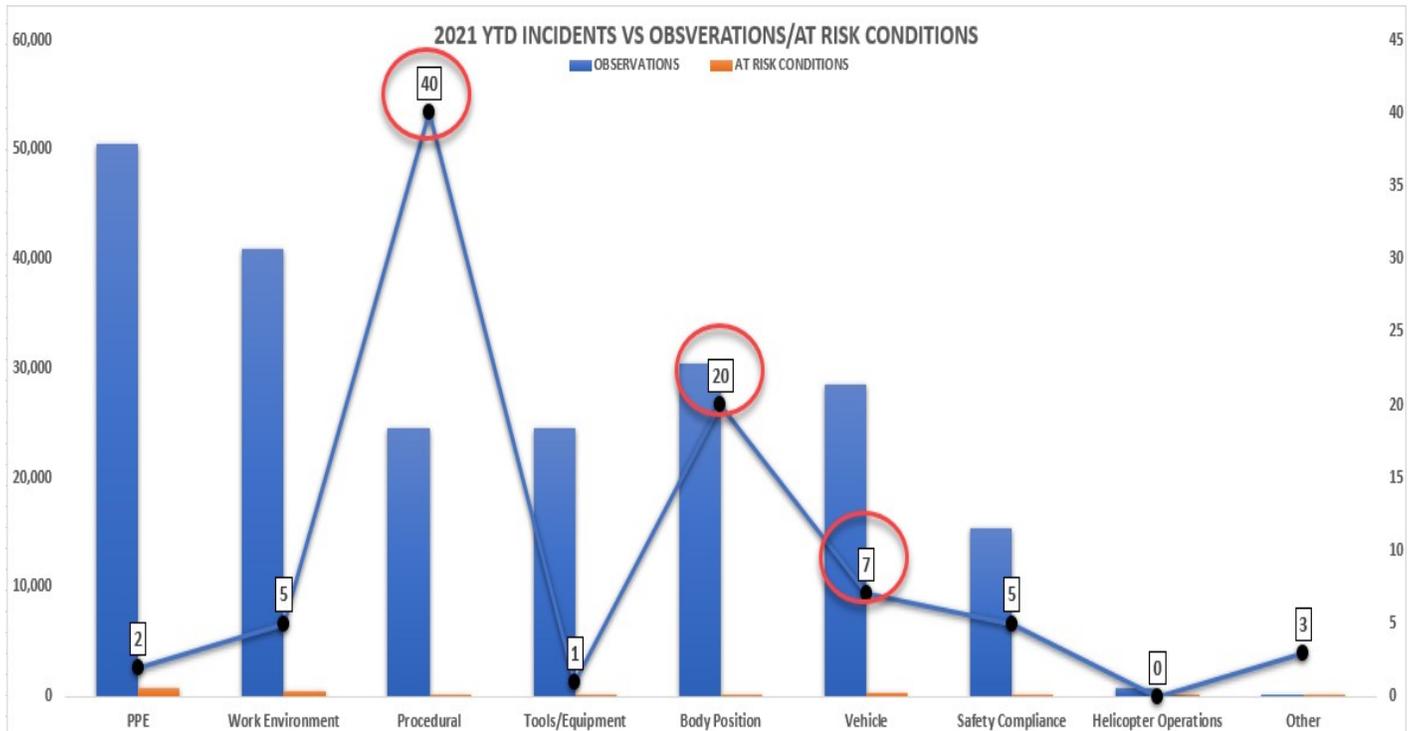
Medium-High Risk Observations (August 2021)	Recommendation/Mitigation
Operator was moving a steel plate with boom, and the rigging almost failed potentially dropping the plate.	Ensure rigging and equipment is sufficiently weighted and inspected prior to performing work.
Crew was maneuvering heavy equipment on a main road without traffic control or the use of a spotter.	Ensure spotters are used when backing. If no spotter is available, the Circle of Safety is performed.
Rear wheels of skid-steer came 18 inches off the ground when a crew was loading a road plate.	Ensure rigging and equipment is sufficiently weighted and inspected prior to performing work.
Laborer was actively shoveling underneath a backhoe arm, placing himself in a very dangerous position.	Pinch points and caught in-between hazards are thoroughly identified and avoided.

MONTHLY INCIDENTS/NEAR MISSES

Incidents (August 2021)	Recommendation/Mitigation
Switching Error (Electric Incident)—General Foreman took clearance from control center, but did not release the OK.	Ensure proper work procedures are following, as detailed in the JHA. Ensure crews double-verify critical work.
SIF Potential Event (Electric Incident)—Crew was working a de-energized circuit and was inadvertently exposed to a difference in electric potential.	Ensure proper work procedures are following, as detailed in the JHA. Ensure crews double-verify critical work. Ensure crews test to verify status prior to performing work.
Gas Incident—Crew was performing repairs on a gas main, when a gas leak was caused.	Ensure hand tools are inspected prior to use.
Electric Incident—Crews were reconductoring when an existing squeeze on the conductor broke, causing the conductor to fall to the ground resulting in an outage affecting over 5,000 customers.	Crews verify integrity of wire prior to reconductoring, and ensure secondary safety measures are in place.
Switching Error (Electric Incident)—Foreman performed a switching step without receiving authorization from switching center.	Ensure proper work procedures are following, as detailed in the JHA. Ensure crews double-verify critical work.

Five electric and three gas incidents occurred in August 2021. Three switching errors occurred in August 2021.

*SIF Potential Event = Serious Injury/Fatality Potential



FUTURE FOCUS AREAS

When looking at the past incidents, SDG&E recommends targeting mitigation measures for:

- Procedural gaps
- Body position
- Vehicle

Let us know what you're seeing in the field so we can make our observations even better. Please make sure to visit our bulletin board on ISN and read the latest communications at <https://www.isnetworld.com/BulletinBoard/asBulletinBoard.aspx>.

Questions or comments? General questions: SDGContractorSafety@semprautilities.com
Reporting Incidents: SDGContractorIncidents@sdge.com



Contractor Safety Talks

Special Points of Interest:

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For SDG&E's current COVID-19 guidelines, please see the latest communication on the ISN bulletin board and also communicated via email from Supply Management.

Personal Protective Equipment (PPE)



Did you know?

In the US, close to 9,000 PPE related incidents occur each year.

Many of SDG&E recordable injuries can be attributed to lack of appropriate PPE or improper use of PPE.

The difference between life and death can often times be FR/AR clothing.

It is important to discuss predominant hazards. Mitigating falls from heights, secondary electrical contact, struck by and caught in-between hazards is crucial on every jobsite due to their small margin for error. However, the basics are often overlooked. All required and necessary PPE must be worn to minimize crew exposure to potentially serious workplace hazards. If hazards cannot be eliminated, substituted, engineered out or administratively controlled—then PPE is the last line of defense.

All PPE should be maintained, clean, and meet American National Standards Institute (ANSI) requirements. PPE should fit comfortably and be used properly. Employers are responsible for training their employees on when PPE is needed, what type is needed, proper use, limitations, and proper care and maintenance.

Contractors should utilize a PPE program, whenever PPE is in use on a jobsite. This PPE program should address jobsite hazards, detail necessary mitigation measures as it relates to PPE, and discuss necessary training. PPE programs should be consistently monitored by contractors to ensure efficiency and long-term effectiveness.

FAQ

Q: How do I learn more about Personal Protective Equipment (PPE) and where can I find additional information on PPE and SDG&E's expectations?

A: Go to Cal OSHA [1910.132](#) "Personal Protective Equipment"

OBSERVATIONS FROM THE FIELD

Over the last 30 days SDG&E safety observers performed jobsite inspections on almost all SDG&E jobsites and observed 30,890 construction activities. Of these there were 413 at-risk conditions documented and corrected in the field. Of the at-risk conditions observed, 87% were low risk, with the majority of them involving proper use of PPE. There were 54 medium at-risk observations and 0 high risk observation during the month.

At-Risk Observations (September 2021)	At-Risk Behaviors
413	The majority of at-risk conditions were in the PPE category: safety glasses, and gloves. Additionally, there were many instances of JSA's and tailboards missing information or incomplete.

NOTABLE AT-RISK OBSERVATIONS

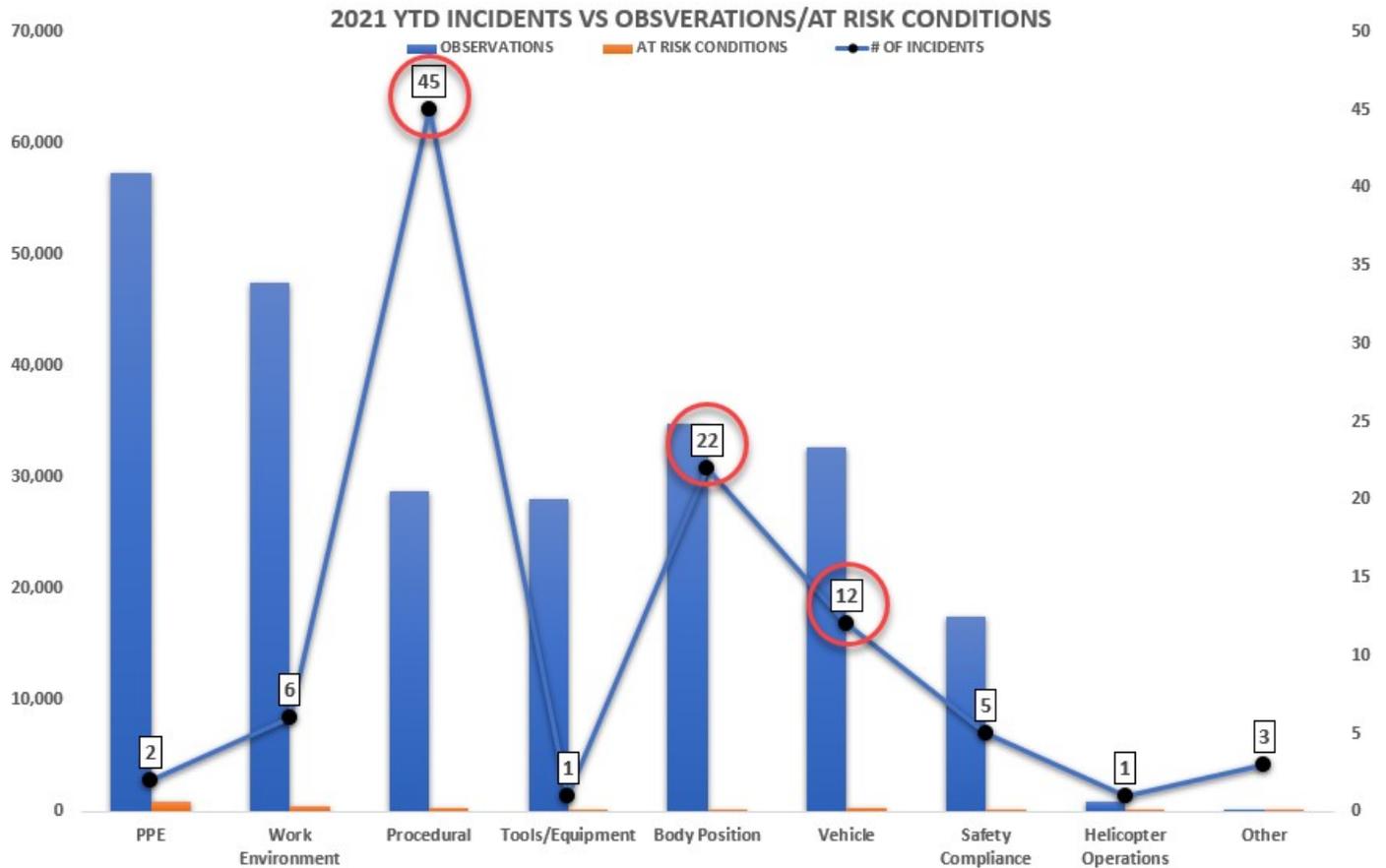
Medium-High Risk Observations (September 2021)	Recommendation/Mitigation
Foreman and crew operating within the Minimum Approach Distance (MAD) without Flame Resistant (FR) clothing.	Ensure crews maintain MAD. Ensure crews are wearing all appropriate PPE for the task at hand.
No spotter or truck used to escort heavy equipment on the main roadway adjacent to traffic.	Escort vehicles and/or spotter vehicles are used during heavy equipment transport on public roadways.
Employee getting ready to operate a chainsaw without cut resistant chaps.	Ensure crews are wearing all appropriate PPE for the task at hand.
Apprentice was working between phases without cover up.	Ensure crews use adequate cover to mitigate second points of contact.

MONTHLY INCIDENTS/NEAR MISSES

Incidents (September 2021)	Recommendation/Mitigation
DART Injury—Subcontractor slipped on freshly laid oil, fell and hit the top of his head and was taken to the hospital.	Ensure employees are wearing nonslip shoes. Ensure employees maintain three points of contact when walking near potentially slippery areas.
Vehicle Incident—Backhoe stockpiling material traveling through spoil pile when left tire deflated causing the backhoe to tip on to its left side.	Operators maintain situational awareness during operation. Spotters are used when available. Vehicles are not driven over uneven terrain.
Switching Error (Electric Incident)—Crew had an unplanned outage due to a switching error.	Ensure proper work procedures are following, as detailed in the JHA. Ensure crews double-verify critical work.
Vehicle Incident—Operator maneuvering in reverse on a downhill slope when the bucket portion of the vehicle contacted the abandoned wire causing the pole it was connected to, to crack and break.	Spotters are used when available. Ensure housekeeping is in order.
OSHA Injury—Lineman cutting pole had pole drop on finger, causing a fracture.	Keep clear of pinch points. Ensure crews are wearing all appropriate PPE for the task at hand.

One electric and one gas incident occurred in September 2021. One switching error occurred in September 2021.

****SIF Potential Event = Serious Injury/Fatality Potential***



FUTURE FOCUS AREAS

When looking at the past incidents, SDG&E recommends targeting mitigation measures for:

- Procedural gaps
- Body position
- Vehicle

Let us know what you're seeing in the field so we can make our observations even better. Please make sure to visit our bulletin board on ISN and read the latest communications at <https://www.isnetworld.com/BulletinBoard/asBulletinBoard.aspx>.

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Contractor Safety Talks

Workplace Conflict Resolution

Special Points of Interest:

The State and County's Coronavirus controls are evolving but we will continue to demonstrate safe work practices for the safety of our employees and customers.

For SDG&E's current COVID-19 guidelines, please see the latest communication on the ISN bulletin board and also communicated via email from Supply Management.

Did you know?

Assaults at work are the second leading cause of death in the workplace.

1.5 million assaults happen in the workplace each year.

In 2017, according to the Bureau of Labor Statistics Census of Fatal Occupational Injuries (CFOI) 458 of the total 5,147 fatal workplace injuries occurred due to an intentional injury by another person.



Conflict whether it be in the form of harassment, intimidation, or physical violence affects everyone — employees, clients, customers and the public alike. Conflict distracts the workforce and can pose a threat to property and livelihood. Therefore it is imperative that we as professionals in our trade take into consideration the benefits of proper conflict resolution techniques. That being said, contractors are expected to establish and enforce a zero-tolerance policy towards workplace violence.

Poor communication, emotions, and differences in personalities and values are all known to cause conflict. Should a conflict arise contractors should stop work in the affected area and take the time to focus on a solution and not the issue. If necessary, goals and expectations should be reiterated for the respective parties to ensure alignment. Overall, in order to handle workplace conflict stop work, take a breather, calm down and look for solutions.

Spotlight on SDG&E Contractor Safety Scorecard!

A combination of ISN, Predictive Solutions (PS), and SDG&E-specific contractor incident rates are used to calculate a Total Safety Score (maximum is 100%). The percentage is converted to a 5-point or 10-point score to work with Supply Management's scoring methodology.

Scoring Breakdown

- 50% Incident Rate (at-fault): *At-fault incidents remain on the scorecard for three months to coincide with Site Tracker reporting (one month lagging). Incident rates are calculated using Site Tracker hours.*
- 40% Predictive Solutions: *The Predictive Solutions rate is a percentage of safe observations.*
- 10% ISN grade: *The ISN grade is the numeric score on the contractor's ISN scorecard.*

OBSERVATIONS FROM THE FIELD

Over the last 30 days SDG&E safety observers performed jobsite inspections on almost all SDG&E jobsites and observed 33,099 construction activities. Of these there were 423 at-risk conditions documented and corrected in the field. Of the at-risk conditions observed, 88% were low risk, with the majority of them involving proper use of PPE. There were 52 medium at-risk observations and 0 high risk observation during the month.

At-Risk Observations (October 2021)	At-Risk Behaviors
423	The majority of at-risk conditions were in the PPE category: safety glasses, gloves and face shields. Additionally, JSA's were found to be incomplete and inaccurate. All were corrected in the field, but should be readdressed with crews.

NOTABLE AT-RISK OBSERVATIONS

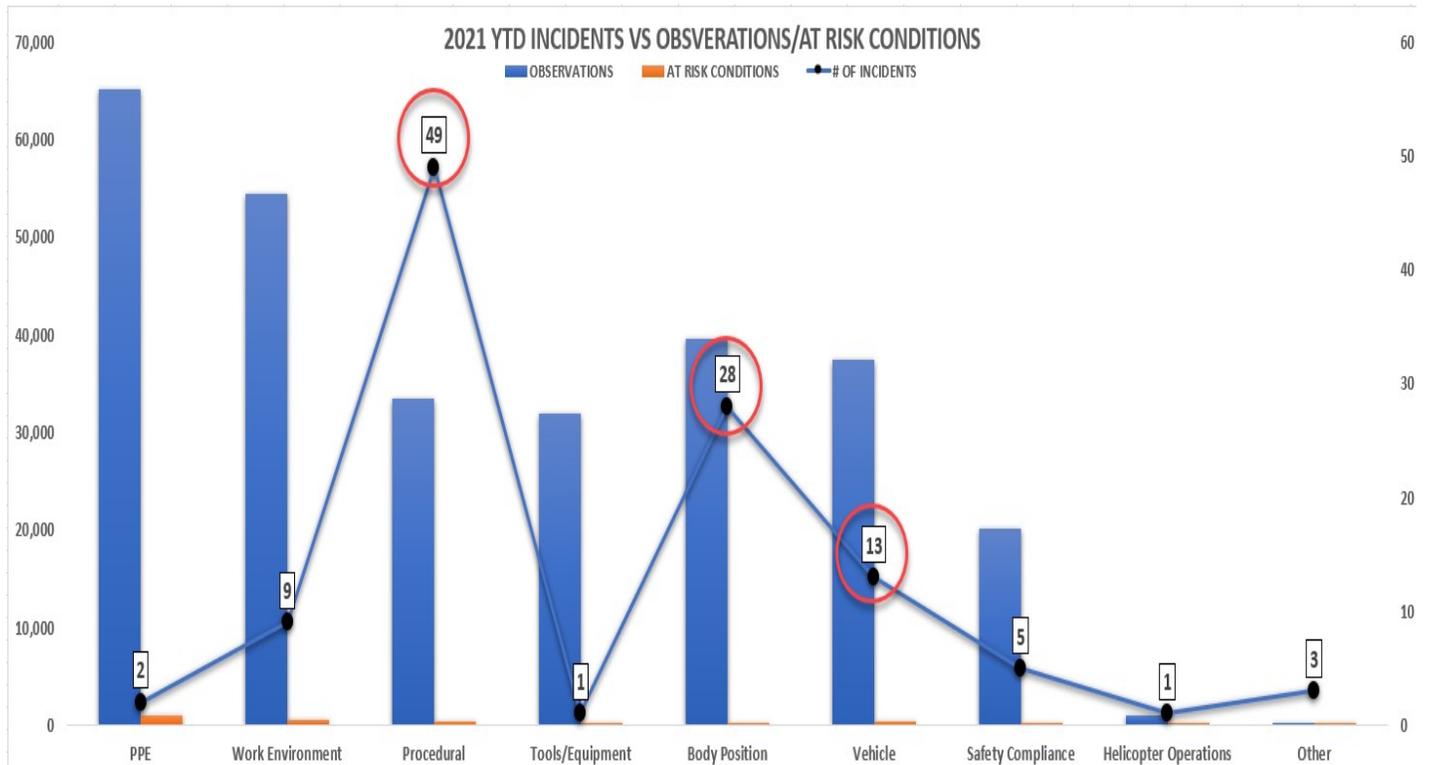
Medium-High Risk Observations (October 2021)	Recommendation/Mitigation
Cube door left open and energized with potential for electric shock and was not cautioned off.	Ensure appropriate barricades and signage are present. Hazardous energy sources must be properly locked out and tagged out (LOTO).
Crew was digging in an alleyway without a mark out or dig alert ticket.	Crews obtain dig alert ticket prior to performing work.
Contractor performing work without a Job Safety Analysis (JSA) being completed.	Crew has a written tailboard that covers the tasks at hand, hazards, mitigations and roles and responsibilities.
Monitor was working under direct loads coming in from helicopter.	Non-essential employees are not allowed to approach within 50 feet of the helicopter when the blades are turning.

MONTHLY INCIDENTS/NEAR MISSES

Incidents (October 2021)	Recommendation/Mitigation
Electric Incident—Crew hit unmarked power box.	Ensure underground utilities are fully exposed by hand prior to using mechanized digging equipment.
First Aid—Employee reached behind cover/guard to grab a screw and contacted a live AC component with the tip of left index finger and received a small burn/blister.	Minimum Approach Distances (MAD) are maintained.
Gas Incident—Crew hit 1/2 inch gas line while sharp shooting with shovel.	Ensure underground utilities are fully exposed by hand prior to using mechanized digging equipment. Ensure underground utilities are adequately protected after exposure.
OSHA Injury—Employee injured left hand when lifting eye of hoisting plug for drill rod came into contact with the employees' middle finger on the left hand.	Spotters are used when available. Ensure housekeeping is in order.
OSHA Injury—Crew member smashed finger.	Keep clear of pinch points. Ensure crews are wearing all appropriate PPE for the task at hand.

One electric and one gas incident occurred in October 2021. Zero switching errors occurred in October 2021.

*SIF Potential Event = Serious Injury/Fatality Potential



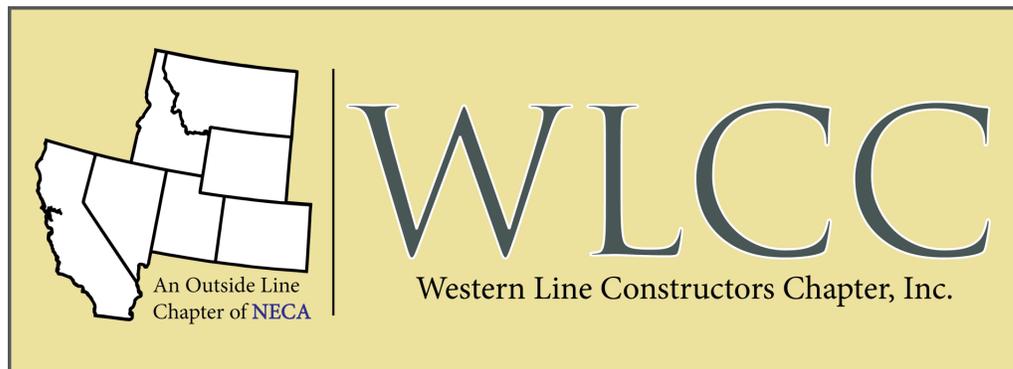
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WLCC BULLETIN

SAFETY ALERT – RED BOOK

IN THIS ISSUE

California Safety Manual “Red Book” Conversation with SCE Concerning - Section 2.07(i)

On the Call Thursday, April 2, 2020 at 8am pacific time:

SCE SAFETY

Raymond Juarez III
Donald Arnold
Gregory McDonald
Jadranko Kuric
Jesse Rorabaugh
Alfred Avila
Keith Brewer
Michael Rodela

Red Book Committee

Jim Stapp
AJ Zartman
Chris Larson
Hal Lindsey
Jules Weaver

Subject: 2020 Redbook Revision Conversation Concerning Section 2.07(i)

The meeting opened at 8:00 AM. We proceeded to give foundation and explained the purpose of the Redbook, (e.g.) that it meets or exceeds Title 8 of the State of California, that it is bound to the CBA, to provide a consistent standard to protect the workforce employed by any signatory Contractor in the State of California.

We then got to the purpose of the meeting, which was to discuss and arrive at a conclusive understanding of Rule 2.07(i) and inform all SCE Safety Personnel and Contractors of the understanding.

We discussed and explained Section 2.07(i), “Back-Feed: *Where the possibility of back-feed exists*, the transformer secondary leads shall be disconnected from the transformer and all secondary leads shall be grounded or shunted.”

The assembled members had a lengthy discussion on the meaning of the sentence, with the following final interpretation, the phrase *Where the possibility of back-feed exists*, means if you **have not** protected yourself from all sources of voltage, then you **must** follow the rule 2.07(i): “*the transformer secondary leads shall be disconnected from the transformer and all secondary leads shall be grounded or shunted*” but, if you **have** protected yourself from the possibility of Back-Feed this rule does not apply.

Exhibit D

As the assembled members discussed the interpretation of Rule 2.07(i), we also reviewed pertinent sections of the Redbook that addresses Back-Feed, as well as Section 2940.9 Protection from Back-Feed Voltages, in Title 8.

During the meeting, we also discussed future revisions and updates to the Redbook that would be an annual exercise with clarifications, additions and deletions to our safety manual as changes to Title 8 were made.

We were assured by the SCE Safety Team that they will provide guidance to their contractor safety organization and we will continue this forum to discuss any further interpretation of the Redbook.

Thank you for your attention to this matter. If you have any questions, feel free to contact Jules Weaver at the Chapter Office.

Stay Safe!

Contact Us

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