

Notice of Joint Safety Committee Meeting December 5, 2023

To: All parties in interest

Date: 11/30/2023

Via: E-Mail Transmission

E-Mail: jweaver@westernlineneca.org

The next 2023 Quarterly Red-Book Safety Meeting is scheduled for:

Tuesday, December 5, 2023

1:00 PM

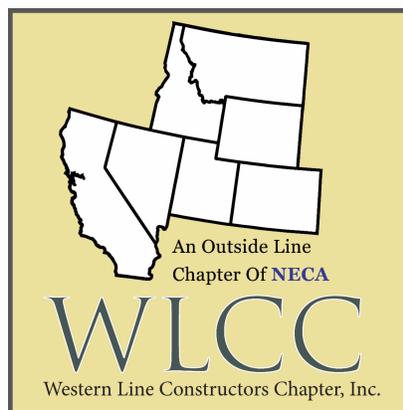
Cal-Nevada JATC Training Center

545 Santa Anita Drive
Woodland, CA 95776

The Minutes for [September 5, 2023](#) will be posted on the [WLCC Chapter Website](#) on Monday December 4th.

Thanks, and stay safe!

Jules W. Weaver
Chapter Manager



MEETING MINUTES
IBEW 47-1245 / WLCC-NECA JOINT SAFETY COMMITTEE
September 5, 2023
Cal-Nevada JATC – Riverside Training Center

Present:

Mgmt:

Lon Peterson
AJ Zartman
Raul Guardado
Chris Burt
Larry Lopez
Jeremy Atchison
Chris Larson
Ian Neff
Jon Bateman
Ed Antillon
Sonny Mendez
Matt Bates
Frank Farwell
Jack Crabbs
Lito Wilkins
Jacob Milhoan
Todd Barton
Nick Roncanio
Mike Holcomb
Rodney Karr
Nicholas Stark
Tim Greenwood
Mike Johnson
Mike Lewis
Pete Hendrickson
Luke Potter
Andy Smoot
Josh Fenceroy
Mark Anders
Mike Brown
Paul Gonzalez
Robert Robison
Scott Gillman
James Hulse
Scott Hudelson
Kent Maughan
Jules Weaver – Secretary

IBEW:

Casey Lavin
Ralph Kenyon
Arnold Trevino
Jeremy Newman

Cal-NEV
JATC/Guest:

Jimmy Skinner, Cal-Nevada JATC

Meeting called to order by acting Chairman Zartman at 1:30pm.

Acting Chairman Zartman welcomed the group and had everyone introduce themselves.

Previous Minutes:

M/S/C to approve the Meeting Minutes of the Joint Safety Committee Meeting held on June 7, 2023.

Review of Accidents & Incidents:

The updated **Accident & Incident Reports** is 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 where also discussed. The following contractors noted they had no accidents or incidents to discuss: Hampton Tedder Electric; Ferreira Power; City Light & Power; Rokstad and Teichert Line Services.

JATC Reports: Executive Director Skinner discussed our current apprentice statistics covering information such as how many we have indentured this year, laid off apprentices, etc. and climbing classes to be scheduled and the availability of online training on the apprentice's home page. Mr. Skinner also reminded everyone of the requirement to timely report accidents/incidents involving apprentices and how those incidents are shared and discussed in class with all the apprentices. Director Skinner then discussed specific statistics on apprentice accidents/incidents and noted that vehicle accidents are continuing to be a large part of the overall incidents that involve apprentices.

Local 47 - Southern California: as reported by Mr. Arnold Trevino and he discussed a close call and then noted they had no additional accidents/incidents to report beyond those discussed today.

Local 1245 - Northern California: as reported by Ralph Kenyon and he noted they had no additional accidents/incidents to report beyond those reported today.

Exhibits attached hereto:

Exhibit B – Various Safety Bulletins from SCE

Exhibit C - Contractor Safety Talks from SDG&E

Observations: A discussion was held regarding the epidemic of Suicides that our Industry and this Country is seeing, and it was noted that LINECO has a Suicide Prevention Hotline 1-800-273-8255 and then the national 988 # was discussed.

Old Business:

1. Acting Chairman Zartman noted that the Red Safety Book Subcommittee is continuing to work on cleanup and proposed edits to the Red Safety Book.
2. Secretary Weaver gave a quick update on EICA’s Safety Wallet and Crane Certification program and the progress taking place on the development of our Helicopter Training Class we are in the process of transferring to the Safety Wallet training platform.

New Business:

1. Director Skinner invites all contractors to come and tour and utilize our 2 training centers and the training tools that are available and include our Transbanker transformer trainers, Timpson energized trainers, Equipment Simulators and many other training tools along with our classroom facilities.
2. It was noted for the record that as of this meeting the **Red Book Subcommittee** is composed of the following 8 individuals from Labor and Management:

Labor

Ralph Armstrong
Casey Lavin
Ralph Kenyon
Arnold Trevino

Management

Chris Larson
Walter Posey
Chris Burt
Ryan Ritchie

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

Labor Representatives

Ralph Armstrong
Ralph Kenyon
Casey Lavin
Arnold Trevino

Management Representatives

Jim Stapp
AJ Zartman
Walter Posey
Jules Weaver

Next Meeting Date and Location:

Tuesday – December 5, 2023, at 1:00pm at the Cal-Nevada JATC Training Center located in Woodland, CA.

Meeting adjourned at 3:50pm

IBEW 47 - 1245 / WLCC - NECA

4th Quarter 2023 Accident/Incident Reports

Date Of Incident	Occupation	Type of Incident	Body Part / Root Cause	Description
Contractor Significant Accidents				
11/6/2023	Outside Crew	Injury	Hyper-Extended Knee	Injury - October 31, 2023 , A crew was using a crane to install a pole. When an employee used a cant hook to assist removing the old pole, he lost his footing and his left knee hyper-extended.
10/23/2023	Outside Crew	Injury	Right Shoulder Laceration	Injury - October 23, 2023 , When a crew was staging a pole, the pole pushed over a free-standing fence post, and the fence post struck a crew member standing nearby. The crew member sustained a small laceration to the right shoulder. The field supervisor transported the employee to an urgent care for evaluation. The injured employee sustained four stitches.
10/23/2023	Outside Crew	Injury	Left Foot	Injury - October 23, 2023 , Without incident, three two-man tree crews hiked down a high-angle, sloped mountain to the jobsite at the bottom of a canyon and completed brush removal underneath transmission lines. After work was complete, the crews hiked back up to a road where vehicles were stationed. The last worker in the formation stopped to take a break and leaned his body against a large boulder (approximately three-feet by three-feet). When the worker rested his body weight against the boulder, the boulder became dislodged, fell off the rock it was settled on, struck the worker's left foot, and then rolled down the mountain. The worker yelled to his crew members for help, and they came to his immediate assistance. Crew members administered first-aid, stabilized the injured worker's bleeding, called 911 and Edison Dispatch, and made other appropriate notifications (crew had cell reception). CAL Fire Rescue, California Highway Patrol, SCE, and contractor personnel arrived on-scene. The injured worker was air-lifted to a nearby hospital.
10/16/2023	Outside Crew	Injury	Lacerations & Bruises	Injury - October 16, 2023 , After completing field inspection work for the day, two inspection workers driving a company vehicle traveled back to their yard (work base). While driving behind several other vehicles on a two-lane highway, the driver swerved off the road to the right. He tried to control the vehicle, but admitted he may have panicked and stepped on the accelerator pedal instead of the brake pedal. The vehicle sideswiped a utility pole and the vehicle's airbags deployed and windows broke. About 100 feet past the pole, the driver regained control of the vehicle and came to a stop. The driver sustained minor abrasions from broken glass, sore muscles, and a headache. The passenger sustained larger abrasions to his right forearm and elbow (passenger was asleep at the time of the incident). Both employees declined the need for transport via ambulance. The driver contacted his supervisor and other appropriate notifications were made. A supervisor arrived on-site and transported the workers to the hospital, where they were treated and released. A local Sheriff's deputy was a few vehicles behind the vehicle at the time of the incident and pulled over, helped secure the scene, contacted the California Highway Patrol, and had initially assessed the workers for injuries.
10/13/2023	Outside Crew	Injury	Hand Cut	Injury - October 13, 2023 , When cleaning out a truck bin, an employee's hand was cut by a knife
9/25/2023	Outside Crew	Signifiant Injury	Electrical Contact	Injury - September 25, 2023 , This debrief is from an incident that occurred on 9/25/23 where a contracted crew was tasked to work on various locations with overhead electrical lines. The crew began their day by taking their switching authorization from the switching center. They tested the line de-energized at their open point location, applied master grounds, and then proceeded to the first work location. The first 3 work locations were climber steel poles and were de-energized under the hold-out authorization, the 4th steel pole location was bucket accessible and was not part of the hold-out authorization. The crew tested and verified the first 3 locations de-energized but choose not to create or install an equipotential zone. The crew used their rubber gloves and sleeves off the poles without an insulated platform. The crew completed the full scope of work on the first 3 locations utilizing the same work method. The crew then proceeded on to the 4th location. The scope of work was to install missing hardware on a pole eye plate and install a missing pole top cap. The crew was now utilizing a bucket truck and had not planned on doing any work on the pole within the Minimum Approach Distance (MAD). As the crew was inspecting the work to be completed, they noticed that an additional bolt was missing on the second pole eye plate that was within proximity with the overhead lines which was not in the original scope of work. The crew decided to also replace the missing bolt, but failed to test the overhead lines to verify if they were energized or de-energized. As two journeyman lineman (JL) were maneuvering into position, one of the JL made incidental contact with no injuries, due to use of an insulated bucket truck; JL did experience an electrical sensation that energy was present. The crew regrouped and tested the conductor and the meter read voltage. They discussed what could be causing the meter to read voltage, but ultimately decided to continue the work without installing any insulated rubber coverings. The two JL went back up, installed the hardware as needed, and while one of the JL reached down to grab a tool, his elbow contacted the 12kV jumper while his shoulder was in contact with the V-brace causing him to be in series (phase to ground) with the conductor. The other JL yelled down to the crew to alert them of what happened and to call 911. Due to the worksite being in a rural location, the crew reported the incident to the switching center and asked for help in transporting the injured JL to the nearest medical facility.

Date Of Incident	Occupation	Type of Incident	Body Part / Root Cause	Description
9/23/2023	Outside Crew	Injury	Foot Lacerations	<p>Injury - September 23, 2023, A five-man crew (one journeyman lineman and four groundmen) was assigned to remove old cable from a cable puller's drum. To accomplish this, the drum with cable needed to be removed from the cable puller and separated to access the wire. The lineman and groundman 1 were the only two with experience performing this task, and groundman 1 had only performed it once. The lineman used this task as training for the other groundmen. A key safety topic stressed by the lineman in the tailboard before the work and during the job was that due to the weight of the load, if the load shifted or started to slip, move out the way and do not try to stop the load from falling. Without incident, the reel was removed from the cable puller and set on the ground, and the cable puller was moved out of the way. Then, the reel was separated, and the top half set aside. The wire was removed and placed in the used wire bin, as planned. Then, the lineman tailboarded/instructed the groundmen on the steps to reassemble the reel. Groundman 2 and groundman 3 assisted on both sides of the forklift arms. Groundman 1 stood on the other side of the drum piece on the ground to help align the top piece being set, and groundman 4 stood behind him. Groundman 2 would relay hand signals to the lineman operating the forklift, as groundman 1 would give direction. When lining up the drum halves, the top half of the reel on the forklift arms teetered and slipped off the forklift arms. Contrary to the tailboard, groundmen 1, 3, and 4 put their hands on the reel to stabilize it but couldn't, so they all backed away and the reel barely missed them. Groundman 1 was not able to get completely in the clear in time, and when the top half of the reel fell, it contacted his right foot and toes. When the lineman checked on each groundman, he noticed groundman 1 had an injured right foot. An all-stop was called and first-aid was administered. The lineman notified the field supervisor, who went to the location in the yard and took the injured groundman to the emergency room at a nearby hospital. Groundman 1 received stitches and was released that night with a follow-up appointment. The lineman and remaining groundmen retailboarded and completed the job without further incident.</p>
9/18/2023	Outside Crew	Injury	Wrist	<p>Injury - September 18, 2023, A crew completed work in a residential backyard and was cleaning up their jobsite. As they walked through gravel in the backyard, wires in the ground were exposed. When a worker's foot got caught on the wires, he fell to the ground and put his hand out to brace his fall. When he landed, his wrist bent awkwardly, and he immediately felt pain and his wrist began to swell. The crew stopped work and appropriate notifications were made. The general foreman accompanied the injured worker to a clinic for medical evaluation.</p>
9/18/2023	Outside Crew	Injury	Laceration to Arm	<p>Injury - September 18, 2023, At a jobsite, lineman 1 was at a bucket truck getting material ready. The foreman stepped away to look for access to a backyard the crew would set-up in, and lineman 2 was using a digger derrick truck to off-load a wire reel from a pole trailer. The groundman was guiding the wire reel. The groundman was holding a ladder in his right hand as he stood on the storage bin on the front of the pole trailer. He placed his left hand on the reel as it was raised. Neither the lineman nor the groundman knew the reel got hung up on another ladder that had been placed between the reel and the material rack on the opposite side of the belly of the trailer. When the reel came loose, the groundman lost his balance, fell from the bin, and landed on a protruding DA bolt (distribution apparatus bolt) in the bed of the trailer. Lineman 1 saw the groundman fall and called out to the apprentice. The apprentice went to the groundman, and lineman 2 came down to assist and laid the groundman in a recovery position. The groundman's shirt was ripped, and he sustained a laceration to his right armpit area. Lineman 2 called out to lineman 1, who immediately got the foreman. When the foreman and lineman 1 returned to the incident location, the foreman instructed lineman 1 to call 911, and the crew applied pressure to the laceration until emergency medical services (EMS) arrived, and appropriate notifications were made. EMS transported the injured groundman to a hospital for evaluation, where he was treated and released. An on-site safety stand down was held with the crew to discuss the incident and check on their state of mind.</p>
9/15/2023	Outside Crew	Injury	Arm Injury	<p>Injury - September 15, 2023, A two-person crew went to use a forklift to move a barrel-shaped weight. The weight would be used to crush wooden debris in a trash container so the container could be covered and hauled away. So that the forks could get under the chain attached to the weight and lift the weight, the groundman lifted the chain. When the forklift moved the forks into position, the groundman's arm was pinched between the fork and the weight. The groundman yelled to the forklift operator who then pulled back the forks. 911 was called and immediate first-aid was provided. The groundman was transported by ambulance to an emergency room. After a medical evaluation, it was determined the groundman sustained no broken bones, and he sustained some ligament damage to his arm and will be on restricted duty when he returns to work. It was learned that the groundman did use verbal commands and hand signals to try to stop the operator from continuing to move the forks, but his verbal commands were drowned out by the noise of a train passing directly adjacent to the yard. The groundman's hand signals were not seen by the forklift operator because the operator's line of sight was blocked by the position of the forks.</p>
9/11/2023	Outside Crew	Injury	Broken Leg	<p>Injury - September 11, 2023, Near the end of the work shift, a crew was transferring old HPS fixtures from multiple bucket trucks onto a stake bed vehicle. The crew unloaded materials from almost the last truck to be unloaded, then tied down the materials on the stake bed. As a crew member transitioned from the catwalk of the bucket truck to the rear platform, he lost his balance, went off the platform, and fell to the ground. As he fell, he put his leg out to catch himself, but landed with all his weight on his left leg. The foreman immediately called 911 and the injured worker was transported by ambulance to a hospital. Appropriate notifications were made. The worker sustained a broken leg.</p>

Date Of Incident	Occupation	Type of Incident	Body Part / Root Cause	Description
9/11/2023	Outside Crew	Injury	Knee Injury	Injury - September 11, 2023 , When an employee stepped up from a gravel surface into a truck, he felt a pop and pain in his knee.
9/7/2023	Outside Crew	Injury	Electrical Contact	Injury - September 7, 2023 , A contractor crew was performing overhead electric transmission work. While performing the work, one of the contractor's employees received voltage via induction. The contractor's employee remained conscious and was transported via company truck to the hospital for medical evaluation.
9/5/2023	Outside Crew	Injury	Flash/Face	Injury - September 5, 2023 , a 5-man crew was replacing two services. In the process of removing the first service from the spreader-bar, the Apprentice Lineman hung the handline on the triplex secondaries, freed the service by removing the preform, and tied the handline to the service, freeing it from the spreader-bar. As the service was being lowered to the ground, the handline hook slid towards the spreader-bar and contacted an uncovered secondary conductor (120v phase), resulting in a flash. The employee was transported to an urgent care facility as a precaution and released for duty shortly after.
9/4/2023	Outside Crew	Injury	Fall/Unknown	Injury - September 4, 2023 , A two-man digging crew was tasked with pre-digging a pole hole for a pole replacement with environmental requirements. The crew met and tailboarded with the environmentalist at the jobsite to verify all USA and environmental requirements were met. The homeowner aggressively stated the pole was not to be placed in her yard but was to be placed on the other side of the back property line. The digging crew contacted their foreman and explained the customer concern. The foreman approved the location of the excavation without project general supervisor (PGS) notification and approval. The digging crew and environmentalist went to the back property line to the new pole excavation site. The digging crew pre-dug the hole for the pole replacement (five feet on the high side and three-feet-six-inches on the low side). The environmentalist was present. The crew covered the hole with a half-inch sono tube cut-to-size, with spoils on top and alongside it, to hold it into place. The environmentalist photo documented the excavation area. The line crew arrived on-site, entered the property to assess the job, and located the pre-dug pole hole. When the foreman saw some spoils outside the back property line, he asked the apprentice to investigate, and the apprentice confirmed the hole was under the cover next to the spoils. After he discovered the hole, the foreman instructed the apprentice to check for truck access, and as he walked on the back property line, the apprentice passed the environmentalist walking toward the pole hole. In the meantime, the foreman went to the front of the property to meet the environmentalist, as he had received a text from the environmentalist that she was on-site. The foreman did not expect her to come in from the back property line area. About 50 feet after the apprentice walked past the environmentalist, at the back property line area, he heard commotion and when he went back, he found the environmentalist had fallen into the new pole hole excavation. The foreman checked on the environmentalist, who said she was not injured. Then, the environmentalist went to the front of the property as the crew began to dig a hole closer to the existing pole and monitored the digging without further incident for some time. The crew and foreman asked the environmentalist several times if she felt alright, and she responded that she was fine. At some point during the job, the environmentalist left the jobsite, and a new environmentalist took over. Once it was clear to the foreman that there was a reportable incident involving a third-party environmental sub-contractor, the incident was elevated to management.
8/27/2023	Outside Crew	Injury	Right Bicep	Injury - August 27, 2023 , Following a brief tailboard, a first-step apprentice structural mechanic and a construction helper working in a substation were to install foundations for 33 kV bus disconnects. An eight-foot long, 90-pound rebar cage was moved by a Bobcat and delivered approximately 10-feet away from the hole due to energized equipment obstructing its path. The apprentice and helper would need to hand carry and place the rebar cage into the hole. To lift and carry the cage, the helper was positioned in front of the cage and the apprentice was positioned in back, both employees facing forward. The helper knelt down and lifted his side of the cage approximately one foot off the ground. He could feel the apprentice had picked up and immediately dropped his end of the cage. When the helper turned around, he saw the apprentice grab his right arm and remove his shirt. The apprentice's right bicep was bulging out, as if his muscle was in a ball. The helper took his injured co-worker to an urgent care, where he was diagnosed with a ruptured tendon. About two weeks later, the apprentice underwent surgery and is recovering at home.
8/21/2023	Outside Crew	Injury	Smashed Fingers	Injury - August 21, 2023 , Using sheets of plywood, two workers were forming a duct bank for concrete encasement. The duct bank was terminated into and exiting a newly installed vault, so the plywood was being positioned to butt up against the vault wall. The ground was stable but wet and slightly muddy from recent rain. Together the two workers tried to dislodge the plywood from the mud and nudge it up against the vault. Worker 1 was at the far end of the plywood and Worker 2 was at the leading end of the plywood, closest to the vault wall. When Worker 1 pushed with greater force than Worker 2 anticipated, Worker 2 was unable to remove his fingers before impact, and his fingers were smashed between the plywood and the concrete vault. The injured worker removed his glove, an all-stop was called, and the injured worker received first-aid by an on-site company safety representative. The injured worker was taken to an emergency room for evaluation. Appropriate notifications were made.

<u>Date Of Incident</u>	<u>Occupation</u>	<u>Type of Incident</u>	<u>Body Part / Root Cause</u>	<u>Description</u>
8/15/2023	Outside Crew	Injury	Finger/Elbow Burns	Injury - August 15, 2023, Two crews were tasked to replace a 33 kV Alduti-Rupter remote control switch on a 33 kV line. During their tailboard, the crew discussed induction hazards. Without incident, the crews installed equipotential bracket grounds at their structure, replaced the switch and potential transformer (PT), and transferred 653 ACSR wire. Then, the crew was beginning the final steps of adjusting the throw of the switch rod. The apprentice working from the bucket was at chest-level with the PT bracket, and he placed both hands on the switch rod just above the bracket. After lifting the switch rod upward, he felt his hands lock up. He yelled out and after a few seconds was able to release his hands from the rod. The lineman in the bucket with the apprentice immediately lowered the bucket and an all-stop was called. The apprentice stepped down from the truck and through conversation and visual confirmation with the field supervisor (FS) on-site, they identified the apprentice had one burn on his left finger and another just above his elbow. Although the apprentice said he was fine, due to the nature of the incident and their remote location (only available by GPS coordinates), the FS drove the injured apprentice to the nearest medical facility. The apprentice was evaluated and released, then transported to Grossman Burn Center for further evaluation, where he was released that evening. Another FS had been called to the jobsite and the crews re-tailboarded. The job was completed without further incident.
8/14/2023	Outside Crew	Injury	Heat Illness	Injury - August 14, 2023, After a worker used a chainsaw to cut a wood pole, he felt heat illness symptoms. His supervisor had the worker sit in an air-conditioned truck cab to cool-off and drink electrolytes. Supervision took the worker back to the work base after he felt better but the worker felt worse on the way. The supervisor took the worker to an emergency room, where the worker was released once he felt better.
7/31/2023	Outside Crew	Injury	Bicep Laceration	Injury - July 31, 2023, crew was assigned a repair order to replace a broken pole. Once the transformer was installed, the apprentice working off the pole was supporting the bus work with his left hand and began skinning conductor with his right hand. The knife dug into the conductor, which caused resistance. When the knife released, it inadvertently struck the apprentice's left bicep. After applying first aid, the foreman informed the duty supervisor of the incident and transported the apprentice to the hospital. The apprentice sustained a two-inch laceration and received eight stitches. The apprentice was in good spirits and was able to drive himself home.
7/26/2023	Outside Crew	Injury	Minor Flash Burn	Injury - July 26, 2023, A five-man crew was tasked to replace a service on structure 4593306E on the Marbuck 12KV o/o Francis Sub in the city of Montclair. The 3rd step apprentice conducted a tailboard with the crew to share the steps he would be taking before proceeding to climb the structure. Once at the work location, the apprentice identified minimal clearance between phase and neutral on the buss work. He then called for a secondary blanket in order to minimize the hazard. With all appropriate PPE, the apprentice then began to apply the cover. As he was applying the blanket, the connections on the phase and neutral made contact, causing a secondary flash. The apprentice reacted and removed the weight of the blanket in order to eliminate this contact. The apprentice descended the pole and was driven to the emergency room. The employee was evaluated and released to return to work in two days. There was no diagnosis by the physician as to the severity of the burn; however, observation identified redness to the neck of the employee.
7/24/2023	Outside Crew	Injury	Dislocated Shoulder	Injury - July 24, 2023, An employee got out of his pickup truck and reached to get his cones out of the truck bed. As he was pulling the cones up, he felt a sharp pain in one of his shoulders. He immediately dropped the cones and called his supervisor, stating that he couldn't move his arm, which is why he thought his arm was dislocated. His supervisor instructed him to call for an ambulance. When the paramedics were on site with the employee, they called the supervisor to inform him that they would have to take him to hospital for further evaluation. At the hospital, his shoulder was put back in position, and he was released back to work.
7/24/2023	Outside Crew	Injury	Contusion	Injury - July 24, 2023, A crew was replacing an H structure with helicopter support. The crew flew in rock bags to back fill the new and old poles. After setting both poles, one additional bag of rock was needed. On the downhill leg, lineman 1 (LM 1) hooked the hand line to it and put a burn around a step bolt on the old pole. Lineman 2 (LM 2) ran up the hill and pulled the rock bag to get it to start sliding while lineman 3 (LM3) was going to burn off the hand line. When LM 2 pulled the bag, it started sliding. LM 3 was walking to the hand line to help when he lost his footing and hit his shin/leg on an old pole stub. An all STOP was called, and the crew iced LM 3's leg. After 30 minutes of icing his leg, LM 3 was still in discomfort and requested to see a doctor. The doctor diagnosed the injury as a contusion and released him back to duty.
7/17/2023	Outside Crew	Injury	Hand Strain	Injury - July 17, 2023, An employee was working on switchgear that required the use of a ladder. As he stepped off the ladder, he mistook the second rung for the last rung and lost his balance. This caused him to reach out with his left arm to grab support to prevent from falling. This caused him to stress his left hand, causing a slight pain.

Date Of Incident	Occupation	Type of Incident	Body Part / Root Cause	Description
7/17/2023	Outside Crew	Injury	Heat Illness	<p>Injury - July 17, 2023, A crew was replacing a tangent transformer pole with a riser. The pole was intended to be set into the same existing hole due to the riser. The crew set the pole and transferred the primary conductor. The apprentice (AP) was tasked with installing pipe straps on the secondary riser. Lineman 1 (LM 1) was in the air also strapping the riser. Lineman 2 (LM 2) was removing the Christmas tree attachment from the spare bucket so he could assist LM 1 in the air. The foreman (FM) was fixing the pole ground hammer. The FM returned from the back of his truck from fixing the pole ground hammer. The AP was still working on the strap and couldn't get the straps to fit. The FM told him he would take over and assigned the AP to finish pounding in the ground rods. The AP dropped what he was doing, grabbed a water, and drank it. He then proceeded to the grounding rods. Shortly after, the FM observed that the AP was standing up holding the ground rod hammer. It was attached to the ground rod but he wasn't moving. The FM asked if he was ok, and the AP only mumbled. The FM got a little closer and told him to take a break and cool off in the truck. The AP did not respond. The FM shouted at LM 2 to come down and help with the AP. The AP slowly sat himself down with the FM's support but was still mumbling. The AP was awake and eyes were open but his mumbling was not making sense. LM 2 and the FM gave him cool water to sip and poured water on him. The FM got LM 1's attention and told him to come down out of the air and assist. The AP had gone from sitting up to slumped over onto a dirt tarp. The FM immediately called 911. The 911 operator told the crew to get him into air conditioning. They then proceeded to carry him to the foreman truck which was approximately 60' feet away. The AP was awake but not responsive. The crew got him onto the passenger seat, removed his shirt and started pouring cold water onto him as instructed by 911. Paramedics arrived and transported him to the hospital. The FM provided the responding paramedics with the AP's information as well as his own information. The FM was advised by the responding paramedics that he did not need to accompany the AP to the hospital as all pertinent information was given. Management was notified.</p>
6/23/2023	Outside Crew	Injury	Lacerations to Head & Shoulder	<p>Injury - June 23, 2023, A distribution crew was called for an emergency "A" tag to repair a wire laying on a crossarm. Around 10:30 AM, the crew was caravanning from Platina, eastbound on Highway 36. They were to meet the Foreman (FM) in Red Bluff and then caravan to the jobsite. Two JLs were driving a Bucket truck and a Groundman (GM) was driving a digger derrick with a trailer attached. While driving, the GM lost control of the digger derrick and was involved in a 270° rollover. The GM was wearing a seatbelt. The JLs saw a cloud of dust behind them and suspected there was an accident. They reversed to see if anyone needed help when they saw the Digger Derrick on its side with the trailer upright. The JLs saw the GM unconscious in the Digger and proceeded to break through the windshield to extricate him. During the extraction process, the GM regained consciousness. The GM sustained lacerations to the head and shoulder. A bystander went to a local general store and called 911. CHP arrived and the GM was transported via CHP helicopter to Mercy Hospital in Redding. The GM was treated at the hospital and released the same day.</p>
6/23/2023	Outside Crew	Serious Injury	Fractured Leg	<p>Injury - June 23, 2023, A PAR WLC crew was tasked with framing a wooden transmission H-structure. The two poles were positioned parallel to each other; each pole was sitting on a 16" pole framing stand. In addition to the pole framing stand, pole #1 was supported by a digger derrick (DD) with a chain attached to the butt of the pole. The chain was holding the butt of the pole off the ground. The Foreman (FM) and a Journeyman Lineman (JL) finished drilling holes in pole #1 and began lining up holes on pole #2. While assisting the JL, the FM was positioned between the two poles with his back towards pole #1. At that time, two apprentices were working on feeding the grounding wire through the basket of the chain on pole #1. The top of pole #1 became unstable and tipped off the pole stand, striking the FM in the lower left leg. The pole fractured bones in the FM's lower left leg. The crew was able to make a splint per the FM's request, and transported him to a hospital in Helena, MT via a PAR WLC vehicle.</p>
6/20/2023	Outside Crew	Injury	Severed Finger	<p>Injury - June 20, 2023, A five-man crew was assigned a repair order to replace a leaning pole. As assigned, the first step apprentice worked from the bucket and dropped out (removed) the communications lines from the pole, then secured the pole with a chain sling hanging from the boom. The lineman on the ground was using the remote control to operate the boom with sling attached to the pole. The lineman and the apprentice were approximately 10-15 feet apart and were verbally communicating their actions to each other. Just after the chain sling was connected to the headache ball, the pole suddenly shifted. The lineman operating the controls came up on (raised/took the slack out of) the sand-line to stabilize the pole. Still in the bucket with his task complete, the apprentice's hand was not in the bight. But, when the pole shifted, the apprentice reflexively reached towards the pole (presumably to help stabilize it) and his left index finger was inadvertently caught in the bight, between the headache ball hook and the steel sling link. An all-stop was called, and the apprentice lowered the bucket and climbed out. As the crew evaluated the apprentice's condition, they also immediately called 911. Emergency medical personnel provided emergency care on-site, and the apprentice was transported to the hospital by ambulance. As a result of the incident, a portion of the apprentice's left index finger was severed. The crew re-tailboarded and completed the job without further incident.</p>

Date Of Incident	Occupation	Type of Incident	Body Part / Root Cause	Description
6/19/2023	Outside Crew	Injury	Finger Burn	Injury - June 19, 2023 , An environmental contractor arrived at a substation to collect potentially hazardous material samples (e.g., concrete, mastic, asbestos cables, lead paint) as part of the ongoing project to rebuild a new 4kV switchrack and remove the existing 4 kV cubicle switchgear. Upon his arrival he was met by the onsite construction site representatives (CSRs) and confirmed the purpose of his visit during a tailboard. At one point, the contractor informed the CSR that he needed to gain access to a locked fenced area where the existing 4 kV line reactor was so he could continue sampling. When performing that task, his gloved hand made contact with the reactor, and he sustained an electrical burn to his finger. A stop-work was immediately called, and emergency protocols were initiated. The injured worker was transported via ambulance to a medical center for evaluation and released the following day.
6/12/2023	Traffic Control Crew	Injury	Civilian Assault Laceration to Face	Injury - June 12, 2023 , Without incident, a crew installed traffic control and performed grinding procedures inside a city shopping center. Before moving from the parking lot to the lane closure, the foreman performed a drive-through evaluation of the traffic control and identified an adjustment needed to a section of the traffic control taper. While the foreman was repositioning the cones, a third-party vehicle abruptly entered the work zone and parked. The driver exited the vehicle, approached the foreman and — without warning — physically assaulted him. He dazed the foreman and knocked him to his knees. After the assailant left the area, a good Samaritan pulled over and assisted the foreman to his feet. The employee notified his immediate superintendent, who came to the site. The good Samaritan left without providing information. Emergency services was contacted and both police and paramedics arrived on-site. Paramedics confirmed the foreman was coherent, all vital signs were okay, and he did not need to be transported to a medical facility. The police conducted a thorough investigation and a report was filed. All work was stopped for the day and the area secured. Appropriate notifications were made. The foreman's upper management confirmed all controls were in place to mitigate traffic control hazards. They also had the foreman taken to an urgent care clinic, where he received stitches to the laceration on his left cheek and was released with no restrictions.
6/12/2023	Outside Crew	Injury	Finger Contusion	Injury - June 12, 2023 , A crew was framing a composite pole for helicopter pole sets on a 12 kV line. When an apprentice wearing gloves placed a crossarm with bracket onto the pole, his left index finger was pinched between the bracket and the pole. When he attempted to remove his finger, he sustained a contusion on his fingertip. The crew called an all-stop, assessed the injury, and the foreman administered first-aid/bandaged the apprentice's finger. Appropriate notifications were made. One of the general foremen on-site took the injured apprentice to a local hospital, where he received five stitches and was released.
6/12/2023	Outside Crew	Injury	Head Injury	Injury - June 12, 2023 , A crew was tasked with pole replacements and reconductor work as part of a five-crew project. The foreman parked his pick-up truck within the coned area on the road to begin work at his location. During worksite set-up, a digger derrick truck had moved to the location and the foreman's truck needed to be moved. When the foreman began to move his pick-up forward, he misjudged how close he was to a drop-off in the road. At slow speed, the truck slid off the road and over culverts, and rolled onto its side into a shallow water way. An all-stop was called immediately and the foreman was removed from the truck. Appropriate notifications were made. The foreman sustained a bump to his head and was taken to a clinic for medical evaluation, where he was treated with first-aid and released 3(follow-up care to be determined). Environmentalists already on-site at the time confirmed no spills.
5/22/2023	Outside Crew	Injury	Finger Laceration	Injury - May 22, 2023 , A laborer was assisting the crew in setting forms in preparation for pouring encasement. The laborer was using a 13# sledge to hammer in the stakes for the forms. He needed to place one more stake in a tight and cramped location. To adjust to the tight confines, the laborer decided to use his non-dominant hand to swing the hammer while holding the stake with his dominant hand. While swinging the sledgehammer at the stake, he missed and hit his righthand index finger causing a laceration.
4/29/2023	Outside Crew	Injury	Fractured Toes	Injury - April 29, 2023 , Two, two-man (lineman and groundman) Underground Detailed Inspection (UDI) crews went to perform an underground vault inspection. The vault lid was an unconventional design, 34-inches in diameter, and approximately 360 lbs. To open the manhole lid, the crews worked together and attempted to use a mechanized, magnetic lifting device but could not get the hook to set in the manhole lid. The team then used the manual Pan Hook, with the intent to lift the lid just enough to slide in a shovel handle and prop the lid up so they could raise it by-hand. Once the lid was partially lifted the crew slid shovels on the sides to keep the lid above the casting, as planned. The crew members were able to lift one "end" of the lid up, with the bottom of the lid still in the metal ring casting. When they rotated/stood-up the lid beyond 90 degrees, the bottom of the lid slid in the casting, the crew members lost control of the lid, and the lid dropped about approximately inches onto lineman 1's left foot. The lid was never lifted or suspended above the manhole opening. The crew reported the incident to the UDI general foreman (GF). Lineman 1 declined medical services, completed his shift and went home. When an Injury Assistance Program (IAP) representative later contacted lineman 1, the lineman indicated the pain level had increased. IAP made an appointment at an urgent care facility where lineman 1 was diagnosed with fractured toes (at the tips).

Date Of Incident	Occupation	Type of Incident	Body Part / Root Cause	Description
4/12/2023	Outside Crew	Injury	Trauma due to Fall	Injury - April 12, 2023, A line crew was assigned to replace secondary spans and multiple services. The crew successfully installed the two secondary spans of 1/0 A.T. before moving on to re-sag the service wire at mid-span. To re-sag the service wire, Lineman 1 leaned an approved collapsible ladder against a single-story home to gain access to the weather head. After he climbed up approximately four-to-five feet, the ladder slid out from underneath him, and he fell to the ground. An apprentice on the pole at the secondary level heard noise from the direction where Lineman 1 had fallen and called out to him. When he did not receive a response, he called for other crew members to check-in on him. Lineman 2 found Lineman 1 on the ground and conscious, and called 911. A groundman used the 900 MHz truck radio to announce the need for assistance and a troubleman responded right away. An immediate all-stop was called. Lineman 1 remained on the ground until the paramedics arrived, then he was transported to a hospital by ambulance and was met there by the operations supervisor (OS) and district manager (DM). The field supervisor (FS) confirmed the remainder of the crew could proceed with the job. The crew retailboarded and completed the job without further incident.
4/12/2023	Outside Crew	Injury	Hyper-Extended Knee	Injury - April 12, 2023, Two crew members traveling on snowmobiles to a branch line fuse location slowed to 3-5 mph when they experienced off-camber terrain. The apprentice driving one of the snowmobiles felt it was going to roll. To avoid being rolled under the snowmobile, the apprentice jumped off the moving vehicle and onto the up-hill side of the snowmobile. His knee hyper-extended as his foot sunk in the soft snow. The apprentice was taken to the local hospital.
4/10/2023	Tree Crew	Injury	Fractured Rib	Injury - April 10, 2023, A line-clearing tree crew was assigned routine tree trimming work. The work involved a backyard climb to trim a co-dominant leader eucalyptus tree (two separate trunks joined at the base). From the ground, the climber placed a rope into the tree and used a 32-foot extension ladder to ascend approximately 20 feet for initial access. He repositioned his rope and attached his work-positioning lanyard to the same leader. From the ladder, he successfully stepped into the tree and the spotter removed the ladder. From that working position the climber successfully trimmed a few branches. Then the tree branch he stood on began to crack, then it failed, and the climber and the branch fell simultaneously to the grass/ground. The branch failure started slowly – it split downward until it broke off approximately eight feet from the ground. The crew immediately called 911 and kept the climber stable on the ground until first responders arrived. The climber was assessed and eventually was able to stand without assistance. The climber was transported to a local emergency room, where it was determined he sustained a fractured rib. He was later released on light duty.
4/7/2023	Outside Crew	Injury	Sprained/ Bruised Ankle	Injury - April 7, 2023, A seven-man crew was assigned to replace mainline underground (UG) cable-related switch equipment, transformers, and meter in service. The general foreman (GF) conducted a tailboard with the crew before leaving the yard. During the work, an employee climbed the ladder to exit the vault and as his weight shifted on the ladder, the ladder slipped. The ladder and employee fell and, and the employee landed on the vault floor with one leg between the ladder rungs. The GF called an all-stop, helped the employee exit the vault, and provided first-aid/assessed the employee. The field supervisor (FS) arrived and took the employee to an emergency room, where the employee was treated for a sprained/bruised ankle and released. The ladder used was only the top half of a 20-foot extension ladder. The actual position of the ladder is unknown and will be determined through investigation fact-finding.
4/3/2023	Outside Crew	Serious Injury	Finger Fracture	Injury - April 3, 2023, A worker was carrying a sledgehammer as he walked to remove support rebar stakes from around a recently-set pier jig. The striking-end of the sledgehammer was over his left shoulder and the end of the handle was in his left hand. The worker tripped on dry, residual concrete and as he fell, he released the sledgehammer. He put out his left hand to try and support himself on a pier rather than fall to the ground and when his left hand contacted the pier, the sledgehammer struck his left index finger. The worker did not report the incident and went to an urgent care on his own later that day. It was determined he sustained a fracture to his left index finger, and the worker reported the incident the following day
4/3/2023	Outside Crew	Injury	Eye Injury	Injury - April 3, 2023, crew was tasked with pumping out run-off water from a new vault. When a worker pulled the pump from vault, the pump "burped," and some water splashed the worker's face and into one eye (the worker was not wearing proper eye protection). When the worker wiped the water away, dirt particles in the water scratched the worker's eye and caused an abrasion. The worker did not realize his eye had been damaged until the next morning when he woke up with his eye swollen and crusted-over. He reported to work and notified his supervisor of the incident and that he needed medical attention. The worker was taken to a local urgent care and appropriate notifications were made.

Date Of Incident	Occupation	Type of Incident	Body Part / Root Cause	Description
3/27/2023	Outside Crew	Injury	Hand Injury	Injury - March 27, 2023, Journeyman Lineman sustained a possible electrical contact while setting transmission pole inside caisson. After successfully grounding the 115 kV line, the crew floated all three conductors off the old H structure and removed it. The crew was in the process of setting the northern most pole of the H structure. As they lowered the pole into the caisson, the crew realized the pole needed to be repositioned. While standing on the ground, the Journeyman Lineman leaned into the grounded center phase with the trunk of his body. He attempted to push the pole with his right hand and grabbed the caisson with his left hand when the incident occurred.
3/20/2023	Outside Crew	Serious Injury	Electrical Shock	Injury - March 20, 2023, On March 27, 2023, a transmission line crew was replacing two deteriorated H-frame structures on a 115 kV line in a remote area. The crew received the line clearance from the senior patrolman indicating the line was deenergized, and they tested and grounded the line using bracket grounding — grounding from the source on both sides of structures 1 and 2, adhering to the overhead grounding requirements. The crew off-loaded and floated the conductors from the old structure. Using a rope tagline, they lowered and relocated the center phase down to approximately four feet above ground-level, to avoid impeding the digger truck. When setting the first pole of the new H-frame structure into the caisson, the pole was not centered and needed to be shifted. To center the pole in the caisson, a lineman pushed the pole with his right hand while his left hand was on the top of the caisson. At the same time, his body made contact with the lowered center phase. The lineman experienced sustained muscle contraction and “locked-up” on the phase and the caisson. The lineman was unable to move, so the crew knocked the lineman off the phase with a wood crossarm. The crew immediately called 911 and deployed their automated external defibrillator (AED). The AED administered a shock and the crew administered CPR as instructed by the AED. The lineman was revived and regained consciousness. Emergency medical services arrived, and the injured lineman was airlifted to a medical center. At the time of this writing, the lineman is in stable condition.
3/17/2023	Outside Crew	Injury	Knee Injury	Injury - March 17, 2023, An apprentice and a lineman were replacing overhead service from pole to residence. The pole is located in the backyard directly behind a residence. Behind the wall, and next to the pole, was a dog attempting to engage with the apprentice. The apprentice decided to stay on his side and use a ladder to gain access to the pole. The apprentice placed the ladder on tile ground without securing the base. After climbing the ladder, near the third rung up top, and in the process of transitioning to the pole, the ladder’s footing slid, and it ran down the face of the pole with the apprentice still on. Grasping a rung, the apprentice continued to slide until both knees made contact with the top of the concrete fence, forcing separation, and resulting in his descent to the grass.
3/6/2023	Outside Crew	Injury	Head Injury	Injury - March 6, 2023, A worker was walking on muddy/slippery ground to the next pole to perform his work when he slipped and fell to the ground on his back, and the back of his head hit the ground (with hard hat still on). Although shaken-up, the worker felt ok. Neither the worker nor the foreman reported the incident until the next day, when the foreman notified supervision. Then, appropriate notifications were made, and the worker was directed to contact the company’s assistance program.
3/6/2023	Outside Crew	Injury	Dog Bites Forearm & Leg	Injury - March 6, 2023, A worker was standing on the outside of a resident’s fence, speaking to the homeowner who had their dog. Without warning, the dog charged at the worker through an open gate and the worker had to fend-off the dog as it attacked. Appropriate notifications were made. The worker sustained bites to the forearm and leg and was taken to a local hospital for medical attention.
3/6/2023	Outside Crew	Injury	Chest Pains from Electrical Shock	Injury - March 6, 2023, When a worker was removing dowel pins stuck in an exciter, he thought he saw an arc. Unable to determine if it was truly an arc, he continued to work thinking it was a static. When he tried to push on the ratchet he was using, he thought he felt a tingling in his left hand through his chest, and he and a crew member saw a spark. With the assistance of a technician, voltage was checked at the turbine deck and pedestal, and it was determined the jumper for the ground fault needed to be removed to avoid backfeed to the lines. That information was not on the lock-out/tag-out (LOTO) procedure. Work was stopped immediately, and appropriate notifications were made. The employee who experienced the tingling was complaining of chest pain and taken to a local emergency room.

Date Of Incident	Occupation	Type of Incident	Body Part / Root Cause	Description
3/6/2023	Outside Crew	Injury	Finger Injury	<p>Injury - March 6, 2023, wo fabrication technicians were assigned to work on new substation mechanical and electrical equipment room (MEER) foundation wood forms. As technician 1 was drilling holes for rebar placement, technician 2 was on the opposite side of the form, removing a two-by-four-inch stud in the way of the holes, getting in the way of the drill bit. When technician 2 grabbed the two-by-four to relocate it, he placed his hand in line of fire of the drilling and when the technician 1 went to drill, the bit made contact with technician 2's gloved hand. The glove wrapped around the drill bit, which cut the glove and the skin of the technician's left, fifth finger. Work immediately stopped and first-aid was applied to the injured worker's finger. After further observation of the injured finger, the injured technician was taken to a local emergency room. Both workers were wearing appropriate personal protective equipment (PPE) for the task.</p>
3/1/2023	Outside Crew	Injury	Flash Burns	<p>Injury - March 1, 2023, A supervising field service representative (SFSR) was sent to replace a 120/240 single phase commercial meter. Once on-site, he set up to perform the task. He had his fluke and wiggy on his tool belt, and he donned his personal protective equipment (PPE), including his leather gloves (with protective rubber inserts). As the SFSR began to remove the panel cover to access the test blocks, the property owner and another individual came up and began speaking with him – both individuals were concerned about recent outages. Additionally, both individuals were armed, and the presence of weapons increased the tension the SFSR was already feeling. As he worked on the panel cover, the SFSR continued conversing with the two armed individuals. The SFSR removed his right-hand glove to make it easier to remove the panel bolts and did not put it back on. Then, when he removed the panel cover, he did not perform required voltage checks. Distracted and anxious as the two customers continued to voice their concerns, the SFSR then attempted to install a T-Bar jumper on the test block to bypass the meter section. When the T-Bar made contact at the jumper landings, a high-energy flash occurred and caused second degree burns to his right hand. The SFSR stopped work and called for additional personnel to isolate the panel and get first-aid. A troubleman (TM) and the SFSR's field supervisor (FS) responded to the site, and the SFSR was transported by the FS to get medical assistance. After investigation, it was determined the customer-side of the meter panel was wired incorrectly and when the T-bar jumper contacted the test block, it connected two phases and caused the flash.</p>
2/27/2023	Outside Crew	Injury	Finger Pinch	<p>Injury - February 27, 2023, A crew prepared to set up for a cable pull at the beginning of the shift. The telehandler forks were positioned closer to the center of the mast to pick up smaller material, so an operator and two workers went to spread the telehandler forks so they could move and set up a larger reel of cable. To move the forks outward to the outside of the mast/carriage, the operator lowered the mast/carriage down to the ground as much as possible, making it easier to slide the forks. The worker began to push the fork outward on the bar/fork shaft and then lift the fork outward to get it over the support plate. As the employee pushed the fork outward, the fork came back towards the mast and the employee's right middle finger was pinched between the mast and the bottom of the fork. After the fork was moved outward, the employee notified his supervisor and was taken to the hospital for evaluation and appropriate notifications were made. The contractor had a stand-down to discuss the incident prior to resuming work. The employee was wearing gloves at the time of the incident.</p>
2/20/2023	Outside Crew	Serious Injury	Flash Burns	<p>Serious Injury - February 20, 2023, After testing and isolating on a 12 kV line, troublemen determined there was a bad underground (UG) cable. The substation ensured part-load up on the 12 kV line. The repair order was sent to the district for completion and was assigned to a district crew to isolate the damaged cable and restore the rest of the 12 kV load. The crew closed a position at vault 1, then moved to vault 2 but found it full of water and started to pump the vault. Part of the crew went to vault 3 to remotely spike cable and isolate the damaged cable. The other crew members returned to vault 2 to decouple and complete initial inspection of the damaged cable, when part of the cable failed and caused a flash. The crew called 911 and their field supervisor, and immediately rendered first-aid. The two linemen in the vault were transported to the Grossman Burn Center.</p>

<u>Date Of Incident</u>	<u>Occupation</u>	<u>Type of Incident</u>	<u>Body Part / Root Cause</u>	<u>Description</u>
2/20/2023	Tree Crew	Serious Injury	Wrist & Elbow Fractures	Serious Injury - February 20, 2023 , When a vegetation crew foreman was preparing to ascend a 30-inch diameter tree, he went to attach his lanyard around the base of the tree, lost his footing, and fell downhill. As he fell, he tried to catch himself by extending his right arm before he struck a small rock approximately four-to-six feet from the base of the tree. The engaged observer witnessed the event, called an all-stop for the crew, and assessed the foreman's condition. The foreman experienced pain in his right arm and was taken to a hospital for a full evaluation, where it was determined he sustained right wrist and elbow fractures and required surgery.
1/23/2023	Outside Crew	Injury	Thigh Cut	Injury - January 23, 2023 , A worker was kneeling next to flex hose to cut the hose. Using a folding knife, he cut towards himself, and when the knife slipped, it cut his thigh. The foreman provided first aid and the injured worker was transported to a nearby clinic, where he received six stitches and was released to full duty.
1/9/2023	Tree Crew	Injury	Finger Laceration	Injury - January 9, 2023 , Two 3-man tree trimming crews were assigned a routine jacaranda tree removal. One crew would handle rigging, spotting, and removal operations, and the other crew would handle hauling brush and chipping to prevent accumulation of debris on the driveway. This effort was to avoid blocking the homeowner's driveway accessibility, given limited space conditions. Once a significant amount of brush was gathered, one worker was assigned to the chipper controls (as an engaged observer), one worker was assigned to feed the chipper, and the third worker was assigned to haul limbs from the backyard to the chipper. This procedure was repeated several times without incident. Then, when the worker was feeding larger logs* into the chipper, one of the logs was consuming another medium-size limb (about eight-to-ten feet long). As it was being grabbed by the chipper, the larger log overturned and landed perpendicular to the limb it consumed. As a result, the smaller limb aggressively shifted into the roller drum area and the worker's right middle finger was caught between the log and smaller limb. The crews immediately stopped all activity, assessed the condition of their injured crew member, and activated their Emergency Response Plan (ERP). The worker was treated by the crew on-site and was then taken to a local hospital. He received stitches and was released on light duty the same day. Appropriate notifications were made.
1/7/2023	Outside Crew	Serious Injury & Fatality	Driver Sustained Fatal Injuries	Serious Injury & Fatality - January 7, 2023 , On Saturday, January 07, 2023, a PG&E contractor driving a 2020 Freightliner M2106 bucket truck was traveling with a passenger on Mountain View Road in Booneville at 06:08 AM, headed west toward PG&E's base camp at Point Arena. At 07:16 AM, the bucket truck approached a stopped General Foreman's (GF) truck. The GF exited his vehicle and alerted them of a low-hanging communications line across the road. The GF assisted the bucket truck driver in navigating under the line safely. The bucket truck then took the lead position, with the GF following continuing west on Mountain View Road. At 07:22 AM, the bucket truck was traveling at 17 MPH and passed an advisory sign indicating "16% grade for the next 1 1/2 miles" near 40301 Mountain View Rd and maintained speeds between 20 and 23 MPH for the next 60 seconds. At 07:23:35 AM, the Bucket Truck began to gain speed and passed a 25 MPH sign while traveling at 38 MPH. The Bucket Truck continued west down the grade into an S curve where the passenger-side tires left the pavement. The truck struck a guard rail and slowed to 30 MPH. The driver could not bring the passenger-side tires back onto the pavement. The guard rail failed, causing the bucket truck to leave the roadway, striking a stand of trees and vegetation before rolling down an embankment and coming to rest on the passenger side. The accident occurred at 41498 Mountain View Road, Manchester, California. The driver sustained fatal injuries, and the passenger was taken to a nearby hospital, where they were treated for severe injuries. Californian Highway Patrol responded to the accident and is in the process of completing a report.

Date Of Incident	Occupation	Type of Incident	Body Part / Root Cause	Description
Contractor Circuit Interruption Incidents				
11/30/2023	Outside Crew	CCII	Operator Error	CCII - November 30, 2023 , Contracted crew began the process of de-energizing an underground service by removing two hot legs followed by removing the neutral. As the crew began loosening the Z-bar with a non-insulated T Handle Allen Wrench, the wrench came into contact with the X3 Z-bar that was above the neutral. This contact caused a secondary flash, which blew the secondary fuse on the pad mount transformer and caused an outage. There was additionally some black marks on the employee's hardhat, glasses, and clothing from the secondary flash. A SDG&E troubleman man was dispatched to respond to this outage and to refuse the transformer. Fortunately, there were no injuries sustained from this incident.
10/30/2023	Outside Crew	CCII	Operator Error	CCII - October 30, 2023 , When a crew was excavating with a backhoe to install conduits, the backhoe struck and damaged three direct-buried underground 4/0 cables. The crew immediately stopped work, assessed the damage, and made appropriate notifications.
10/30/2023	Outside Crew	CCII	Operator Error	CCII - October 30, 2023 , Unplanned Outage, Property Damage, Close Call. When a crew was saw-cutting a concrete sidewalk, the saw blade struck and damaged secondary shoo-fly cable (temporary cable). The crew stopped work immediately, assessed the damage, and made appropriate notifications. Although the damage did not cause the unplanned outage, the work to splice and repair the cable resulted in the unplanned outage.
9/18/2023	Outside Crew	CCII	Improper Grounding	CCII - September 18, 2023 , Three line crews were tasked to replace eight spans of wire on a 4 kV line during a scheduled outage. Without incident, crews 1 and 3 opened isolation points, crew 2 checked voltage and rotation on their bank at pole 5, and crew 1 opened jumpers and grounded at pole 1. Shortly after, crew 3 would test and ground on the north side of pole 10, which they believed to be the 4 kV line they were working on. Two crew members from crew 3 tested voltage on the line and saw minor deflection but thought it was induction from the 4 kV underground primary line in the riser. Rather than call this out, one of the crew members applied the master ground to the primary neutral with a hot stick. When he applied a ground from the primary neutral to the nearest phase, a flash occurred and the 4 kV line relayed and restored within seconds. The crews called an all-stop and confirmed no injuries. Appropriate notifications were made. A project general supervisor was on-site and responded immediately. It was determined the line the crew tested at pole 10 was a different, energized 4 kV line. Crews were eventually authorized to begin the go-back procedure and re-energize the line.
9/11/2023	Outside Crew	CCII	Improper Switching	CCII - September 11, 2023 , An overhead distribution crew was tasked to remove and replace a structure (pole) and remote-control switch (RCS). Also on-site were two SCE Troublemens (TM) to support the crew with a switching procedure. Following the tailboard, the journeyman and apprentice linemen were directed to set up equipment and prepare for the task. The program was to open taps in spans north and south after making parallel a 12 kV line. The line crew was standing by to open pothead taps at a pole, which would de-energize a section of line to the open RCS. The line crew foreman walked across the street to discuss the program with the SCE TM and await the approval to open taps. As the journeyman and apprentice linemen went up in the bucket to prepare to open taps, they thought they heard the direction to open the pot head taps and opened the first phase. The foreman realized what they had done, called an all-stop, brought everyone to the ground, and gathered with the TM to discuss the incident. Appropriate notifications were made.
8/21/2023	Outside Crew	CCII	Operator Error	CCII - August 21, 2023 , During an outage, a civil crew was using a handheld angle grinder to ring-cut conduit housing a de-energized primary cable. An SCE crew had pulled the cable above ground and installed a shoo-fly (temporary line/connection) and when the system was re-energized, the crew heard a popping sound. An all-stop was called, and the crew checked the cable and found that a primary cable failed at the location where the conduit had been cut. They determined the angle grinder must have nicked the cable during ring-cutting. No injuries. Appropriate notifications were made. The crew made necessary repairs and the system was re-energized without further incident.
7/24/2023	Outside Crew	CCII	Operator Error	CCII - July 24, 2023 , A crane operator was operating the crane and boomed up too far and contacted the SCE service (secondary) that crosses the street. The service is perpendicular to the bore pit and crosses overhead at the center of the bore pit. The cable arced where the boom made contact and the power shut off. The line remained suspended in place. The operator identified the arc and reacted by moving the boom down and out of contact with the line. The operator alerted all crewmembers in the area and directed the crew not to touch anything and remained on the crane. The foreman ensured the boom was not contacting the wires and the wires had not been downed. The employee then directed the operator to stow the crane.

Date Of Incident	Occupation	Type of Incident	Body Part / Root Cause	Description
7/24/2023	Outside Crew	CCII	Operator Error	CCII - July 24, 2023 , A crew was tasked to perform anchor remediation project work to replace several down guy anchors on a 12 kV circuit. The four-man crew consisted of a foreman, two junior linemen (JL), and a groundman. The foreman was working under a valid dig ticket and the crew knew, from utility ground marks, that there were energized distribution lines at 1 foot to 3 feet and 4 feet to 6 feet north of the dig area. The crew knew they would be digging up the existing anchors in close proximity to an energized underground (UG) vault. The foreman completed a written and verbal tailboard at the jobsite. The foreman advised that the crew would be hand digging the area and using the digger truck to secure the utility pole before changing the strain on the down guys. The specific tasks to be conducted were to dig and remove the existing anchors, install new anchors, and transfer the existing guy wire before cleaning up the jobsite. The crew performed the first task, potholed, and exposed/identified conduit with energized 12kV at a depth of 2 1/2 feet. They continued digging and then exposed more conduit with energized 12kV cable at a depth of 3 1/2 feet. At this point, the crew assumed they were in the clear. The foreman authorized the use of a jackhammer with an 8-foot GAD (a type of pry bar used in conjunction with demolition hammer) with a 3" chisel tip when they struck and penetrated conduit with energized 12 kV cable at a depth of approximately 6 feet. This dig-in caused a flash and a crew caused circuit interruption. There were no injuries reported.
7/24/2023	Outside Crew	CCII	Operator Error	CCII - July 24, 2023 , A foreman was using a battery-operated porta band to cut the existing cable tray to facilitate the installation of the new cable tray material (this was to be used for future runs of cable). The existing fiber-optic line was tied to the existing all-thread supports at two locations. While the employee was completing his cut to the existing cable tray, the blade became "stuck." The employee continued to run the porta band to finish the cut, causing the zip-tied cable to fall down into the tray due to the vibration of the bound saw blade. This resulted in the cutting of the existing fiber-optic cable.
7/17/2023	Outside Crew	CCII	Improper Wire Connection	CCII - July 17, 2023 , A crew was in the process of performing reframing and reconductor work on a 12 kV line. The lineman was tasked with making up open, two-wire secondary. He had it taped on both ends but was forced to splice the wire in order to make the connections. Rather than trace it out to verify the neutral, he thought he had it properly identified. The foreman failed to verify the connection. When the crews re-energized the line, a customer panel began to smoke, causing the customer phone line to come off the panel. They realized they had inadvertently hooked the neutral to the phase.
7/10/2023	Outside Crew	CCII	Improper Wire Connection	CCII - July 10, 2023 , A crew was installing secondary wire on a 12kV. The crew was tasked with installing new 1/0 triplex between two transformers. They failed to verify and realize that the connections had been paralleled. When the troubleman closed the pole switch, the transformer fuses blew.
7/10/2023	Outside Crew	CCII	Operator Error	CCII - July 10, 2023 , A distribution crew was assigned to replace a structure and transfer a cap bank. The crew's job location was next to a canal. The crew arrived at the jobsite along with traffic control and set up their vehicles and traffic control. Next, the crew tailboarded and went to work by de-energizing the cap bank from a bucket truck. The crew then installed cover on the south side of the structure, starting with the two outside phases (west phases) using two plastic covers (hard guard/tacos) per phase. Next, they moved to install cover on the east phase. While traveling to the east phase, contact was made with both outside phases and the boom of the bucket truck, 5ft above the knuckle and 5ft below the upper boom insulation. The contact between phases resulted in wire down. Appropriate no-test orders were in effect and crew members were located outside the vehicle barricades. The crew stopped work and foreman called "all stop" to make sure his crew was safe and that there were no injuries. The crew Foreman contacted the switching center, general foreman, and project general supervisor. TM also showed up for support, and foreman took a tap line clearance (TLC), grounded, and proceeded to perform the work with circuit de-energized and grounded.
5/22/2023	Tree Crew	CCII	Operator Error	CCII - May 22, 2023 , A three-person crew (employee #1, employee #2, and employee #3) arrived at jobsite to complete a tree removal that started 3 days earlier. The crew performed their job set up, completed the JHA, and began with chipping operations of previously cut limbs. After chipping, employee #1 set the lift truck with two wheels on sidewalk and the other two wheels on the street. Employee #1 was able to safely maneuver the boom without breaking MAD, considering the lift truck was slightly beneath the power lines. The crew successfully rigged down the top of the tree and two logs with employee #1 cutting, employee #2 on the tagline and employee #3 on the rigging line both outside of the drop zone. While working on the 3rd log, employee #1 utilized the elevator part of the aerial lift, which only moves up or down, to move up and down the tree to secure the pulley, tie the knots and make the notch cut. After dressing the knots, employee #1 operated the elevator to reposition himself to begin the back cut. While repositioning, employee #1 was not facing the lines or direction of travel, causing an outage by the knuckle of the boom contacting 12KV primaries.
5/22/2023	Outside Crew	CCII	Operator Error	CCII - May 22, 2023 , While concrete breaking and demolishing a subsurface manhole vault using an excavator w/ breaker attachment, an operator saw an arc flash and discovered a bundle of electric wires inside one of the duct bank conduits entering the vault. The machine did not contact the wires. Instead, when the vault roof caved in on itself, rubble appeared to damage the deep lying wires. The operator stopped work, informed his onsite supervisor, the SCE client was informed, and a SCE line crew was immediately dispatched to the site to investigate. The work area was cordoned off and access prohibited. The SCE crew confirmed two wires were live.

Date Of Incident	Occupation	Type of Incident	Body Part / Root Cause	Description
5/10/2023	Gas Crew	CCII	Improper Pothole	CCII - May 10, 2023 , Contracted crew was tasked with trenching and install of electric conduit and gas line in a joint trench. While a gas distribution contractor was trenching to install conduit and gas line in a joint trench, it was recognized that one of the meter installation locations needed to be adjusted, causing the crew to excavate in an unplanned area. Mark out had been performed curb to curb, however it had not been completed from curb to the new meter location. The crew did not pothole the marked electrical in the street (still within the tolerance zone after shifting 18" laterally), and their operators mini-excavator bucket made contact with and damaged a bundle of energized 240-volt single phase electrical wires near the new meter location. An electrician was called out to the jobsite to perform repairs and restore power to the homes that were affected.
4/3/2023	Outside Crew	CCII	Operator Error	CCII - April 3, 2023 , A foreman opened a pull box to visually verify the contents of conduits to be removed later that day during the outage but was unable to see clearly because the structure was full of water and mud. In a second attempt to visually verify the conduit contents, the foreman entered the trench to cut a window into the conduit and saw the conduit also full of water and mud. Unable to visually verify what was in the conduit, the foreman probed the cut window with a shovel handle and thought he only felt water and mud. When he began cutting the conduit with a Sawzall, the foreman felt resistance, immediately stopped work, exited the trench, and had all other workers also evacuate. Then, it began to rain. This filled the trench with more water and the damaged line relayed, which resulted in a circuit interruption. Appropriate notifications were made.
3/27/2023	Outside Crew	CCII	Improper Cover	CCII - March 27, 2023 , A crew was tasked to replace a pole. The foreman (FM) released his clearance and reenergized a section of the 4 kV. He then instructed the crew to close in the fuse holder on the arm and check voltage on the transformer. The crew positioned the bucket in front of the primary arm and utilized an 8' hot stick to close the fuse holder. After closing the fuse holder, it swiveled into the messenger of the aerial cable. The contact from the fuse holder to the messenger caused the circuit to lock out. The crew was wearing 25 cal PPE. Nobody was injured and there was no damage to the structure or private property. When the lineman (LM) installed the fuse holder on the bracket, he tightened the nut enough to compress the lock washer. After the incident, while adjusting the fuse holder to its proper position, the LM was only able to tighten the nut slightly more. The crew did not utilize any rubber cover while operating the fuse holder.
3/27/2023	Outside Crew	CCII	Improper Transformer Hookup	CCII - March 27, 2023 , A crew was tasked with a reframe. After successfully disconnecting the transformer and reframing the arm, the two journeyman linemen in the bucket reconnected the secondary phases and neutral to what they thought were the correct positions. A hot apprentice later closed the can and the circuit was re-energized. Immediately after load was brought up, a customer came out and said his lights and appliances were malfunctioning
3/24/2023	Outside Crew	CCII	Wire Control	CCII - March 24, 2023 , An overhead electric line crew was tasked to change out a CMP pole that was to be energized during normal work hours. The new wood pole was about five feet taller than the existing pole with straight through energized three phase 4KV primary and energized single phase secondary. The crew framed and landed the new primary and secondary tangent crossarms to the new pole. With all of the appropriate PPE, including cover-ups and rubber gloves, the lineman transferred the street side phase with no incident. As the lineman was transferring the second primary phase to the new pole, the 6/3 copper wire broke at a weak spot at about 15ft to 20ft from the point of attachment at the adjacent pole. The conductor's tensile strength was compromised by weather/elements, causing the corroded conductor to break and cause an unplanned outage. All crew members were in the clear when the wire fell and there were no injuries sustained. The foreman notified STA-A of what happened, conducted another tailgate with the crew, and proceeded to make permanent repairs to restore service.
3/13/2023	Outside Crew	CCII	Wire Control	CCII - March 13, 2023 , A five-man line crew was executing a switching program to deenergize a section of two 16 kV circuits and two 4 kV circuits. As part of the switching program, a crew was tasked to install a set of primary isolators west of one of the structures. Both 4 kV circuits below had already been deenergized. Two workers installed the isolator over the wire and tightened it down without the use of a hoist or slack blocks. After installing the isolator on the road-side phase, they tested and cut the wire open in-between the dead-end shoes of the isolator. When the wire was cut, one side of the wire slid through the dead-end shoe and made contact with the center phase. Both lines fell to the ground and a section of the 16 kV circuit locked out. The foreman immediately stopped work and confirmed no injuries or property damage. Appropriate notifications were made. After evaluating the damage, the general foreman called a nearby crew to assist with making repairs.
3/6/2023	Outside Crew	CCII	Wire Control	CCII - March 6, 2023 , A crew was tasked with replacing a deteriorated pole with street light conductor, a neutral, and three primary conductors on a 10-foot crossarm. The crew held no-test orders, the outage was already underway, and grounds were applied at the source pole one span down. When the crew lowered the primary conductors on the structure to be replaced, the weight of the conductors caused movement on the source structure. The conductors shook and came together mid-span, and the circuit locked out. Appropriate notifications were made, and a plan was implemented to create a safer condition to complete the work.
3/6/2023	3rd Party Vac Truck	CCII	Operator Error	CCII - March 6, 2023 , About one foot behind an existing pole, a third-party vacuum truck completed excavation of the replacement pole hole (approximately six-and-a-half feet deep), and the existing pole lost stability. The bottom of the pole kicked out and into the new hole, the pole leaned at a 45-degree angle, and the energized primary conductors lowered to an unsafe height. Appropriate notifications were made, and the circuit was deenergized for safety. A line crew was dispatched to correct the structure and the circuit was reenergized.

Date Of Incident	Occupation	Type of Incident	Body Part / Root Cause	Description
2/20/2023	Outside Crew	CCII	Wire Control	CCII - February 20, 2023, A digging crew was tasked to remediate pole anchors off a highway in a mountainous area. Without incident, the crew transferred a guy wire from the east anchor to a temporary anchor, using a combination of a nylon sling with shackle and a chain hoist for rigging. Then, the crew moved to the north anchor, where they relieved tension from the guy wire and disconnected it from the anchor. At some point when the tension was released, the pole shifted toward the roadway, which created additional sag in the communication wire. Sometime later, a tractor trailer driving through the area struck and pulled the sagging communication line forward, which pulled the pole out of the ground and onto the roadway. The crew immediately called an all stop, secured the site, set up additional traffic control, and made appropriate notifications, including the California Highway Patrol who responded to the scene and took a report.
2/13/2023	Outside Crew	CCII	Improper Switching	CCII - February 13, 2023, Two linecrews were tasked to replace two poles and reconductor primary wire on a section of a 12 kV line. One crew would handle the switching program to deenergize the section of the line and the other crew would frame poles in preparation for the outage. At the appropriate step in the switching program, after securing approvals, and without incident, crew members amp-checked the wire and opened the isolators at the identified structure using a load drop tool to deenergize a section of the 12 kV line to an open pole switch. After opening the third phase, the crew members tested to verify that the wire had been deenergized. The expected outcome was the wire on the south side of the isolators would be deenergized, but, when testing, crew members identified the wire was still energized. After learning the line was still energized, the foreman and troublemen immediately reviewed the circuit map and realized the crew should have installed and opened isolators south of the structure but had opened existing isolators north of the structure, which deenergized approximately 40 transformers and resulted in the unplanned outage of a residential area. The crew closed the isolators, which restored the load north of the structure, and installed the correct isolators to the south of the structure. After correcting the error, the foreman made appropriate notifications and the crew continued work without further incident.
1/30/2023	Outside Crew	CCII	Improper Testing	CCII - January 30, 2023, A line crew was tasked to replace a PMH switch with a new PME switch. Without incident, the crew tested and confirmed position 3 was deenergized, and they grounded the position. The gas switch was closed to-ground by the troubleman. The crew then returned to the PMH, tested and confirmed all three positions were deenergized, and accessed the J-bars in the underground structure and tested and confirmed all three J-bars were deenergized so they could ground. They removed the dead-end cap from the B-phase J-bar, and when they applied grounds from outside the structure, a fault occurred. The crew immediately removed grounds and reapplied the dead-end cap to the J-bar. The foreman and switching center communicated regarding the fault. The foreman ensured the crew was in the clear and released his no-test orders. Appropriate notifications were made throughout.
1/23/2023	Outside Crew	CCII	Improper Installation	CCII - January 23, 2023, Without incident, a four-man underground crew replaced six 600 Amp T-bodies and six 200 Amp elbows on a switch in a vault on a 12 kV line. After all components were replaced and inspected by the foreman, the foreman gave the troubleman a one-hour notice to reenergize. The crew had cleared-off the line and stood by to phase after the circuit was reenergized. When the troubleman reenergized the circuit, it failed. The crew called an all-stop, ensured no one was injured, and made appropriate notifications. A blower was used to remove smoke from the vault. The crew found that the Position 2 C-phase component had failed. Inspection revealed the insulating plug was not properly seated, which caused the circuit interruption. An SCE underground crew made repairs and re-energized the circuit.
1/16/2023	Outside Crew	CCII	Improper Dig	CCII - January 16, 2023, A line crew was assigned a deteriorated pole replacement for a dead-end pole in a residential area. Without incident, the three-man hole-digging crew completed work (exposed and located underground risers that were attached to the pole and exposed a water line). Then, the crew barricaded the location. They visually inspected the structure and left the location. Approximately two hours later, the foreman was notified by residents that the pole had fallen over. The foreman, the general foreman, and a troubleman met at the site and found the pole had broken below ground level and fallen to the ground, and the circuit relayed. Another crew made repairs and installed the new structure without further incident. Power was restored later that same day.
1/2/2023	Outside Crew	CCII	Wire Control	CCII January 2, 2023, A line crew was digging a hole for a new anchor rod and plate behind an existing anchor. With soil around it removed and tension from the guy wire (still attached), the old plate was exposed enough to pull loose from the soil it was in. The released tension allowed the existing guy wires to slack and the overhead conductor to slap together mid-span, which resulted in a circuit interruption. Appropriate notifications were made and an SCE troubleman was dispatched to the site.

Date Of Incident	Occupation	Type of Incident	Body Part / Root Cause	Description
Contractor Other Incidents				
11/20/2023	Outside Crew	Close Call	Wire Control	Close Call - November 20, 2023, Six crews were tasked with a reconductor project encompassing several pole replacements, re-frames, and wire. Crew #1, where the incident occurred, was tasked with replacing a line and buck pole in the middle of the project. They replaced the pole and made-up new wire on dead ends. The crew was making up the final jumpers but couldn't reach two outside phases based on how the bucket was positioned. Crew #1 foreman called for assistance and Crew #2, along with their bucket, moved down to help. The bucket from Crew #2 was set-up and employee boomed up. As employee moved to the outside phase to make the connection, he stopped working. Foreman noticed employee stopped working, asked what happened, did you get bit and employee responded, "yes."
11/20/2023	Outside Crew	Property Damage	Operator Error	Property Damage - November 20, 2023, Within a section of a project in a substation, abandoned galvanized irrigation piping was removed due to conflicts with construction. The pipe-end furthest away from the 66 kV rack was identified as part of the abandoned irrigation line and demolished accordingly. A worker was tasked to excavate for installation of v-ditch drainage adjacent to the existing 66 kV rack. While excavating, the worker exposed two 10-foot sections of remaining galvanized pipe. The worker made his first cut to remove the remaining piping, but realized the pipe actually contained low voltage wires and the wires had been severed by the cut. The checker was immediately notified, an all-stop was called, and appropriate notifications were made. No arc flash occurred when the wires
11/13/2023	Outside Crew	Property Damage	Operator Error	Property Damage - November 13, 2023, A two-man tree crew was traveling in a company bucket truck. They were traveling at 45mph in a 55mph posted speed limit zone. While driving, the driver encountered black ice that was not visible on a straight section of road, causing the truck to lose control and collide into the hillside off to the right shoulder, ending in a rollover and landing on the driver side. Before losing control of the truck, the driver tried to regain control for an estimated 80-100 yards but was unsuccessful. The employees contacted their General Foreman to notify him of the accident. EMS and California Highway Patrol arrived at the scene of the accident. The driver reported neck and right arm pain and the passenger reported neck and back pain. Both were taken by EMS to the hospital for further medical attention.
11/13/2023	Outside Crew	Property Damage	Operator Error	Property Damage - November 13, 2023, A distribution crew, tasked with pole changeouts, was headed out to the jobsite in a convoy of trucks. During the drive, the weather changed to heavy fog and ice and a 3rd party vehicle entered the roadway, from the shoulder, in front of one of the digger derricks. The truck driver tapped the brakes and merged into the left lane, to provide room for the vehicle ahead. The truck began to slide on the ice and lose traction. The driver was receiving direction from the passenger on how to recover but was unsuccessful. The truck continued to slide sideways at a slow rate of speed and tipped onto its side. Both the driver and passenger were unharmed. The truck was towed to the yard for repair
11/11/2023	Tree Crew	Property Damage	Operator Error	Property Damage - November 11, 2023, Several line crews were working on overhead line improvements/reconductor work in mountainous terrain when heavy rain forced them to stop. As they were leaving the job site, the crew vehicles and equipment got stuck in the mud. After clearing the vehicles from being stuck, a 4-step apprentice was tasked with driving a digger derrick down the highway (pulling a pole trailer without a pole load) back to the yard while being followed by a foreman. At the bottom of the highway, the apprentice pulled over to let a convoy of motorists pass him. The foreman pulled over to make sure he was ok and then pulled back onto the highway and the apprentice followed. The bottom of the highway had a slight downgrade, requiring the apprentice to keep the truck in 3rd gear. He entered an S-Curve shaped portion of the road, at about 30 MPH, when a witness, who was driving behind the digger derrick, smelled burning rubber coming from the digger derrick or pole trailer as the truck. The witness also saw the pole trailer swapping from side to side.
11/6/2023	Outside Crew	Property Damage	Operator Error	Property Damage - November 6, 2023, Within a section of a project in a substation, abandoned galvanized irrigation piping was removed due to conflicts with construction. The pipe-end furthest away from the 66 kV rack was identified as part of the abandoned irrigation line and demolished accordingly. A worker was tasked to excavate for installation of v-ditch drainage adjacent to the existing 66 kV rack. While excavating, the worker exposed two 10-foot sections of remaining galvanized pipe. The worker made his first cut to remove the remaining piping, but realized the pipe actually contained low voltage wires and the wires had been severed by the cut. The checker was immediately notified, an all-stop was called, and appropriate notifications were made. No arc flash occurred when the wires
11/6/2023	Outside Crew	Property Damage	Operator Error	Property Damage - November 6, 2023, When a crew was potholing with a round point shovel, a marked plastic gas service line was damaged. The crew immediately stopped work, secured the area, and made appropriate notifications, including the third-party company so repairs could be made.

Date Of Incident	Occupation	Type of Incident	Body Part / Root Cause	Description
10/30/2023	Outside Crew	Unsafe Act	Poor Leadership	<p>Unsafe Act - October 30, 2023, Three linework crews were tasked to perform three pole change-outs in a residential area, with helicopter support. Per the Congested Area Plan (CAP), the job required fifteen residences to be evacuated before work began. A week prior to the work, the linework contractor attempted customer contact and hung door notices. On the day of the job, both the linework company and contract traffic control technicians were tasked with door-knocking the affected residences to ensure residents were made aware and/or had vacated. Seven residents refused to leave their homes. The technicians informed the contractor safety manager as well as the helicopter pilot about the residents' status and the issue was communicated to the linework contractor VP. The VP directed that the general foreman (GF) notify the SCE project general supervisor (PGS) on-site. Instead, the GF directed the traffic control technicians that customers unwilling to leave their homes were to remain indoors and to not answer the door if someone came by again. The technicians were also directed to not talk to the pilot or SCE PGS. The flight path was modified to fly over the residences that were confirmed vacated, and the job continued as planned. During the course of the job, the pilot raised concern about residents standing on their patios recording the helicopter as he flew over. The foreman reported the issue to the GF, who directed the crews to continue with the job, regardless if people ignored the previous requests to vacate and sat outside. The next day of the job, a different SCE PGS learned about the evacuation process that occurred the day before and the direction from the GF. Again, control technicians door-knocked the affected residences. Four homeowners refused to evacuate, and the technicians informed the SCE PGS and the contractor safety manager. The SCE PGS and contractor safety manager talked to the homeowners, who shared the direction to stay indoors they were given the day before. Three of the four homeowners agreed to leave, and the flight path was adjusted to accommodate the only resident who would not vacate. The contractor safety manager and SCE PGS made appropriate notifications and elevated their concerns to their respective leadership, and the two management teams discussed the events and necessary outcomes. Leadership agreed the GF was to be removed from the property immediately.</p>
10/23/2023	Drone Inspection	Threatening Homeowner	Good Question	<p>Threatening Homeowner - October 23, 2023, A drone inspection crew was conducting an aerial inspection of a distribution pole on a fence line, when a homeowner holding a shotgun demanded to know if the drone being operated near his property was theirs. The crew identified themselves and explained their activity. The homeowner stated, "You almost lost that drone," and indicated he was about to shoot it down. The crew de-escalated the situation as much as possible and left the area. The angry customer did not point the firearm at the crew or threaten them directly but demanded prior notice before a crew operated a drone near his property. The crew had contacted and obtained permission to access the property on which the poles were located. However, the poles were on a fence line with the angry customer, and the customer had not been contacted. A report was filed with law enforcement, the Edison Security Operations Center, and supervision. Law enforcement contacted the angry customer.</p>
10/16/2023	Tree Crew	Property Damage	Operator Error	<p>Property Damage - October 16, 2023, A chipping crew disconnected the chipper from the chip truck and before moving the vehicle again did not check and secure the locking pin to the tailgate that keeps the gate closed. After driving about 140 feet down the main road, the driver turned onto a dirt access road, and the tailgate swung open and struck a power pole. As a result, the pole crossarm fractured and broke-off on one side of the phase. An all-stop was called, the crew shut down operations, secured the scene, and contacted leadership. Appropriate notifications were made.</p>
10/16/2023	Outside Crew	Property Damage	Operator Error	<p>Property Damage - October 16, 2023, A crew was tasked with changing a deteriorated pole. To start the job, a lineman notified the traffic controller (TC) he would position the bucket truck. The TC moved into position with his traffic control paddle to stop traffic as the lineman pulled out of the traffic control zone. The lineman started backing the truck into position then pulled forward to get a better angle for his target position. When he pulled forward, he did not see the water hydrant, and the vehicle front bumper struck the hydrant. The crew immediately called an all-stop, barricaded the area round the hydrant, secured the surrounding area, and contacted emergency services. Other appropriate notifications were made.</p>
10/2/2023	Outside Crew	Property Damage	Equipment Failure	<p>Property Damage - October 2, 2023, A line crew was tasked to replace a deteriorated pole. When a de-energized, grounded wire was moved during the process, a single-phase tangent wood crossarm broke one span to the north. The crew called an all-stop, assessed the situation, and determined there was no immediate danger. The SCE project general supervisor (PGS) was notified and the broken crossarm was replaced.</p>
9/30/2023	Outside Crew	Property Damage	Operator Error	<p>Property Damage - September 30, 2023, A line crew was setting up water pumps to pump an underground (UG) vault. After removing a pump from SCE van 1, the contract temporary traffic control (TTC) workers were asked to move their truck so the crew could move SCE van 2 into that spot and get a second pump from that van. The SCE crew heard the engine rev, and then the truck lunged forward and kept moving within the cone zone. As the truck drove past the lineman standing near the back of SCE van 1, he pushed himself away from the side of the truck to get out of the way. The vehicle continued moving within the work area and struck the groundman in the hip and forearm, which pushed him into SCE van 1. Then the truck transitioned into the traffic lane. The SCE crew immediately called an all-stop and checked on the groundman, who was not seriously injured and was able to continue working. The SCE crew re-tailboarded the job and the work was completed without further incident. The crew believes the TTC driver* unintentionally shifted the truck into neutral, which he figured out when he pressed on the gas and the truck did not move. Then the driver must have failed to apply the brake before shifting the truck into drive, which caused the vehicle to lunge forward.</p>

Date Of Incident	Occupation	Type of Incident	Body Part / Root Cause	Description
9/18/2023	Outside Crew	Property Damage	Operator Error	Property Damage - September 18, 2023, A two-man planning, sub-contractor crew was tasked to pre-field utility poles for future planning and design work. The crew used an online navigation system, found a dirt utility easement they thought they could take to access the structure, and drove the road in the 4X4 company truck. They found the road too dangerous to traverse and stopped. When they used the navigation system again, they found a different utility easement road they thought would afford them safe access to the structure. As they drove the road, the driver realized the truck was losing traction and they could not safely get up the hill. The driver stopped, assessed the situation, and determined they would back down the road to avoid the truck getting stuck. As the driver backed-up the truck (slower than 5 MPH), the right rear side of the truck high-sided and at the same time, both the front and rear left tires dropped down into a large trench (camouflaged by the wild grass). The truck rolled over onto the driver side and stopped upside down on its roof. Both crew members were wearing their seatbelts during the incident and the truck's airbags deployed. The crew members safely exited the truck and made appropriate notifications, including walking back to a nearby main road and notifying the California Highway Patrol (CHP). The CHP responded to the scene and the vehicle was towed.
9/11/2023	Outside Crew	Property Damage	Operator Error	Property Damage - September 11, 2023, Two traffic control crews installed temporary traffic control (TTC) across two lanes for a transmission crew to replace deteriorated transmission poles. The work was completed, and the traffic control crew began dismantling the TTC, starting with the barricades and sidewalk closure signs to open the sidewalk to pedestrians. Worker 2 walked to the opposite side of the work area from Worker 1 (his partner) to break down the barricades. To help close the distance to carry the barricades, Worker 1 backed vehicle 1 towards the location of the barricades on the same side of the work area. As he backed up using only the driver side mirror, within a short distance he felt a bump and stopped the vehicle. Worker 1 had backed his vehicle into another company vehicle. Worker 1 thought the other vehicle had been moved since the job was complete and realized he should have used both mirrors and not assumed all vehicles had moved out of the way. Appropriate notifications were made. Both vehicles sustained damage.
9/4/2023	Outside Crew	Property Damage	Operator Error	Property Damage - September 4, 2023, An operator was driving a company truck on a railroad-grade road when the tip of the excavator boom made contact with a low hanging communication wire. The operator immediately noticed and corrected his direction. The wire sustained minimal damage and hung lower than before the slight contact. Operations were stopped, appropriate notifications were made, and the driver was confirmed to be okay. The driver indicated the sun glare caused an issue with his visibility at that time.
9/4/2023	Outside Crew	Property Damage	Operator Error	Property Damage - September 4, 2023, A vehicle was stuck in a drainage ditch and oil spilled. The oil was contained and cleaned up, and a tow truck was called to recover and haul the trapped vehicle.
9/4/2023	Outside Crew	Property Damage	Operator Error	Property Damage - September 4, 2023, A hole-digging crew towing a compressor left the yard to begin their workday and after they had driven about 100 yards away, the driver realized they had forgotten the material at the yard. To turn around, the driver made an illegal U-turn. He turned too sharp and too quickly, and the tow-behind compressor turned onto its side and landed in the median. The crew set up temporary traffic control and made appropriate notifications. The compressor was removed from the scene shortly after. No fluids were spilled.
8/21/2023	Outside Crew	Close Call	Load Control	Property Damage - August 21, 2023, After the job briefing with the helicopter pilot, a crew prepared bundles of tools and equipment/materials (tower repair system and temporary scaffolding) to be airlifted from the landing zone (LZ) to a tower. During the flight hauling, a piece of scaffolding planks slid out of from the bundle and landed on private property. The day of the incident, the crew was working at two different tower locations, using two helicopters to airlift their materials and equipment to the tower sites. It was not until about a week later that the general foreman on the project learned of the incident, after the contractor was notified that a landowner had reported a piece of construction material had dropped on their property. It was unknown when the scaffold planking fell or from which aircraft it fell from, as there was no evidence any scaffolding planks were missing from the loads the day of the incident (the ratchet straps on the bundle were still tight and in position on the external cargo that was transported). Appropriate notifications were made, including the general foreman who apologized to the landowner and retrieved the scaffolding plank.
8/21/2023	Outside Crew	Property Damage	Operator Error	Property Damage - August 21, 2023, A crew was excavating in extremely hard soil with a chipping gun to install a conduit due to a secondary dead-leg. The chipping gun was equipped with a clay spade gad and when the foreman used the gad at a perpendicular angle to the mark, the gad struck and damaged a direct-buried secondary cable. The crew stopped work and assessed the damage. Appropriate notifications were made.
8/4/2023	Outside Crew	Property Damage	Operator Error	Property Damage - August 4, 2023, A crew tasked with replacing a pole anchor met with the underground utility line locating company worker to locate communication lines prior to digging. The locating company worker was unable to locate a buried utility in the area and, instead, delineated an orange circle around the anchor based on a sign in the area that stated, "buried cable route." Although the crew hand-dug with caution, they struck and damaged a communication line approximately three feet down. The crew called an all-stop and appropriate notifications were made..

Date Of Incident	Occupation	Type of Incident	Body Part / Root Cause	Description
8/4/2023	Outside Crew	Property Damage	Operator Error	Property Damage - August 4, 2023, A foreman was spotting for an equipment operator during excavation when the bucket struck an electrical line package and damaged multiple services. The crew had previously potholed for this running line but misinterpreted the direction of the marked line in this specific area. The foreman stopped all work and secured the site. Appropriate notifications were made.
7/31/2023	Outside Crew	Property Damage	Operator Error	Property Damage - July 31, 2023, In a substation, a worker was using a skid steer to move excavated soil from the work area in an energized rack to a temporary storage area. Several hours into that work, a crew moved an aerial work platform into the area to gain access to the top of a transformer they were working on. The worker continued moving soil to the storage area, now in proximity to the crew's work area. Approximately two hours later, when the worker dumped a load of soil at the storage location, he looked behind him for the position of the aerial work platform and continued to reverse. However, he lost awareness of his proximity to the base of the unit, and the skid steer struck the base and dented a side access door. There were no workers in the lift when it was struck. The worker immediately reported the incident to his supervisor, appropriate notifications were made, and the worker was instructed to utilize a spotter for the duration of the remaining work when required to pass by the parked equipment.
7/31/2023	3rd Party Operator	Property Damage	Operator Error	Property Damage - July 31, 2023, A concrete delivery driver parked the truck across the street from a substation and waited for his turn to offload the slurry. When the traffic control worker signaled him to proceed, the driver veered too far as he made a wide turn, and the back side of the concrete truck struck a power pole and damaged the cut-off switch. The driver was directed to continue and off-load the slurry, and the contractor cleaned up the debris and reported the incident. Appropriate notifications were made.
7/24/2023	Outside Crew	Property Damage	Operator Error	Property Damage - July 24, 2023, An employee was driving a forklift, staging material for the next day's cable pull. He had successfully turned around and was heading back to the road, when he struck a streetlight that was in his blind spot and the spotter was left behind him at the material drop off location. The light post fell toward the forklift and was caught by the fork fence. The post then was carefully lowered towards the ground and was placed off the road into the rock dust. No injuries occurred and no damage to the forklift.
7/19/2023	Outside Crew	Close Call	Equipment Failure	Close Call - July 19, 2023, A crew had replaced a pole and while the groundman was tamping the newly installed pole the short hydraulic hose that is attached to the tamp ruptured. This led to hydraulic fluid spraying the groundman in the face and ear. The groundman was wearing all required PPE and had completed all required inspections of the equipment prior to using the tamp. The groundman was operating the tamp correctly and was maintaining the hoses facing away from him. All work was stopped, evaluated scene safety, evaluated EE, and EE was taken to the ER to be evaluated and cleaned, Crew re-tailboard and completed the work. It's been determined the tamp and hoses had been inspected as required and there was no visual indication the hose was weal/damaged. Ruptured hoses on tamps are not uncommon, and common practice is for the operator to keep hoses facing away from their bodies as much as possible. The groundman involved was trained and experienced in operating and inspecting tamps.
7/17/2023	Civil Crew	Close Call	Equipment Failure	Close Call - July 17, 2023, A civil crew was working to regROUT the O-ring of a vault entrance. A heat scan and atmospheric testing had been completed. A manhole rack and blower were set up. An unusual noise was heard from within the vault, and the crew backed away from the opening of the structure. Immediate communication was made to management. Work has been postponed until further notice. It was later identified by an SCE troubleman that an elbow failed, relaying the circuit while the civil crew was performing their work.
7/17/2023	Outside Crew	Property Damage	3rd Party Vehicle Incident	Property Damage - July 17, 2023, An employee was driving down a dirt road, at approximately 10 mph, after leaving an area where he recently completed work. He approached a curve, and about midway through completing the turn, a secondary vehicle (FedEx van) was traveling up the dirt road. Both drivers attempted to hug the right side of the road, but the vehicles made contact with each other in a swiping motion.
7/17/2023	Outside Crew	Property Damage	Operator Error	Property Damage - July 17, 2023, A crew was dispatched to pre-dig for a deteriorated pole replacement. Upon arrival, the crew evaluated the locate markings and acknowledged the underground utilities in proximity to where the digging was to take place. The crew then held a tailboard and verified all USA and excavation documents to ensure compliance before starting to break the concrete with a jackhammer and then hand-digging next to the structure. They used appropriate hand digging tools to avoid causing damage if they encountered any utility lines. After locating the poly gas line, the crew began to expose the line with appropriate digging tools. While moving dirt and exposing the line 0, they nicked the poly service gas line causing a minor leak. The crew was unsure of the extent of damage and out of an abundance of caution, the crew called an All-Stop and secured the area prior to contacting management who then reached out to the appropriate SCE personnel.
7/10/2023	Outside Crew	Property Damage	Improper USA Marking	Property Damage - July 10, 2023, A crew was trenching to install new SCE and SoCalGas main in a mobile home park when the operator struck 3/4 gas service to lot 4. Crew exposed and marked all utilities for each mobile home. Prior to excavation – on lots 1, 2, 3 – the crew noticed all the utilities were the same (2' area) of each other. At lot 4, the crew had only exposed the electric and not any of the other utilities. The foreman noticed this and spoke with crew to locate and expose the gas service and water service. Four days later, the spotter and operator did not expose the gas service or water service. They did not mark out the gas or water service location or depth. In addition, the foreman did not follow through with the crew to verify they did locate and mark the gas and water service.

Date Of Incident	Occupation	Type of Incident	Body Part / Root Cause	Description
7/10/2023	Material Handler	Property Damage	Operator Error	Property Damage - July 10, 2023, A hot line material handler was tasked to unload 16 new transformers that were delivered to the yard. He successfully unloaded 10 transformers and positioned the forklift to lift two pallets at a time. In doing so, he inadvertently pushed a third transformer off the flat bed to the ground, breaking the top bushing and spilling the oil contained inside. An all stop was called, management was notified, and SCE was notified. Environmental cleanup was dispatched to the area for further clean up.
7/5/2023	Outside Crew	Close Call	Anchor Failure	Close Call - July 5, 2023, A Barstow District crew was replacing a buck pole down guy anchor on the Mule Canyon 12kv. When the crew arrived they noticed the down guy that had been attached to the failed anchor had been moved to a remaining Telephone Co. anchor. The plan was to tie the guy off to the bucket truck and release tension on the anchor, then dig a new anchor hole. During the process of removing tension on the down guy to transfer the tension to the truck, the anchor broke 2 to 3 feet below grade due to corrosion. Release of tension on the guy caused the pole to recoil, resulting in conductors contacting, and the circuit to lockout. There were no personnel injuries, however, the guy whip resulted in a near miss.
7/3/2023	Outside Crew	Property Damage	Operator Error	Property Damage - July 3, 2023, Excavating to install a conduit for a new electrical system, a crew performed the daily tailboard and reviewed the scope of work along with mitigation measures. Then, they proceeded to conduct their pre-excavation walk (Green Zone) of the site to identify all marked lines and any potential conflicts. As the crew was in the process of potholing with a round point shovel, they damaged a marked 1/2" plastic service line. This incident occurred due to an employee contacting the gas line with a round point shovel while attempting to locate it. Immediately following the incident, the crew stopped work, secured the area and made all proper notifications. Contact was also made with So-Cal Gas to advise of the damage. A So-Cal Gas repair crew arrived on site, assessed the damage and made all necessary repairs.
6/26/2023	Tree Crew	Flash	Tree Control	Flash - June 26, 2023, A crew was using a tree care handler (heavy equipment) to remove trees along a 115 kV transmission line. The handler was set up under the 115 kV line with the boom completely extended off to the side of the machine to cut a 35-foot top of a pine tree. The base of the tree was 22 feet from the outside phase. When the treetop was cut, the outriggers of the tree care handler on the boom side slid backwards due to the weight transfer, and the outriggers sank into the sandy soil (about 14.5 inches from where there were originally placed). Due to the motion, the handler shifted, and the cutting head and treetop held by the grapple applied downward pressure to the remaining part of the tree. The grapple head tilted back towards the closest phase, and due to the tilt and motion, the treetop whipped and encroached the minimum approach distance (MAD), which caused an arc flash. No line contact was made. No line movement witnessed by the spotter or operator. An all-stop was called. The crew shut down all operations and made appropriate notifications.
6/26/2023	Civil Crew	Property Damage	Operator Error	Property Damage - June 26, 2023, A foreman was operating a skid steer-mounted grinder to prepare the area for final asphalt paving. The spotter was not positioned to clearly observe the entire area around the moving equipment, and a nearby fire hydrant was damaged. The foreman stopped work to assess the damage. Appropriate notifications were made, the water was turned off, and the area secured.
6/26/2023	Outside Crew	Close Call	Loss of Reel Control	Close Call - June 26, 2023, A worker was setting up cable reels in preparation for a cable pull and set up reel stands on a paved approach area at the entrance, next to a substation. When a reel* was placed on the ground near the reel stand, the reel rolled away from the worker due to the sloped ground conditions at that area. The worker was unable to get control of the reel, and it rolled down a set of stairs along the substation fence, across the powerhouse driveway, down a slope, and finally came to rest at the riverbank. Work was immediately stopped, and appropriate notifications were made. No injuries or damage.
6/19/2023	Outside Crew	Flash/Fire	Wire Control	Flash/Fire - June 19, 2023, An apprentice working on a 4 kV-to-12 kV cutover was tasked to splice and tape-up secondary duplex wire on the ground. The apprentice failed to properly tape the wire, and the foreman failed to check his work. When the crew raised and energized the wire, the phase made contact with the neutral, and the wire sparked. The sparks then ignited a small patch of dry weeds in the customer's backyard. The crew quickly extinguished the fire with a fire extinguisher and garden hose, so the local fire department was not called. Appropriate notifications were made. The line was de-energized, proper repairs were made, the duplex wire was properly taped, installed, and energized.
6/12/2023	Outside Crew	Close Call	Electrical Flash	Close Call - June 12, 2023, A crew worked an emergency car-hit-pole replacement. Without incident, the crew replaced the pole and transferred the primary wires. Then the crew began transferring the floated 1/0 AT secondary feed (low voltage conductors). When they came up on the rigging, the grip made accidental contact with the one bolt on one of the phases, which caused a small spark. The crew stopped work, reset the rigging, removed the one bolt, and covered the low voltage conductors. Appropriate notifications were made. No injuries, outage, or damage to tools/work equipment or customer property.
6/12/2023	Material Handler	Property Damage	Operator Error	Property Damage - June 12, 2023, A material handler transporting material on a flatbed truck drove through a fence opening between the prefabrication yard and the main yard. He took too sharp a turn and the side of the flatbed struck the fence. The fence sustained minor damage. Appropriate notifications were made, including a fence company to repair the damage.
6/5/2023	Outside Crew	Property Damage	Operator Error	Property Damage - June 5, 2023, When a crew member was tunneling under a three-foot slab of concrete to place conduit, the sharp-shooter shovel nicked the existing marked gas service line. The crew immediately secured the area. Appropriate notifications were made, including the gas company who sent a representative to repair the leak.

Date Of Incident	Occupation	Type of Incident	Body Part / Root Cause	Description
6/5/2023	Outside Crew	Property Damage	Operator Error	Property Damage - June 5, 2023 , Unsafe Act, Close Call, Property Damage. When an experienced heavy equipment operator was removing a courtyard wall, he discovered a sub-grade concrete footing supporting the wall. The operator was aware of an underground conduit with 12 kV electrical line in the area — the superintendent had marked the conduit location using red paint. The operator completed the wall removal, and he and his spotter went to lunch. After lunch, the operator was instructed by the site safety officer to expose no more than 24 inches of soil due to the known 12 kV electrical conduit 48 inches below ground, and to give the conduit a 24-inch easement. The operator and his spotter would dig using an 18K excavator to expose and remove the concrete footing. The operator concentrated on exposing the end of the footing and had placed the spoils from the excavated material directly adjacent to the trench edge. During this time, his spotter had left the digging location to pick up a Bobcat with a breaker bar to aid in the concrete footing removal. Working without the spotter, the operator went to retrieve the fallen spoils with the excavator bucket, and the bucket struck the PVC conduit with 12 kV conductors. No electrical arc or flash occurred. The site was immediately secured. Appropriate notifications were made, and excavation activity was halted for the day. No damage to the conductors.
5/29/2023	Outside Crew	Property Damage	Operator Error	Property Damage - May 29, 2023 , A contractor called an Underground Service Alert (USA) to request marks, They hired a ground penetrating radar (GPR) contractor for additional info on underground utilities. The GPR contractor identified a telephone line intersecting a planned SCE-only trench and marked it on the asphalt. At the beginning of the shift, the contractor foreman walked planned excavation, took photos, and directed his crew on which utilities to pothole by hand. While the laborer/spotter was potholing by hand to locate a gas line near this telephone line, the operator decided to clear some dirt out of the trench nearby with the bucket of the mini-excavator. The operator apparently forgot about the marks for the telephone line, and immediately struck it.
5/29/2023	Outside Crew	Property Damage	Operator Error	Property Damage - May 29, 2023 , A crew was dispatched to an emergency call out (ECO). The scope of work was to excavate and install new conduit for a dead leg service. An emergency Underground Service Alert (USA) ticket was called in and the crew performed their pre-excavation walk of the site to identify any potential conflicts. The crew began carefully hand excavating from the existing SCE handhole towards the house meter. While in the process of hand excavating with a round point shovel, the crew damaged a marked 1/2" plastic gas service line.
5/22/2023	Outside Crew	Minor Injury	Bee Sting	Minor Injury - May 22, 2023 , A contractor was making observations and talking to a resident. During the conversation, the contractor used his left hand to brush a bug off his neck. Giving it a swipe, he noticed a pinch on the finger. And shook his hand without looking at it. A moment later, he observed a small stinger and its sac. While not observing a bee directly, this looked like a bee stinger and sac. He shook his hand again and give it a flick with the left thumb and the sac removed itself. The contractor kept his composure on the conversation with the resident and called his supervisor. No allergies. Pain is a non-issue. The stinger was barely attached.
5/22/2023	Outside Crew	Property Damage	Vehicle Incident	Property Damage - May 22, 2023 , A bicyclist was heading westbound and a contractor was pulling out and around with a work truck and water buffalo at the same time. The contractor was warned to look both ways and to proceed with caution prior to entering the vehicle by the foreman. The contractor noticed the bicyclist was approximately 200-300 yards away. He determined that he had plenty of time to pull out and around from the laydown yard to the substation. The bicyclist had to stop abruptly, minorly damaging her wheel/spoke.
5/22/2023	Outside Crew	Property Damage	Vehicle Incident	Property Damage - May 22, 2023 , A contractor employee was driving a crane from their yard to the job site. About 7 miles into the drive, the driver attempted to navigate a 90-degree left hand turn but entered it at an unsafe speed. The driver was unable to safely complete the turn, subsequently tipping the crane onto its side. The crane landed on the shoulder of the roadway. The driver did not sustain injury and appropriate notifications were made. There were no environmental impacts, and no fluids of any kind were spilled at the scene. The crane was recovered without further incident.
5/19/2023	Gas Crew	Property Damage	Improper Ground/Rod installation	Property Damage - May 19, 2023 , Contracted crew was tasked with trenching and installing a gas service. While a gas service crew was trenching a gas service to the property, they were digging next to a ground rod when the crew noticed that the ground rod was installed between the electrical house service wires below grade. The crew stopped all work and contacted all necessary personnel. SDG&E Troubleman was dispatched and determined that the rod was not energized.
4/17/2023	Outside Crew	Property Damage	Loss of Control	Property Damage - April 17, 2023 , Without incident, a crew finished conduit installation between two buried underground residential distribution (BURD) structures. They installed rope and mandrelled the new conduit. When a worker went to reinstall the fiberglass lid on a BURD structure, his right foot slipped (due to the debris on top of the plastic sheeting), he lost his grip on the lid, and the lid fell partially into the structure. The leading edge of the lid fell at a 45-degree angle and made contact with and dislodged the wingnuts of bails on two elbows. No injuries, electrical flash, or circuit interruption.
4/17/2023	Tree Crew	Property Damage	Operator Error	Property Damage - April 17, 2023 , A two-man crew and safety monitor were at a location to perform routine line clearance tree-trimming. Using the aerial lift truck, the foreman completed the work without incident. As he cradled the boom, the corner of the boom knuckle struck a streetlight wire, and the neutral wire disconnected from the pole. Appropriate notifications and repairs were made.

Date Of Incident	Occupation	Type of Incident	Body Part / Root Cause	Description
4/17/2023	Outside Crew	Property Damage	Improper Transformer Installation	Property Damage - April 17, 2023 , A crew was tasked to replace a pole with transformer on a 16 kV line. The crew replaced the pole and installed and energized a new 12 kV transformer under load, without first testing for proper voltage. Approximately three minutes after the transformer was energized, a homeowner came out and told the crew something in his home was smoking. The crew immediately de-energized the transformer, after which they realized they installed a 12 kV transformer on the 16 kV line. The crew made appropriate notifications, then picked-up and installed a new 16 kV transformer. Before applying load, the crew tested for proper voltage, then energized the transformer for all-load-up without further incident. It was determined the smoke coming from the customer's home was two surge protectors that tripped when the transformer was energized. The crew replaced the surge protectors, confirmed everything in the customer's home was working as expected, and is in touch with other homeowners being fed by the replaced transformer to learn if any damage occurred.
4/3/2023	Outside Crew	Property Damage	Improper USA	Property Damage - April 3, 2023 , A crew was tasked to place a four-by-seven-foot slab box next to and parallel with an SCE encased duct structure and other marked utilities. All utilities (including a gas line) were potholed and visually located above the SCE encasement on both ends of the proposed box location (10 feet between potholes). When the crew dug with a mini excavator, the gas line was damaged. The crew stopped work, secured the area, and appropriate notifications were made. It was discovered that between the two potholes, the gas line veered away from the encasement and towards the excavation. A Gas Company representative completed repairs.
4/3/2023	Outside Crew	Property Damage	Operator Error	Property Damage - April 3, 2023 , Without incident, a crew de-energized and grounded a section of 12 kV line for a night outage that involved multiple crews to perform structure upgrades and reconductor work. After they communicated status to the other crews, the crew repositioned to another structure, spliced out isolators, and then returned to the original structure to complete preparations for reconductor work. The crew set up the bucket truck and began to prepare their structure. As two workers in the bucket boomed down to retrieve additional materials the foreman was grabbing from the pole trailer, the bottom of the bucket truck tub caught the existing secondary wire and communication line (attached to the structure being worked), which damaged the customer's weather head. The crews called an all-stop, secured the area, and made appropriate notifications.
3/27/2023	Outside Crew	Dog Bite	Homeowner- No medical Attention Needed	Dog Bite - March 27, 2023 , Employee approached residence to speak to the homeowner who was outside. Two dogs were in the yard and employee asked if they were friendly. The owner stated yes. The owner told the employee to come in. The employee walked inside the gate. The two dogs approached employee and became aggressive, biting the employee in the hand and leg. No medical attention was needed. The owner stated, "You just have to show them whose boss."The dogs ran off on their own
3/13/2023	Outside Crew	Property Damage	Improper Dig	Property Damage - March 13, 2023 , A crew was using a round-point shovel to pothole a marked communication line when they damaged the line. Work was immediately stopped, and the site secured. Appropriate notifications were made. A communications company representative arrived on-site to perform repairs.
3/6/2023	Outside Crew	Property Damage	3rd Party Vehicle	Property Damage - March 6, 2023 , A worker was parked in his company vehicle on a road shoulder when a third-party box truck traveling in the same direction side-swiped the worker's vehicle and kept going. The worker's vehicle sustained damage to the driver-side back quarter panel, the driver door handle, and the side mirror. The employee was not injured and declined medical attention. Appropriate notifications were made, including law enforcement, who took a report on-site.
3/6/2023	Tree Crew	Property Damage	Driver Error	Property Damage - March 6, 2023 , To access trees to perform routine line clearance work, a two-man crew needed to drive across a private narrow wooden bridge with wooden rails. One worker drove slowly across the bridge and the other worker offered guidance as the spotter. While looking at the spotter, the driver slightly veered to the right of the bridge and the vehicle's front bumper hit some posts. The posts sustained minor damage. The area was without cell reception, so the crew assessed the damages, completed their work, and made appropriate notifications when they had cell reception. Repairs were arranged with the property owner.
3/6/2023	Outside Crew	Near Miss	Rigging	Near Miss - March 6, 2023 , Multiple crews were involved in a helicopter pole set of composite poles on a 12 kV line. After receiving environmental clearance and tailboarding with the air operations crew, one crew framed the pole. When the pole was cleared for the helicopter, the designated rigger attached the pole to the hook and as the helicopter started to pick up the pole, the two bottom sections toppled to the ground. The helicopter was immediately signaled to bring the remainder of the pole down. The top section was released, and the area cleared. No one was in the landing zone/vicinity at the time of the incident. The fallen pole sections struck a small mailbox, which was repaired on-site. The crew and a project general supervisor on-site confirmed no damage to the pole. The foreman and general foreman had inspected the pole and rigging; the pole appeared secure. After the incident, the crew made the proper attachments, inspections, etc., and the pole was set without further incident.

Date Of Incident	Occupation	Type of Incident	Body Part / Root Cause	Description
3/6/2023	Outside Crew	Property Damage	Improper Assembly	Property Damage - March 6, 2023 , Multiple crews were involved in a helicopter pole set of composite poles on a 12 kV line. After receiving environmental clearance and tailboarding with the air operations crew, one crew framed the pole. When the pole was cleared for the helicopter, the designated rigger attached the pole to the hook and as the helicopter started to pick up the pole, the two bottom sections toppled to the ground. The helicopter was immediately signaled to bring the remainder of the pole down. The top section was released, and the area cleared. No one was in the landing zone/vicinity at the time of the incident. The fallen pole sections struck a small mailbox, which was repaired on-site. The crew and a project general supervisor on-site confirmed no damage to the pole. The foreman and general foreman had inspected the pole and rigging; the pole appeared secure. After the incident, the crew made the proper attachments, inspections, etc., and the pole was set without further incident.
3/6/2023	Outside Crew	Unsafe Act	Improper Grounding	Unsafe Act - March 6, 2023 , When a worker was removing dowel pins stuck in an exciter, he thought he saw an arc. Unable to determine if it was truly an arc, he continued to work thinking it was a static. When he tried to push on the ratchet he was using, he thought he felt a tingling in his left hand through his chest, and he and a crew member saw a spark. With the assistance of a technician, voltage was checked at the turbine deck and pedestal, and it was determined the jumper for the ground fault needed to be removed to avoid backfeed to the lines. That information was not on the lock-out/tag-out (LOTO) procedure. Work was stopped immediately, and appropriate notifications were made. The employee who experienced the tingling was complaining of chest pain and taken to a local emergency room.
2/27/2023	Outside Crew	Property Damage	Improper Potholing	Property Damage - February 27, 2023 , While potholing for a marked communication line, the line was damaged. The crew stopped work and made appropriate notifications. The line was encased/backfilled with two inches of slurry and buried at only 10-inches deep.
2/20/2023	Outside Crew	Property Damage	Improper Potholing	Property Damage - February 20, 2023 , While potholing an area in preparation for new pole installations, the worker mistook a communication line for a tree root and the line was damaged. The crew immediately called an all-stop and appropriate notifications were made.
2/20/2023	Outside Crew	Property Damage	Driver Error	Property Damage - February 20, 2023 , When a worker driving a tanker truck was leaving a work site, the dirt road shifted due to the weight of the waste in the tanker, and the tanker hit a gate. The worker did not notice the vehicle hit the gate until another driver informed him. Appropriate notifications were made.
2/6/2023	H-Pilot	Property Damage	Cargo Line Control	Property Damage - February 6, 2023 , A pilot was assigned to provide human external cargo (HEC) and cargo support for line crews. Gusts and sustained winds were projected for the day and at the landing zone (LZ) the pilot and crews tailboarded, and the pilot held the work until winds lessened. Once winds lessened, without incident, crew members were flown to a structure. At that time, the line foreman and pilot decided to move cargo to another site. Without incident, they completed several cargo missions within the original project area. On the last load of cargo, the pilot returned to the new site with a "daisy chain" load approximately 25 feet high, when suspended. The crew members at the new LZ signaled to the pilot where to put the cargo, which was in close proximity to their vehicles. As the pilot slowly descended with the load, a prominent, driving gust of wind contacted the aircraft, directing it towards the large bucket truck. The load drifted into the windshield and side mirror of the bucket truck. The pilot observed and was told he had contacted the truck. He then steadied the load and placed it where the lineman had originally directed. While conditions were still flyable, the pilot flew back to the other LZ, switched out his cargo line for the HEC line, and retrieved the lineman who had been taken to the structure earlier in the day. Then, the pilot called the day due to winds. The line truck sustained damage. No injuries. Appropriate notifications were made.
2/6/2023	Outside Crew	Property Damage	Improper Load	Property Damage - February 6, 2023 , While driving a truck and trailer on a freeway, a carton fell from the trailer and a piece of metal came out of the box and struck and damaged a third-party vehicle traveling behind the trailer. Police were notified but did not come to the scene due to the minor incident. Other appropriate notifications were made.
2/6/2023	Outside Crew	Property Damage	Operator Error	Property Damage - February 6, 2023 , A worker driving a digger derrick towing a pole trailer was passing through a gate of the second substation yard to park the vehicle overnight. The digger derrick passed through the gate and as the attached trailer passed through the gate, the digger derrick truck began its right turn. The passenger side and rear section of the trailer struck and bent the gate corner post, and the gate separated from the fence post at the hinges. The driver stopped, pulled the downed fence post and fence material in the clear, parked the digger derrick and trailer in a safe location, and made appropriate notifications.
2/6/2023	Outside Crew	Property Damage	Operator Error	Property Damage - February 6, 2023 , A subcontractor was operating a Bobcat (heavy equipment) in a substation to spread additional rock dust. The spotter could see the Bobcat was close to a light pole and assumed that the operator was going to move forward. Instead, the operator rotated the Bobcat and hit the light pole, which caused it to fall over. The crew immediately stopped the job, confirmed no injuries, and secured the site. Appropriate notifications were made. The SCE checker on-site immediately secured the electrical circuit for all of the substation light poles and disconnected and safe-ended wiring to the fallen light pole.
1/30/2023	Outside Crew	Property Damage	Operator Error	Property Damage - January 30, 2023 , While trenching with a mini excavator, the operator struck four-inch clay sewer pipe. The operator stopped work immediately and the site was secured. Appropriate notifications were made. The third-party operator had walked the trench line in the morning and seen the Underground Service Alert (USA) marks, but he stopped ahead of what seemed to be an old trench line and assumed the sewer main ran in it.

<u>Date Of Incident</u>	<u>Occupation</u>	<u>Type of Incident</u>	<u>Body Part / Root Cause</u>	<u>Description</u>
1/30/2023	Outside Crew	Near Miss	Improper Grounding	Near Miss - January 30, 2023 , Two crews were tasked to replace deteriorated poles. Crew A successfully applied the first set of master grounds on two sets of transmission circuits and one distribution circuit at the east end of the jobsite. At the other end of the jobsite, crew B successfully applied master grounds on the distribution circuit and one of the transmission circuits. While crew B was installing master grounds on the remaining transmission circuit, crew A installed their equipotential zone (EPZ) bracket two spans away at their work location and was simultaneously floating each conductor from the insulator as it was being grounded. The SCE project general supervisor (PGS) approached crew A's foreman and voiced concerns with the grounding methods performed and it was identified the crews had not complied with SCE grounding procedures. The crew was coached on proper SCE grounding policy.
1/16/2023	Outside Crew	Property Damage	Improper Dig	Property Damage - January 16, 2023 , Next to an existing structure, a line crew excavated for a new pole hole. Once depth was reached, the crew began to remove loose soil at-depth when the existing pole shifted, and dirt collapsed into the newly dug excavation. As a result, the pole leaned over. The crew stopped work and secured the site. Appropriate notifications were made.
1/16/2023	Outside Crew	Property Damage	Driver Error	Property Damage - January 16, 2023 , A line crew member went to move a bucket truck to meet the crew at the landing zone (LZ) and begin work. When he released the parking brake and put the truck in gear, it rolled backwards and struck a vehicle parked behind him. The worker did not realize he had hit the other vehicle until the foreman alerted him to the issue. Appropriate notifications were made.
1/16/2023	Outside Crew	Property Damage	Improper Load Securement	Property Damage - January 16, 2023 , A truck driver hauled a load of reels to a laydown yard. Waiting at the yard to offload the reels, the driver removed the cargo-securing rigging from the load. When it was time to have the reels off-loaded, the forklift operator asked the delivery driver to pull forward. When the truck pulled forward, the reels fell off the truck bed. The driver had not resecured the load; the truck was on a flat surface, and he did not expect the material to move or shift. The truck driver and forklift operator worked together to safely pick up the reels that had fallen. No further damage to the truck or reels.
1/16/2023	Traffic Control Work	Property Damage	3rd Party Vehicle	Property Damage - January 16, 2023 , A traffic control company provided temporary traffic control (TTC) for a line crew performing a pole replacement; a one-directional road closure was set-up. During the night's work (before midnight), with the complete absence of traffic on the road, the TTC crew (P1 and P2) positioned themselves at opposite ends of the closure to hold all traffic as needed (intermittently), so the crew could raise, swing, and set the pole. During that timeframe, at one end of the closure a single third-party vehicle entered, driving slowly in the wrong direction. The vehicle bumped the arm of P1 and kept driving. The lead technician heard on the two-way radio that the vehicle had bumped P1's arm, and in the traffic control truck he followed the vehicle until it was parked. The driver was not attempting to flee the scene at a high speed, which made it seem as if the driver may not have been aware of what happened. The lead technician reported the incident to law enforcement, including the vehicle's license plate and the location of the vehicle. When the police arrived at the location, the lead technician returned to the job site. The job continued without further incident. The police officer stopped by the jobsite, confirmed there were no injuries, and left without further investigation.
1/2/2023	Outside Crew	Property Damage	Driver Error	Property Damage - January 2, 2023 , A worker was transporting materials in a company pick-up truck on a city street. As he came to a stop at a red light, his foot slipped off the brake, and his vehicle struck the vehicle in front of him. The worker pulled to the side of the road to assess for injuries and damage. Appropriate notifications were made. Local police responded to the scene and no injuries were reported at the time of the incident.

Date Of Incident	Occupation	Type of Incident	Body Part / Root Cause	Description
Customer Accidents/Incidents				
11/20/2023	SCE Crew	Injury	Eye Injury	Injury - November 20, 2023 , While cutting a pole, even though they were wearing eye protection, an employee got saw dust in their eye. Employee was transported to urgent care.
11/6/2023	SCE Crew	Close Call	Operator Error	Close Call - November 6, 2023 , An employee used a forklift to off-load two bundles of anchor bolts from the side of a truck deck. When the employee backed up the forklift, the bundles shifted away from the forklift backrest and further onto the forks. When the forks cleared the deck, the employee lowered the load and the forklift tipped forward. The rear wheels came off the ground and at the same time, the anchor bolts slid off the forks and onto the truck's rear tires, which stopped the forklift from tipping further. The scene was secured until fellow associates made the situation safe.
11/6/2023	SCE Crew	Injury	Operator Error	Injury - November 6, 2023 , An employee was using a knife to prepare tree wire before using a cable stripper tool, and he cut his left thumb.
11/6/2023	SCE Crew	Vehicle	Operator Error	Vehicle - November 6, 2023 , An employee driving a crane dolly entered a turn, but the street he was turning onto was lined with vehicles, so the employee could not safely complete the turn. The employee needed to back-up the crane dolly and would then continue going straight. The crane dolly was already at an angle so the rear axle would not line up to the pintle hitch and when the employee backed-up approximately 10-15 feet, the rear axle on the dolly jack-knifed. The ladder and fender of the dolly sustained damage.
11/6/2023	SCE Crew	Property Damage	Operator Error	Property Damage - November 6, 2023 , An employee intended to close a remote automatic recloser (RAR) on a 16 kV line out of a substation but mistakenly energized a 16 kV section of line beyond a remote-control switch (RCS) out of a different substation. Line sections were previously de-energized per Public Safety Power Shut-off (PSPS) protocol. The employee realized the error and de-energized the 16 kV section of line.
11/6/2023	SCE Crew	Property Damage	Operator Error	Property Damage - November 6, 2023 , An employee mistakenly opened a 115 kV line circuit breaker (CB), and the load was dropped. The employee realized the error, closed the CB, and began restoring load.
11/6/2023	SCE Crew	Property Damage	Operator Error	Property Damage - November 6, 2023 , A crew was potholing with a round point shovel and damaged a marked half-inch plastic gas service line. The crew immediately stopped work, secured the area, and made appropriate notifications, including the gas company
11/6/2023	SCE Crew	Property Damage	Operator Error	Property Damage - November 6, 2023 , A line crew was caravanning to a jobsite. The driver in the pick-up truck followed too closely behind the self-loader pole truck and when the self-loader stopped, the front end of the pick-up truck hit the pole. No injuries were reported. The foreman truck sustained damage. Appropriate notifications were made.
11/6/2023	SCE Crew	Property Damage	Operator Error	Property Damage - November 6, 2023 , A crew completed a tailboard in a turnout of a mountain road, then left for the jobsite up the mountain. One vehicle was positioned to turn left to exit the turnout (and head eastbound) and another crew vehicle was going to make a right to exit the turnout. The driver positioned to turn left could not clearly see beyond the other crew vehicle, so he did not see a third-party vehicle coming their direction (heading eastbound). When he exited the turnout, the worker side-swiped the third-party vehicle. Immediately following the incident, the worker pulled over and exchanged information with the third-party driver. The foreman immediately turned around to go back to the accident site. California Highway Patrol was notified and arrived on-scene. No injuries were reported. Other appropriate notifications were made.
10/30/2023	SCE Crew	Switching	Operator Error	Switching - October 30, 2023 , When a crew was performing switching to make a box loop on a planned switching program, a step was skipped to block protection at a remote automatic recloser (RAR), and load was dropped. Service was restored as soon as possible.
7/31/2023	Outside Crew	Property Damage	Operator Error	Property Damage - July 31, 2023 , A civil crew was tasked with trenching to install conduit along a gutter. When they excavated over a water service, the mini excavator accidentally damaged the marked service. An all-stop was called and appropriate notifications were made. It was determined the water line was covered in excavation spoils (dirt), so the spotter did not see the line and forgot it was there.
7/31/2023	Outside Crew	Property Damage	Operator Error	Property Damage - July 31, 2023 , When a civil crew was hand-digging a trench to install conduit, a house gas service line was nicked/damaged. Crew members removed themselves from the area, the area was secured, and appropriate notifications were made.
6/26/2023	Outside Crew	Property Damage	3rd Party Vehicle Incident	Property Damage - June 26, 2023 , A crew was tasked with securing a floating gas switch and other items in a vault on a city street. While preparing to switch at a nearby vault, an alleged drunk driver drove through the crew's traffic control and rear-ended the back driver side of the parked SCE bucket truck. No employees were in the vehicle at the time. No injuries to the crew or traffic control personnel. The driver was arrested and taken away by the police. Local SCE garage personnel came to the scene and deemed the bucket truck safe to operate, and the crew was given the okay to complete the work. The general foreman (GF) made other appropriate notifications, including the Distribution Operations Center (DOC), Claims department, and the Watch Office. This incident is a good reminder of the importance of work area protection.

<u>Date Of Incident</u>	<u>Occupation</u>	<u>Type of Incident</u>	<u>Body Part / Root Cause</u>	<u>Description</u>
4/17/2023	SCE Crew	Property Damage	Operator Error	Property Damage - April 17, 2023 , SCE employee was traveling out of Big Creek on Huntington Lake Road when he struck a rock on the right side of the road and lost control of his vehicle, veered to the right and over the edge of the road before rolling down the hill several times. The employee was seat belted in and remained hanging in the driver seat when the vehicle came to rest on its right side. This incident has been classified as a Tier 4 – PSIF incident because there was a high-energy incident (motion greater than or equal to 30 mph), that did not result in a serious injury but could have.
3/6/2023	SCE Site Reps	Unsafe Act	Lack of Testing	Unsafe Act - March 6, 2023 , A substation, SCE site representatives went into the mechanical and electrical equipment room (MEER) building and turned on the exhaust ventilation system to allow the 15-minute air flow time. Crew members waited outside the building and when the air flow time was complete, the site representatives escorted the crew members into the building. During that time, the crew members proceeded to enter the basement without using a gas meter to test the air quality. Site representatives called an immediate stand down to retailboard and discuss the unsafe condition. Work was stopped for the remainder of the day.
2/27/2023	Drone Inspector	Wire Strike	Pilot Error	Wire Strike - February 27, 2023 , A drone inspection team was performing distribution pole aerial inspections when, for unknown reasons, the aircraft made unintentional propeller contact with a distribution line. No injuries. No property damage. Appropriate notifications were made.
2/20/2023	Drone Inspector	Property Damage	Civilian Shooting Drone	Property Damage - February 20, 2023 , A drone inspection team was performing a utility pole inspection in a residential backyard. Without incident, the crew gained access to the structure through an adjacent backyard and began the inspection. Then, without warning, the drone suddenly fell and landed in the adjacent backyard. When the inspection crew retrieved the drone, they found a hole in the bottom of the drone, which confirmed the drone had been shot down. They also found the metal projectile still inside the drone. Appropriate notifications were made, including their immediate supervisor, who contacted the police and Edison Security Operations Center (ESOC).
1/16/2023	SCE Troublemán	Fatality	Inadvertent Contact w/Energized Source	Fatality - January 16, 2023 , A SCE Troublemán (TM) responded to an area-out incident and a report of arcing at a pole. The TM accessed a live-front padmount transformer to determine the cause of the emergent outage. During the troubleshooting process, the Northern Distribution Operation Center (NDOC) Dispatcher was unable to contact the TM. Emergency first responders along with SCE personnel were dispatched to the site, where the TM was found to be deceased. It has been concluded the TM inadvertently contacted the energized FI while encroaching the minimum approach distance (MAD). The purpose for encroaching the MAD remains unknown, but he may have been observing the interior of the transformer to ensure the configuration was as intended, visually checking the FIs to ensure they had not indicated a fault, or for an unknown reason.
6/26/2022	SCE Crew Member	Injury	Heat Illness	Property Damage - June 26, 2022 , After his shift, while still at an Edison facility, an employee began to feel ill and vomited. He notified his supervisor, stated he immediately felt better, and did not display any other symptoms. Then, as the employee drove himself home, he began to develop cramps and drove to the hospital, where he was admitted and diagnosed with heat illness.



8/29/2023

Ref. No. HL-1023

Expiration: Current until Archived

Sentient Energy MM3 Remote Fault Indicator (RFI) Installations on Overhead (OH) Covered Conductors

Purpose

The purpose of this bulletin is to inform Edison and Contract field personnel that Sentient Energy MM3 RFI installations on OH covered conductor is prohibited. The new Power Delivery Products (PDP) RFIs for use on covered and bare conductors are within small scale deployment; they are currently unavailable for scoping. Once that is completed the PDP RFIs will be available for large-scale deployment.

Background

There have been instances of Sentient MM3 RFIs installed on covered conductor in the field. Sentient MM3s RFIs are only meant to be installed on OH bare conductor. If placed on OH covered conductor, the metallic jaws of the MM3 RFIs will damage and compromise the covered conductor sheath and the Sentient MM3 RFIs will not be able to measure current and report faults correctly.

Action

- Continue using Sentient MM3 RFIs on OH bare conductors.
- **DO NOT** use Sentient MM3 RFIs on OH covered conductors.

Standards Affected

[DOH](#) CC 100: Covered Conductor

[DAP](#) AP-604: Sentient Energy MM3 Remote Fault Indicator (RFI)

Contact Information

- SCE Employees – contact David.Melendrez@sce.com; Brett.Costantino@sce.com or CMHelpDesk@sce.com
- Contractors – contact your Edison Representative, Project General Supervisor (PGS), Inspector, Specialist, Project Superintendent, etc. or Field Safety Advisor





9/1/2023
Expiration: Current until Archived

Ref. No. HL-1123

Unapproved Anchor Rod Modifications

Purpose

The purpose of this communication is to re-enforce that SCE employees and contract crews are never permitted to modify anchor rods, anchor plates, or other anchor-related materials, other than cutting guy wires to the appropriate length.

Discussion

During the investigation of anchor installations throughout SCE's territory, it was discovered that there may have been an understanding with SCE crews that it was acceptable to field modify 24-inch anchor plates to avoid obstacles during construction. It is important that, in no scenario, may anchor-related material, including 24-inch anchor plates, be field modified. Modification will remove protective galvanization and/or paint, exposing the anchor assembly to accelerated corrosion. Additionally, the holding capacities and related safety factors for anchor rod assemblies are developed based on fully intact anchor assemblies, modification may reduce the expected holding capacity of the anchor creating a safety concern.

Action

Install anchor-related material in accordance with all applicable construction standards. If the anchor material cannot be installed as designed, due to obstacles in the field, inadequate equipment on the truck, or for any other reason, notify planning for re-design.

In all scenarios, anchor rods shall only be paired with their appropriate plate or helix (Power Installed Screw Anchor-PISA) material.

PISA rods must be installed using the correct tools ([PISA Job Aid](#)) and may only be attached to PISA anchors as illustrated in Table PO 310-3 below.

Table PO 310-3: Maximum Allowable Holding Capacity for PISA Guy Anchors (Partial)

Anchor Rod	SAP Number	Photo	Anchor	1-1/2" Anchor Hub	SAP Number	Photo
1" x 7' Triple Eye Galvanized Steel	10185605 (Medium Strength)		Power Installed Screw Anchors (PISA)	4" Double Helix	10067289	
				8" Single Helix	10217543	
				8" Double Helix	10200272	
				10" Double Helix	10200180	

Non-PISA anchor rods may only be attached to cross-plate anchors as illustrated in Table PO 310-5 & Table PO 310-6 below.

Table PO 310-5: Rod

Size	SAP	Remark
3/4" x 8'	10185600	Stainless steel anchor rod shall only be used with concrete anchor 
1" x 10'	10185604	
1" x 10' (Stainless Steel)	10067254	
1-1/4" x 10'	10210269	

 = For Reference Only

Paired with:

Table PO 310-6: Plate Anchors

Size	SAP	Remark
17" x 17" Cross Plate	10067304	
23" x 23" Cross Plate	10210268	

Standards Affected

- DOH PO 300 Guying – General Information
- DOH PO 310 Guying – Anchors for Guys
- DOH PO 315 Guying – Anchor and Guying Components
- DOH PO 320 Guying – Determination of Anchor/Guys Size
- DOH PO 330 Guying – Determination of Anchor Deviation Angle
- DOH PO 350 Guying – Guy Guards
- TOH TO 200 Guying

Contact Information

- SCE Employees – contact CMHelpDesk@sce.com
- Contractors – If you have questions about this bulletin content or its applicability to your work, contact your Edison Representative, Project General Supervisor (PGS), Inspector, Specialist, Project Superintendent, etc. or Field Safety Advisor



9/12/2023

Ref. No. HL-1223

Expiration: Current until Archived

Recall of ABB/ Elastimold 25 kV Class Load Break Elbows

Purpose

The purpose of this Hotline Bulletin is to inform SCE and contract employees about a recent concern with ABB (the parent company of Elastimold and Thomas and Betts) 25 kV load break elbows. Prioritization requirements for 200-amp elbows for 16 kV applications are provided in the Action section of the bulletin.

Background

SCE was recently informed by Elastimold that the 25 kV load break elbows, typically used on SCE's 16 kV systems may have a product quality issue which may reduce the force to remove the elbow below what is required in the specification requirements.

In discussions with Elastimold, initial findings indicate the reduced force may be experienced where different manufacturers bushings are used with the Elastimold 25 kV load break elbow (refer to Table 1). The effected elbows were reported to have been manufactured between June 2022 thru August 2023. Field observations for failed components in this date range or otherwise are to be documented using the Material Performance and Failure Reporting (MPFR) process to engineering.

Refer to [DUG](#) TP 161 for 25 kV load break elbow installation standards, TP 160 for 25 kV load break bushing insert installation standards, and JJ 680 for junction bar installation requirements.

Action

Effective immediately work locations shall prioritize application of 25 kV, 200 A load break installations based on the following (refer to Appendix 2):

1. Confirm the installation can be constructed with **25 kV, 200 A dead break components**, per standards requirements.
 - Obtain appropriate bushing inserts or junction bars to complete an installation with dead-break elbows (Refer to Table 2)
2. If 200 A dead-break components are not available or the installation requires load break functionality, check for availability of 200-amp load break components manufactured from **Eaton/Cooper** to complete the installation. Where material is available, use Eaton/Cooper bushings or junction bars with the Eaton/ Cooper elbows before selecting ABB bushings or junction bars.
3. If Option 1 or Option 2 are not possible, apply **Elastimold 25 kV, 200 A load break** elbows in combination with Elastimold load break bushings. Do not mix other manufacturer bushing with Elastimold 25 kV, 200 A load break elbows. Refer to Table 3 for the list of bushing inserts as well as junction bars.
 - Record the location of the installation on the form provided in Appendix 1 and email to [Niousha Tavakoli](#)
 - For in-service installations, inspect Elastimold 25 kV, 200 A load break elbows for manufacture date stamps (refer to Figure 1)
 - Confirm the elbow fully seated on the bushing(s) (refer to Figure 2a)

NOTE: Elbow shall be replaced if it is found in-service and not fully seated and falls within the impacted date range (refer to Figure 2b).

Table 1: Affected SAP Codes

ITEM	Description	SAP CODE
#2 Strand Load Break Elbow	25 kV Load-Break Elbow	10117359
1/0 Strand Load Break Elbow	25 kV Load- Break Elbow	10117358

Figure 1: Manufacturing Date Codes

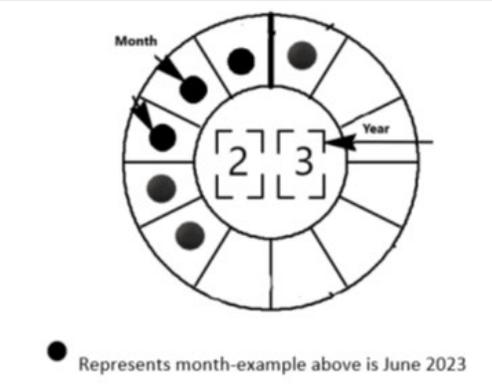
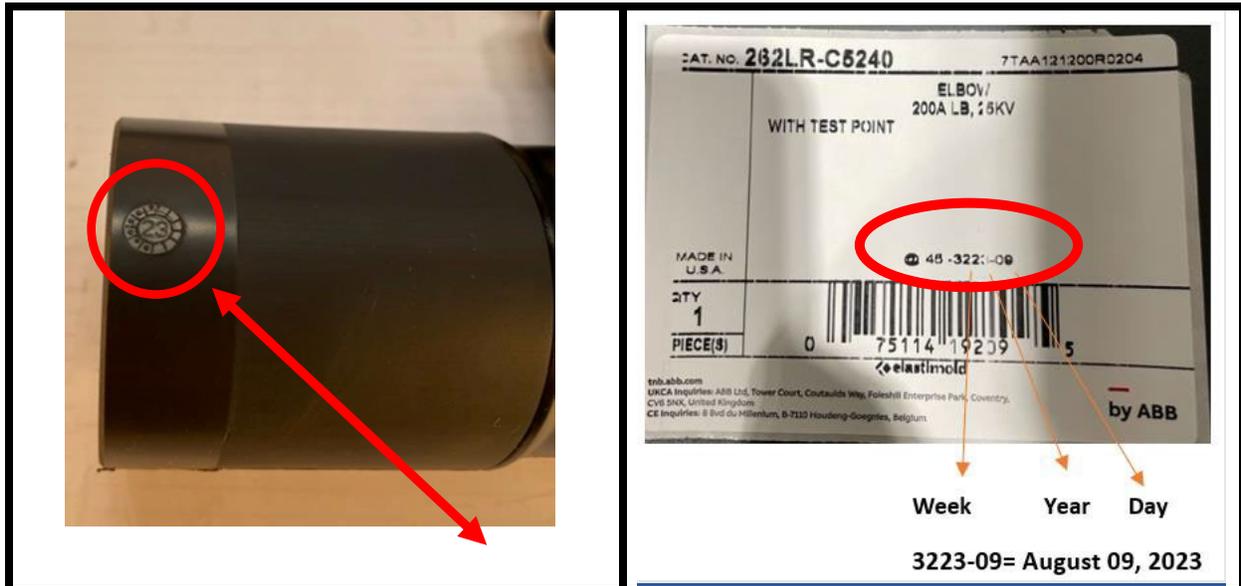


Figure 2a: Fully Seated Load Break Elbow



Figure 2b: Unseated Load Break Elbow



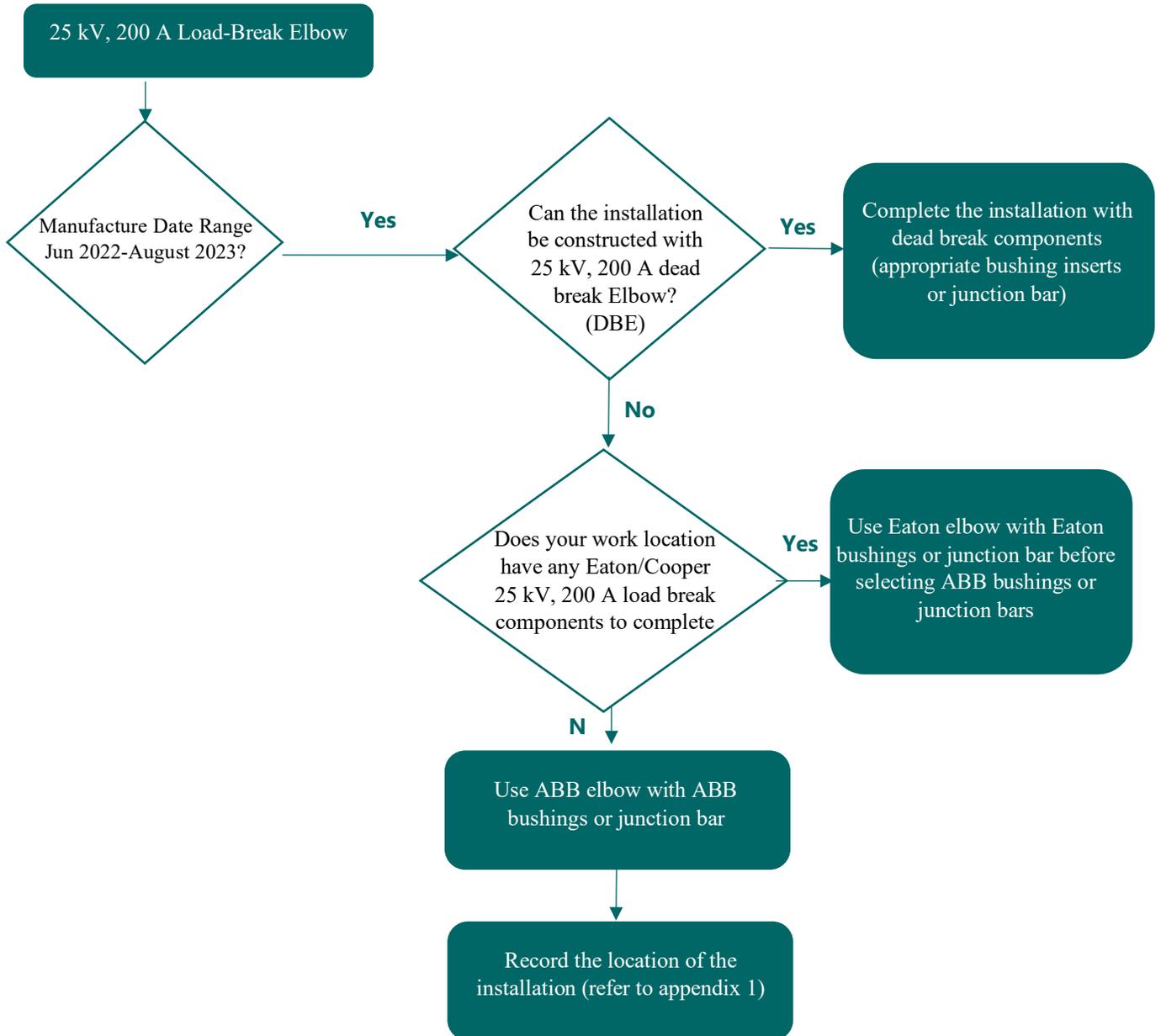
Table 2: 200 A Dead Break Components

ITEM	Description	SAP CODE
Dead Break Elbow	25 kV Dead-Break Elbow	10118050
Junction Bar	25 kV 3-way Dead Break Junction Bar	10117747
Junction Bar	25 kV 4-way Dead Break Junction Bar	10117332
Bushing Insert	Dead-Break Bushing Insert	10118014

Table 3: 200 A Load Break Bushing Inserts and Junction Bars

ITEM	Description	SAP CODE
Bushing Insert	25 kV Load-Break Bushing Insert	10117355
Junction Bar	25 kV 3-way Load Break Junction Bar	10117343
Junction Bar	25 kV 4-way Load Break Junction Bar	10117342

Appendix 2: Options for Construction Configurations for 200 A, 25 kV Load Break Elbows





9/21/2023
Expiration: Current until Archived

Ref. No. HL-1323

Underground Work Practices in Structures with a Suspected or Confirmed Failure

Purpose

The purpose of this Hotline bulletin is to communicate current interim underground (UG) work practices that are now permanent procedures.

Action

Effective immediately, below is an updated summary of current interim work practices that are now permanent procedures when working in any underground structure that has a confirmed or suspected failure of component, cable, or piece of equipment that still has energized equipment and or components contained within.

This is specific to the structure with the failure and not adjacent structures required to facilitate troubleshooting and/or switching.

1. If the structure with the failure has water present and the waterline is above the equipment, cable, or components, it must be **pumped to allow for enough time to obtain stable temperature reads. Prior to entry, scan from outside of the structure. The supervisor/foreman on site will use discretionary judgment to determine a stable temperature before work can proceed. Once inside the structure, obtain a baseline temperature read.**
2. Shall have the **gantry deployed, set up, and ready for use for repair and restoration work** without undue delay.
3. **When entering a vault after cable or component failures, PPE must include the following minimum (noted below) or the highest requirement for performing work in the structure:**

- a. 8-calorie count PPE plus safety glasses
- b. Balaclava
- c. TecGen/Benchmark Coverall **or** Approved Rain Gear
- d. 25 cal/cm² leather gloves **or** primary rubber gloves

Note: Once an assessment is complete and confirmed it is safe to proceed with repair work that does not require the PPE noted above, employee can revert to the minimum required PPE for the task to be performed.

4. If needed, de-energize adjacent cables or components when there is a failure in a vault until all the hazards can be identified.
5. When there is a cable or component failure in a vault, implement the use of “**tethered**” **blast blankets/cover on adjacent cable components** unless physically impossible to facilitate repairs on cable or equipment.
6. **Requires no test order (NTO)** on all energized circuits running in the structure.
7. Shall use **thermal imaging camera to heat scan** on a regular basis throughout the job evolution to determine if temperature differences exist. (*Refer to DOM TE-5*).
8. Before making repairs in the subject structure, **an on-site supervisor** (e.g., FS or TM FS, GF, OS, Safety Advisor, etc.) **should be present** until such time the supervisor and crew or TM no longer deem it necessary for on-site supervision. In instances where an on-site supervisor is not available, a verbal check-in with supervision is still required before work can proceed.
9. When repairs are completed, a **blue notice tag** per the Distribution Operations and Maintenance Manual (DOM) IM-5: Conditions That Affect Entry into Vaults or Manholes 4.0 Operations 4.4 will be placed.

The [Job Hazard Analysis \(JHA\) # D-016 – Entering a Structure After a Primary Cable Failure](#) will also be updated, highlighting the new requirements.

Standards Affected

Revisions to SCE standards, controlling documents, policies and procedures will take place and be communicated at a later date.

Contact Information

- SCE Employees – contact CMHelpDesk@sce.com
- Contractors – If you have questions about this bulletin content or its applicability to your work, contact your Edison Representative, Project General Supervisor (PGS), Inspector, Specialist, Project Superintendent, etc. or Field Safety Advisor



10/2/2023
Expiration: Current until Archived

Ref. No. HL-1423

Rubber Glove and Live Front Practices

Effective Monday, October 2, 2023

Purpose

The purpose of this communication is to inform SCE and contract personnel of a new work practice requirement for opening padmounted structures and two interim work practices that are permanent as of 10/2/23.

Background

In January of 2023, as a precautionary measure, interim work practices were introduced and communicated. Those interim work practices were in place while permanent mitigations were explored.

Action

New practice:

1. Rubber Gloves Required When Opening Any Unlabeled or Live Front Padmount

When opening any padmounted piece of equipment, Class 2 rubber insulating gloves and protectors must be worn at all times, except when operating live line tools, unless:

- a) A label on the exterior door indicating the padmounted equipment is 'dead front' (DF) is clearly displayed.

OR

- b) After opening the padmounted equipment (while wearing class 2 rubber insulating gloves and protectors) it is determined the equipment is dead front.

Note: Once the equipment is confirmed as dead front, the employee will label the exterior door with a DF label.

At all times, including when wearing Class 2 rubber insulating gloves, or using live line tools, employees must maintain the required minimum approach distance (APM Rule 147), wear appropriate PPE (APM Rule 109), and follow the Arc Flash Manual (Section 6.0). Work on live front equipment can only be performed with live line tools (APM Rule 311).

QEWs and other personnel are expected to request assistance or support if assigned or emergency work cannot be performed safely by one person. Additional support will be provided upon request by supervision.

New Permanent Practice:

The following sections are for Qualified Electrical Workers (QEW) only.

1. Accessing Live Front Equipment

a. When accessing the primary side of energized live front equipment ^(Note¹), two current Distribution journeyman linemen or above are required at all times. *One employee will act as an observer or assist in performing the work as needed.

****If two journeyman linemen are not available, one journeyman lineman and a qualified employee in training (5th or 6th step apprentice) under the supervision of the lineman is acceptable.***

b. Working in a secondary voltage compartment is permitted, as long as the primary side of live front compartment is closed, all barriers are in place (no energized parts exposed), and applicable APM rules and procedures are followed.

Note¹: Accessing or working in the primary side of live front equipment includes, but is not limited to: removing barriers, checking cable tags, installing Fault Indicators, phasing, phase identification, voltage/load checks, heat scans, and visual inspections.

For qualified employees (QE), please refer to the [rubber glove task chart](#).

2. Temporary Fault Indicators on De-Energized Live Front Equipment

a. When accessing the primary side of live front equipment to install or remove temporary fault indicators, this work must only be performed with live line tools after the primary compartment of the live front equipment ^(Note²) is tested and determined to be de-energized. For this one work activity, installing grounds is not necessary.

Note²: The primary compartment of a live front padmount transformer includes the entire compartment, primary cables, and terminations (potheads). The primary compartment in a live front padmount switch (e.g., PMH style) includes only the position being worked on.

- b. Applicable standards include APM 155: Qualified Electrical Workers, and APM 311: Permissible Work in Live-Front Transformers.

Important: If a Troubleman or crew determines work on live front equipment cannot be performed safely, alternative approved work methods must be utilized regardless of the length of time it will take to complete the task and without regard to the number of customers impacted.

Standards Affected

Revisions to SCE standards, controlling documents, policies and procedures will take place and be communicated at a later date.

Contact Information

- SCE Employees – contact CMHelpDesk@sce.com
- Contractors – If you have questions about this bulletin content or its applicability to your work, contact your Edison Representative, Project General Supervisor (PGS), Inspector, Specialist, Project Superintendent, etc. or Field Safety Advisor



10/4/2023
Expiration: Current until Archived

Ref. No. TB-0223

Additional Mitigation Measures for Certain Transmission Corridors

Purpose

The purpose of this communication is to reinforce and update the mandatory Additional Mitigation Measures for work on specific Sub-Transmission circuits inside of Transmission 500kV corridors.

Discussion

These Additional Mitigation Measures do not exempt workers from following all Overhead (OH) Grounding rules and policies, and do not replace or change any requirements in the Transmission Overhead Grounding Manual (TOGM) or Overhead Grounding Manual (OGM). They are an extra layer of protection in case of an unseen error.

Action

All circuits listed in Table 1 below will be worked on by SCE crews only.

Effective immediately, apply the additional mitigation measures below according to these groups:

- Group 1 will require additional mitigation measures 1 through 5.
- Group 2 will require additional mitigation measures 2 through 5.

Additional Mitigation Measures:

1. For Group 1 circuits listed below, workers in proximity to the established Equal Potential Zone (EPZ) must be trained and properly wear an AC induction suit. See additional information below.
2. A full grounding plan must be developed. Plan must include how external grounds or externally grounded conductors/objects in the workspace EPZ, or brought into EPZ workspace, will be incorporated.
3. A copy of the work order map, Outage request TSBL 20, and your grounding plan must be sent to the Induction Mitigation Team for review prior to the execution of the job (Marc Ferguson is Transmission point of contact).
4. A job-walk with the Induction Mitigation Team prior to the start work date.
5. A dedicated observer is required on the jobsite to focus solely on creating and maintaining a single EPZ workspace for the entire duration of the job. Within Transmission we are asking this observer to be a Qualified Electrical Worker (QEW).

Additional Information for Group 1 Circuits Requiring Induction Suits:

1. AC induction suits shall be worn when performing de-energized work methods in Table 1, Group 1 circuits while working within minimum approach distance of:
 - a. Workspace EPZ
 - b. Downed wires
 - c. Steel structures (grounded or not)
2. The supervisor must ensure the employee has been instructed in the nature and hazards of working on de-energized grounded equipment and conductors where induced voltage can be present. Additionally, the supervisor must document, in written form to the tailboard, that the employee has the experience and/or received the appropriate instructions.
3. AC induction suits should be worn when installing and removing grounds on steel structures.
4. AC induction suit should be worn when installing, reconfiguring, reestablishing, moving, or removing workspace EPZ on steel structure.
5. Employee qualified to perform work using the AC induction suit is defined as: an employee who has completed AC induction suit training and is familiar with the hazards involved when working on de-energized grounded equipment and conductors where induced voltage can be present.

Note: Steel structure includes Tubular Steel Poles (TSP), lattice towers, Light Weight Steel (LWS), etc.

Table 1: Applying Additional Mitigation Measures to Affected Sub-Transmission Circuits

Group	Sub Transmission Circuits Affected	Additional mitigation measures
1	ANTELOPE-RITTER-RANCH 1, 66kV	1 through 5
1	ANTELOPE-RITTER-RANCH 2, 66kV	1 through 5
1	KRAMER-COOLWATER 115kV	1 through 5
Group	Sub Transmission Circuits Affected	
2	ANTELOPE-ANAVERDE-HELIJET 66kV	2 through 5
2	DEVERS-BANNING-WINDPARK 115kV	2 through 5
2	DEVERS-VENWIND 115kV	2 through 5
2	DEVERS-EISENHOWER-THORNHILL 115kV	2 through 5
2	MIRAGE-CAPWIND-DEVERS-TAMARISK 115kV	2 through 5
2	DEVERS-HI DESERT-YUCCA 115kV	2 through 5
2	EAGLE MOUNTAIN-BLYTHE 161kV	2 through 5
2	VICTOR-AQUEDUCT-HESPERIA 115kV	2 through 5
2	VICTOR-AQUEDUCT-PHELAN 115kV	2 through 5

The circuits in Table 1 are not the only circuits we see with induction risk; induction can happen almost anywhere. These circuits were prioritized based on having the highest induction risk currently on our system.

If workers find Sub-Transmission circuits in areas with low water tables and high resistive soil conditions, such as sand that parallel 500kV circuits for a minimum of five miles, and are not listed in Table 1, workers must contact the Induction Mitigation Team (Marc Ferguson) immediately. If these Additional Mitigation Measures cannot be met (e.g., Priority 1, car hit pole), workers are required to notify and get approval from their principal manager before work can proceed.

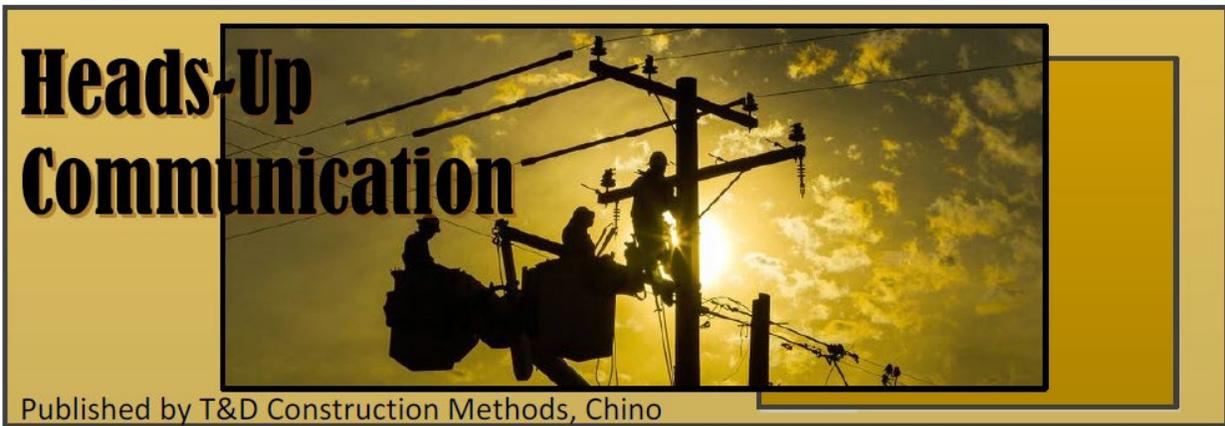
Standards Affected

Transmission Overhead Grounding Manual (TOGM)

Overhead Grounding Manual (OGM)

Contact Information

- SCE Employees – contact [Marc Ferguson](mailto:Marc.Ferguson@sce.com) or CMHelpDesk@sce.com
- Contractors – If you have questions about this bulletin content or its applicability to your work, contact your Edison Representative, Project General Supervisor (PGS), Inspector, Specialist, Project Superintendent, etc. or Field Safety Advisor



9/11/2023
Expiration: Current until Archived

Ref. No. HU-1523

New Cobra-Head Streetlight Generation 6 LED Edition (Replacing Generation 5)

*****This Bulletin Supersedes HU-0623*****

Purpose

The purpose of this Heads-Up communication is to inform SCE employees of the transition from General Electric (GE) Evolve Gen. 5 LED Cobra-Head streetlights to Gen. 6 LED Cobra-Head streetlights.

Also, Compatible Units (CU) not included in HU-0623 are being updated and new color temperature 2700 Kelvin (K) (2700 K) is explained.

Background

Replacing the current Gen. 5 streetlights (LED) with Gen 6 Cobra-Head streetlights allows for lower wattage fixtures with an equivalent lumen output.

The Gen. 6 GE LED fixtures will also allow for a customer to choose between color temperatures of 4000 Kelvin (4000 K), 3000 Kelvin (3000 K), and now 2700 Kelvin (2700 K).

2700 K and 3000 K color temperatures lights are considered “warm white” and will have more yellow and amber tones that are consistent with today’s existing High-Pressure Sodium (HPSV) streetlights.

4000 K color temperature lights are between warm and cool on the spectrum and provide a “whiter” appearing light without crossing into the bluer spectrum.

Changes to the tariffs will be made appropriately.

Action

The Gen 5 Cobra Head streetlights are Key06, and once stock has been depleted the key status will be changed to Key10. Use the Gen 6 Cobra Head streetlights in orders as part of the design.

Tables 1-6: Existing Lamp Conversions for Gen. 5 to Gen. 6

EXISTING HPSV	GEN 5 3000 K LED EQUIVALENT	GEN 6 3000 K LED EQUIVALENT	SAP (GEN 6)	New Compatible Unit
50-watt HPSV	22-watt LED	22-watt LED	10217019	SL-H-LED-22-3K-1
70-watt HPSV	31-watt LED	29-watt LED	10217020	SL-H-LED-29-3K-1
100-watt HPSV	39-watt LED	37-watt LED	10217003	SL-H-LED-37-3K-1
150-watt HPSV	71-watt LED	59-watt LED	10217004	SL-H-LED-59-3K-1
200-watt HPSV	82-watt LED	76-watt LED	10217005	SL-H-LED-76-3K-1
250-watt HPSV	136-watt LED	121-watt LED	10217006	SL-H-LED-121-3K-1
310-watt HPSV	137-watt LED	130-watt LED	10217007	SL-H-LED-130-3K-1
400-watt HPSV	174-watt LED	160-watt LED	10217008	SL-H-LED-160-3K-1

EXISTING HPSV	GEN 5 4000 K LED EQUIVALENT	GEN 6 4000 K LED EQUIVALENT	SAP (GEN 6)	New Compatible Unit
50-watt HPSV	22-watt LED	22-watt LED	10217021	SL-H-LED-22-4K-1
70-watt HPSV	31-watt LED	29-watt LED	10217022	SL-H-LED-29-4K-1
100-watt HPSV	39-watt LED	37-watt LED	10217011	SL-H-LED-37-4K-1
150-watt HPSV	71-watt LED	59-watt LED	10217012	SL-H-LED-59-4K-1
200-watt HPSV	82-watt LED	76-watt LED	10217013	SL-H-LED-76-4K-1
250-watt HPSV	136-watt LED	121-watt LED	10217014	SL-H-LED-121-4K-1
310-watt HPSV	137-watt LED	130-watt LED	10217015	SL-H-LED-130-4K-1
400-watt HPSV	174-watt LED	160-watt LED	10217016	SL-H-LED-160-4K-1

EXISTING HPSV	LED 2700 K EQUIVALENT	SAP	New Compatible Unit
50-watt HPSV	22-watt LED	10216993	SL-LED-22-2.7K-1
70-watt HPSV	29-watt LED	10216994	SL-LED-29-2.7K-1
100-watt HPSV	37-watt LED	10216995	SL-LED-37-2.7K-1
150-watt HPSV	59-watt LED	10216996	SL-LED-59-2.7K-1
200-watt HPSV	76-watt LED	10216997	SL-LED-76-2.7K-1
250-watt HPSV	121-watt LED	10216998	SL-LED-121-2.7K-1

310-watt HPSV	130-watt LED	10216999	SL-LED-130-2.7K-1
400-watt HPSV	160-watt LED	10217000	SL-LED-160-2.7K-1

EXISTING LPSV	GEN 5 3000 K LED EQUIVALENT	GEN 6 3000 K LED EQUIVALENT	SAP (GEN 6)	New Compatible Unit
55-watt LPSV	22-watt LED	22-watt LED	10217019	SL-H-LED-22-3K-1
90-watt LPSV	31-watt LED	29-watt LED	10217020	SL-H-LED-29-3K-1
135-watt LPSV	71-watt LED	59-watt LED	10217004	SL-H-LED-59-3K-1
180-watt LPSV	96-watt LED	87-watt LED	10217783	SL-LED-87-2.7K-1

EXISTING MH	GEN 5 3000 K LED EQUIVALENT	GEN 6 3000 K LED EQUIVALENT	SAP (GEN 6)	New Compatible Unit
100-watt LED	31-watt LED	29-watt LED	10217020	SL-H-LED-29-3K-1
150-watt LED	39-watt LED	37-watt LED	10217003	SL-H-LED-37-3K-1
175-watt LED	39-watt LED	37-watt LED	10217003	SL-H-LED-37-3K-1
250-watt LED	71-watt LED	59-watt LED	10217004	SL-H-LED-59-3K-1
400-watt LED	111-watt LED	102-watt-LED	10217782	SL-H-LED-102-3K-1

EXISTING MH	GEN 5 4000 K LED EQUIVALENT	GEN 6 4000 K LED EQUIVALENT	SAP (GEN 6)	New Compatible Unit
100-watt LED	31-watt LED	29-watt LED	10217022	SL-H-LED-29-4K-1
150-watt LED	39-watt LED	37-watt LED	10217011	SL-H-LED-37-4K-1
175-watt LED	39-watt LED	37-watt LED	10217011	SL-H-LED-37-4K-1
250-watt LED	71-watt LED	59-watt LED	10217012	SL-H-LED-59-4K-1
400-watt LED	111-watt LED	102-watt LED	10217781	SL-H-LED-102-4K-1

Standards Affected

[DOH SL-318](#)

Contact Information

- SCE Employees – contact MICHELLE.LUM@SCE.COM 909-274-1581 or COLLEEN.SELLARDS@SCE.COM 714-796-9868
- Contractors – contact your Edison Representative, Project General Supervisor (PGS), Inspector, Specialist, Project Superintendent, etc. or Field Safety Advisor



Heads-Up Communication



Published by T&D Construction Methods, Chino

9/26/2023

Ref. No. HU-1623

Expiration: Current until Archived

Circuit Map Revisions

Purpose

The purpose of this bulletin is to review and reinforce the [Circuit Map Revision Procedure](#) with SCE and Contractor field personnel. Circuit maps are used by field personnel to operate the distribution system. Circuit map accuracy is crucial for the safety of our field personnel and the public, infrastructure reliability, regulatory compliance, and financial liability.

Background

Due to multiple incidents of outdated or incorrect circuit maps which have led to switching errors in recent months, it has become evident that circuit map revisions are not being made when required.

Applicability

Any SCE employee and its Contract employees that perform field modifications to distribution (primary) high voltage conductor or equipment or who discovers a circuit map that has discrepancies from field conditions, are responsible for submitting a circuit map revision as soon as possible as being the person with the most knowledge of the circuit status.

Discussion

There are several possible- and some serious - consequences of working from inaccurate circuit maps.

Potential consequences of working from inaccurate circuit maps:

- Increased risk of potential incident involving injury to field personnel or the public
- Equipment operating errors, often resulting in unintended customer outages and restoration delays; and

- Risk of being non-compliant by failing to meet regulatory obligations as a utility to serve customers in a timely and efficient manner.

Action

A **circuit map revision is required** any time a circuit is reconfigured, distribution equipment or a primary conductor is added, removed, or upgraded, or when a discrepancy between the map and actual field conditions is found. **This applies to both emergent and planned work in the field.**

Review and reinforce the [Circuit Map Revision Procedure](#) with your teams, ensure both contractors and SCE field personnel are meeting this expectation.



Please reach out to the appropriate Distribution Circuit Mapping office for additional support and/or questions. (Table 1)

Table 1: Circuit Mapping Office Contacts

Circuit Mapping Office Contact/AOR		
AOR	Email	Districts
Northern	NorthernGMCCircuitMapping@sce.com	35, 36, 39, 49, 50, 51, 52, 53, 59, 72, 73, 85, 86
Southern	SouthernGMCCircuitMapping@sce.com	29, 33, 43, 48, 61, 77, 88
Eastern	EasternGMCCircuitMapping@sce.com	22, 26, 27, 30, 31, 34, 40, 79, 84, 87
Western	WesternGMCCircuitMapping@sce.com	32, 42, 44, 46, 47

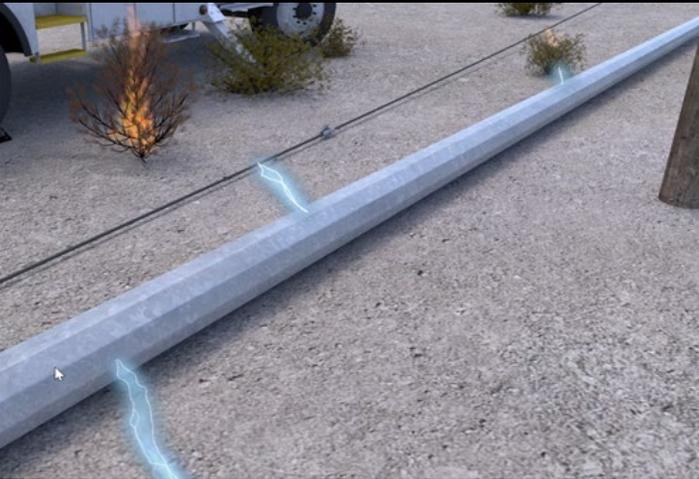
Standards Affected

N/A

Contact Information

- SCE Employees – contact CMHelpDesk@sce.com
- Contractors – – If you have questions about this bulletin content or its applicability to your work, contact your Edison Representative, Project General Supervisor (PGS), Inspector, Specialist, Project Superintendent, etc. or Field Safety Advisor

SAFETY OBSERVATIONS | JANUARY 2021 - PRESENT



Top Opportunities For Improvement

37	•Crew did not ground properly
31	•Grounds were out of date or not in good condition
16	•Equipotential Zone (EPZ) not achieved during grounding
3	•EPZ not maintained as conditions changed
2	•Improper use of the grounding log
2	•No barricade at ground-level
1	•Improper grounding sequence

HISTORY TELLS US

Induction is the result of high-voltage lines running parallel to or crossing de-energized and/or grounded conductors being worked. Due to the significant electromagnetic fields present around energized high-voltage electric lines, voltages may be induced onto adjacent de-energized or non-commissioned electric lines.

These voltages may be large enough to deliver potentially *lethal* electric shocks.

Common causes of induction incidents are inadequate grounding and inadequate establishment and verification of an equipotential zone (EPZ).

So, this begs the question, how well-versed is our workforce on what can cause induced voltage? Even further, do we know how to identify if a worker is in-series and what to do if that happens? And what is the relationship between grounding and mitigating the risk of induction?

Of course, there are multiple steps before grounds are applied — such as proper inspection of the ground head and cable — but the last critical task of testing de-energized reveals the true status of the line. As a professional who is aware of your surroundings, you understand that when working in environments when a crew member can be exposed to induced voltage, addressing the proximity to energized conductors and preventing induction is an expected tailboard topic during job planning and before any work begins.

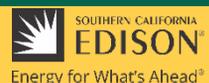
And for those work-types that work near energized circuits but not with them, you may not need to know your EPZ's, but you definitely need to know and adhere to your MADs.

Static is not the same as induction.

- Are we using the right size grounds? Right length?
- Have we properly inspected our grounds? Properly verified the test date?
- Are there any energized lines running parallel to the de-energized and grounded line(s) we'll be working on? Any energized line crossings?
- What is in the EPZ and what is not?
- Have we documented ground application and removal?
- We've established an initial EPZ but how will we maintain it if conditions change?
- How will we communicate to all affected personnel when we are ready to remove grounds?
- Did we test and validate de-energized before grounding?
- Does everyone understand what EPZ means and what can cause induced voltage?
- Is the clamp properly installed onto the conductor?
- Did we confirm grounds have been properly applied? Properly removed?

Exhibit B

Ask the crew: What's our grounding plan for this job and how will we maintain an EPZ if changes arise as the job progresses?



A SELECTION OF INCIDENTS & CLOSE CALLS | 2019 – PRESENT

Year	Incident Summary
2021	<ul style="list-style-type: none"> When pruning a properly line tree in close proximity to energized high-voltage lines, a worker experienced symptoms of induction through the tree limb. No direct contact was made and no injuries.
2020 A selection of events	<ul style="list-style-type: none"> A worker sustained injuries to index finger from induction while pulling in new covered conductor. A crew saw static wire on the ground as they drove to their job site. The crew secured the scene, re-grouped, began protocol to notify leadership of the downed wire, and at that time the crew witnessed the static wire coiled up and audibly hot. The crew grounded the static wire and attached hardware to pull the wire back up to the structure. Due to environmental limitations, the crane was set up on the north side of the structure and the wire coming in was on the south side. The crew began the task of reattaching the wire. Two workers were in the air in the crane basket to attach personal grounds and re-secure the wire. Worker 1 had a shotgun stick to attach personal grounds. Worker 2 reached over the traveler to adjust the grounding clamp and had an electrical contact, most likely due to induction. Worker 2 fell back, unconscious, and Worker 1 called down to lower the basket and call 911. The injured worker was flown to a local trauma center for evaluation and was treated for his injuries. Two workers received induction shock while removing 4/0 grounds from a bundled 220 kV line. After clearing-off of a 66 kV line, there were grounds still applied to the line disconnect blades. There was an air gap between the line disconnects and the bus tie breaker. Worker 1 neglected to take an equipment clearance on the 66 kV CB 13 bus tie breaker. Worker 2 noticed the grounds while he was walking out the program in the 66 kV switch rack for other work, which led to confusion about the status of the switch rack and to the discovery of the errors. Worker 2 notified the operations manager, and the program was put into an all-stop. Worker 1 did not log the grounds that were applied to the 66 kV line disconnects and used inappropriate nomenclature when logging the equipment clearance. When logging the line and equipment clearance, Worker 1 failed to notice that there are two 66 kV line positions (1 and 2) for that circuit. All of Worker 1's clearance logging referred to the 66 kV line only, not a specific position, which caused the subsequent confusion. Multiple crews were working on the same line. A worker holding a clearance for all work had completed work at location 1 and released the clearance to the system operator. A few minutes later, the worker called the system operator back to delay the release because grounds were still on the line from the other crew. No switching had begun. After an all-stop, re-tailboarding and removal of grounds, the system operator was called back with no further incident. A crew successfully installed shunts on conductor hot spots and was to replace the Optical Power Ground Wire (OPGW) dead-end shoe at the getaway (first outside of the substation) Tubular Steel Pole (TSP). The OPGW tested at 4 kV and grounds were applied. The crew confirmed the tester was in good operating order. The OPGW still tested at 2.5 kV after grounds were installed. A second set of grounds was installed but the OPGW still tested too high to replace the shoe so an all-stop was called. A line crew set up to work on a section of a transmission line they thought was de-energized. They tested the line before applying grounds and discovered it was still energized. A crew received the outage on the 12 kV 'C' section of the West Operating Bus. Testing with a hot-line tester was used for all areas where the grounds were to be applied. The first ground was applied in the incorrect spot and a flash occurred. No injuries. The correct grounding spot was the West Bus jumpers, approximately 16 inches from where the flash occurred. During troubleshooting, worker 1 (checked by worker 2) climbed a ladder to perform continuity checks of primary fuses to the No. 1 12 kV capacitor bank at a substation. A clearance was not obtained, and no personal grounds were applied.

Exhibit B

Ask each other: Are there any energized lines running parallel to the de-energized and grounded line we'll be working on? Any energized line crossings?



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

Primary Hazard Focus: Induction

A SELECTION OF INCIDENTS & CLOSE CALLS | 2019 – PRESENT

Year	Incident Summary
2019 A selection of events	<ul style="list-style-type: none">• A worker made contact with a de-energized, ungrounded line component, which resulted in an induction injury.• A crew set up to test and ground multiple distribution circuits at the pole that was one span away from the pole they were to replace. The crew incorrectly believed that all the distribution lines on this pole had been de-energized via a switching procedure, but the 149-step switching program de-energized <i>sections</i> of a 12 kV and 4 kV feeder & feedback circuits, which were attached to the pole being replaced. A second 4 kV circuit was involved in the program but no portion of it was being de-energized, as it was not attached to the pole being replaced. Two workers went up in the bucket with a high-voltage tester and tested all of the distribution lines on the pole, which included the 12 kV and 4 kV feeder & feedback circuits, and the other 4 kV circuit. The two workers reported that all lines tested de-energized and proceeded to install grounds. They had installed grounds on the 4 kV feeder & feedback conductors, then proceeded to ground one of the conductors on the other 4 kV circuit, which was still energized. This resulted in a small arc when they installed the ground, and the circuit locked out. No injuries or damage.• Three crews were working multiple poles on a de-energized section of line with a clearance and grounds. The foreman released his clearance with grounds still applied and the switch was closed remotely, which energized the 12 kV line into a set of grounds and locked out the circuit.

ADDITIONAL TAILBOARD TOPICS

- When should induction be considered?
- As a crew member, what is my responsibility to help ensure we are properly set up to safely apply grounds?
- Are there situations where induction would not be a concern?
- Does grounding always eliminate induction hazards?
- What is an EPZ mat used for?
- Does the distance and relationship between the energized and de-energized conductors affect induced voltage?
- Is there a given, standard distance for induction?
- Who can induction affect? Workers on the ground, in the air?
- If we are using a grounding rod, is it driven well enough into the ground? Do we need more than one rod?
- Where in the field can induction occur? What would induction look like in the field on a 12 kV line? What if the 12 kV line was running parallel to a 500 kV line?
- As the foreman, am I prepared to give direction on grounding and provide oversight throughout the job?
- What is my crew's grounding knowledge or skill level?

DEADLINES AND IMPORTANT DATES

November 7: Daylight Savings Time¹

Plan ahead at work and home for the potential impacts of Daylight Savings Time!

Fatigue — Studies suggest that it takes people who work traditional hours several days to fully readjust their sleep schedule after the time change.

Accidents — Evidence suggests that time changes increase safety problems both at work and at home. Just being aware of the increased risk of accidents in the period immediately following the time change may help you stay alert. Try to avoid building up a sleep debt in the days before the change.

Update: 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.

Ask yourself: As a foreman or crew lead, how will I ensure we're properly grounded and have established and verified an EPZ?

Exhibit B



HOW MUCH DO YOU KNOW?

1. What are possible health impacts to line workers frequently caused by induction?²
 - a. Inadvertent movements like slips and falls or dropping tools and materials
 - b. Respiratory failure and ventricular fibrillation
 - c. Tissue burning injuries and amputation
 - d. Brain injuries, depression, and forgetfulness
 - e. Long-lasting problems with sensation due to nerve tissue damage
 - f. All of the above
2. When working in environments where a crew member can be exposed to induced voltage or induced current, two visible signs they have been exposed are that they stop _____, and they stop _____, because they have stopped breathing and are stuck due to muscular contraction.²
3. Inspecting the ferrule of a ground cable thoroughly includes ensuring the _____ and _____ do not have debris in them.
4. If _____ sources can inadvertently energize the line, select the appropriate size of grounds that will provide protection for the _____ available fault duty at each grounding location.
5. Whenever possible, avoid contact with and the _____ of grounds when installing them.
6. Inspecting a ground cable thoroughly includes checking for soft or spongy spots, and checking for a lump or bump, which could indicate strands have been _____ and balled up within the cable.
7. An electromagnetic field is the presence of _____ (electric field) and _____ (magnetic field) on a conductor.
8. When working in Red Flag Warning conditions, if dry, dead vegetation cannot be _____, _____ the temporary ground rod, when possible.
9. _____ the path electrical current is going to take when building an equipotential zone.
10. Crew members should ask themselves, "What is in _____ with my body when I touch [this], and I am going to touch [that]?" ²

¹ F – all of the above ² moving, talking ³ threads, jaws ⁴ multiple, highest ⁵ coiling ⁶ broken ⁷ voltage, current ⁸ removed, relocate ⁹ Visualize ¹⁰ parallel

ADDITIONAL RESOURCES

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

Total run time approximately 15 minutes

¹safetytoolboxtopics.com ²Brady Hansen, *Written In Red Training Solutions*

Ask the crew: How will we communicate to everyone affected that grounding is complete before work begins?

Exhibit B



Contractor Safety Talks

Fire Safety & Prevention

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:

At this time last year in 2022, there was 4,795 wildland fires that burned 102,753 acres in California. In 2023, there have been 4,123 wildland fires that have burned 112,964 acres so far year to date.

With those wildfires that have occurred in 2023 year to date, there have been three firefighter deaths and 12 structures that have been destroyed. Fortunately, there have been no civilian deaths this year in California due to wildfire.



During the summer months when the vegetation can become dry, wildfires can become a huge concern. In the construction field, there are various factors to keep in mind when it comes to fire prevention. It is important to reference and ensure compliance with the ESP 113.1 Wildland Prevention Plan and any other applicable requirements or plans for your work area.

Prior to beginning work each day, make sure to perform a vehicle inspection and ensure there are the necessary fire tools on the vehicle such as a fire extinguisher, shovel, Pulaski, and a full backpack pump. At work sites, make sure to have all required tools available and within 50' of the work activity. Also, when parking your vehicle on the jobsite or at a laydown yard, avoid parking over any dry vegetation to avoid the exhaust coming into contact with it, which could potentially cause a fire. Another important item to check prior to work beginning is the Fire Potential Index (FPI) to determine the fire potential for that day. The SDG&E Weather app is a good resource to use to check the FPI.

If performing any hot work activities such as grinding, cutting, or welding, there should be a designated fire watch present at all times and if working in a non-designated area, ensure the area is free of fire hazards. Wetting nearby dry vegetation is essential, especially in the case there is a stray spark initiated by the hot work that could catch the dry vegetation on fire within seconds. Being proactive when it comes to fire safety can greatly reduce the chances of a fire occurring.

FAQ

Q: How do I learn more about Fire Protection and Prevention?

A: Go to "Cal/OSHA "Article 36 Fire Protection and Prevention" and/or click [here](#)

OBSERVATIONS FROM THE FIELD

During the past month, SDG&E safety observers performed jobsite inspections on almost all SDG&E jobsites and observed 38,197 construction activities. Of these there were 363 at-risk conditions documented and corrected in the field. Of the at-risk conditions observed, 89% were low risk, with the majority of them being PPE gaps. There were 42 medium at-risk observations

At-Risk Observations	At-Risk Behaviors
Lack of barricades and warnings on jobsites	There has been an increase in observations where crews do not have barricades such as caution tape or cones set up around open holes or trenches.

NOTABLE AT-RISK OBSERVATIONS

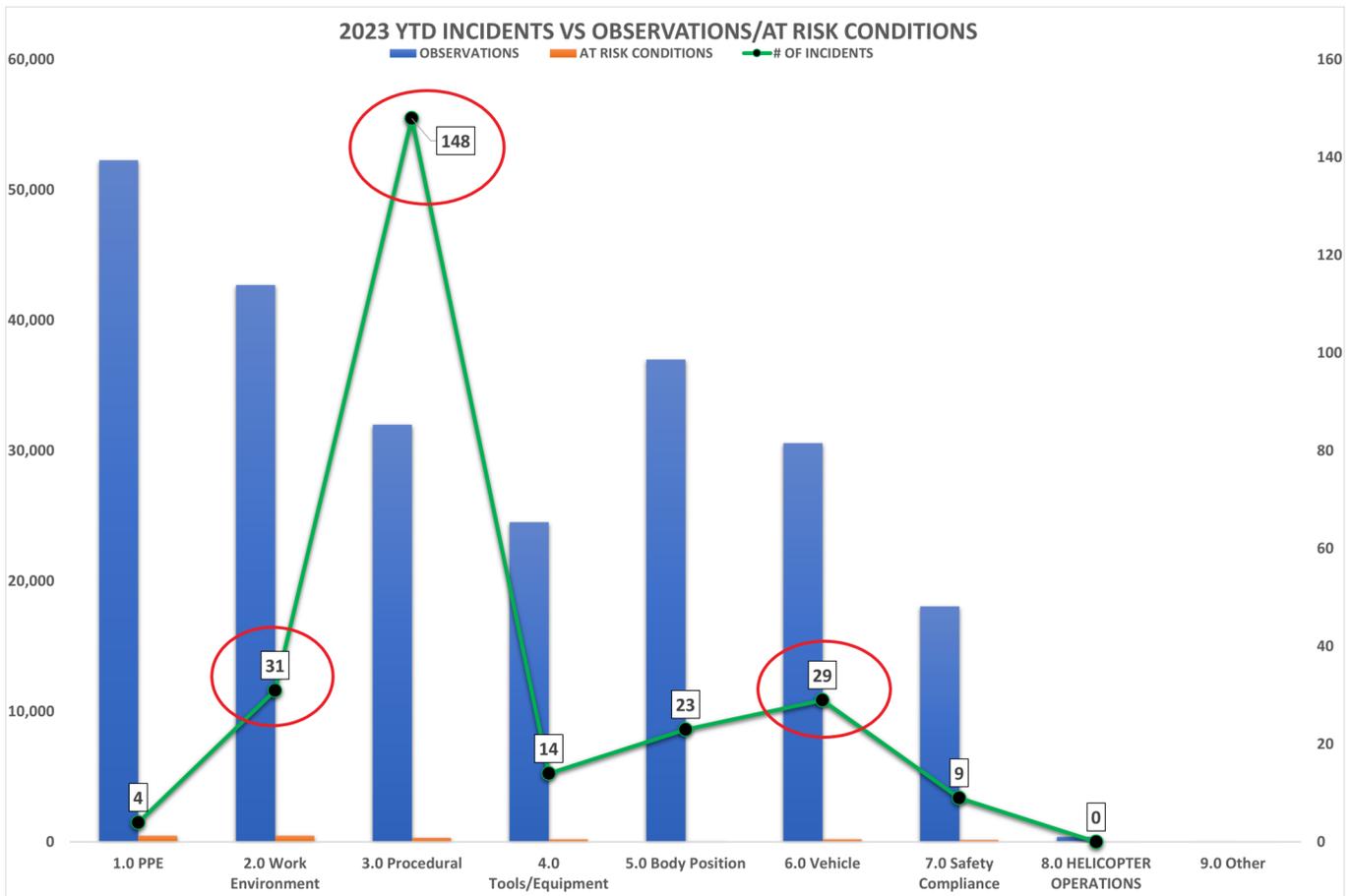
Medium-High Risk Observations (July 2023)	Potential Mitigation
A pole brusher was observed working out of the coned work zone on a downhill road near a curve. He was exposed to struck by hazards.	Make sure to work within the barricaded area of the of the work zone to avoid a stuck by hazard, especially if working in a high traffic volume area.
Crew members were working inside a vault while not adhering to confined space requirements. Crew did not have an atmospheric tester onsite due to it being broken. There was also no retrieval system or ladder present onsite to assist with worker emergency egress if needed.	Ensure proper confined space entry protocols are being followed and that all required equipment/materials needed for the job are available at the jobsite.
During rigging operations, the rope got stuck inside a port a wrap (device used with ropes to lower trimmed branches). Employee tried to loosen it while load was still suspended in the air. The worker was stopped and the crew lowered the load down from a distance.	Crew members should not place themselves under a suspended load in the case the load becomes unstable and could lead to a crushing hazard.
A crew member was working to expose a 4" steel gas main and valve without a Foreman on site, who was also the Competent Person (CP). It was determined that the Foreman needed to leave the job site for an emergency.	While work is being performed, there should be a designated, qualified Competent Person onsite at all times.

MONTHLY INCIDENTS/NEAR MISSES

Incidents (July 2023)	Potential Mitigation
DART Incident - Employee was tasked with installing conduit and ground rods. During the course of this work, the employee was utilizing a jackhammer for a good portion of the day. This led to a back strain and employee was placed on modified duty.	If the task at hand requires repetitive motion, such as lifting or dealing with constant vibration, ensure to use proper lifting procedures, PPE, and consider rotating employees for the task.
OSHA Incident - Employee was opening a package with a pocket knife and the knife went through the package quicker than expected, leading them to cut their left hand between the thumb and index finger. The employee received stitches.	If cutting, make sure to cut away from yourself and use the correct tool for the task at hand. Even if it's a cutting task you have performed several times, be aware of your hand placement.
Electric Incident - Two employees were tasked with clearing vegetation from beneath an open wire secondary. While tree trimming, one of the employees was in an aerial lift truck with the upper & lower arm fully extended down a hillside . This employee decided to use the aerial lift as a means to haul debris which led to a limb dropping onto a secondary line, causing a power outage.	Any debris should be transported in an appropriate manner, especially if working over/around electrical lines. ANSI Z133.1 can be referenced to review Pruning, Trimming, repairing, Maintaining, & removing Trees and Cutting Brush Safety Requirements.
Electric Incident - While crew member was tree trimming with a pole saw on a slope, they slipped and lost their balance, leading to a fall towards a secondary service drop. During the fall, the pole saw made contact with the service drop.	The Job Hazard Analysis should always be reviewed by all employees prior to beginning work to ensure all hazards are recognized. If having to work on a slope, ensure your body position is correct and allows you to maintain your stability to avoid a slip/trip/fall.

Electric - 3 Gas - 0 OSHA - 1 DART - 1 SIF Potential - 0 Serious Safety Incident - 0

**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
- Vehicle
- Work Environment

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Contractor Safety Talks

Trenching and Excavation

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.

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Did you know:

In the first six months of 2022, there were 22 nationwide worker fatalities due to falling victim to the deadly hazards present in trenching and excavation work. This number surpassed the number of trenching and excavation related deaths in 2021, which was at a total of 15.

One of the 22 deaths in 2022 included two workers that were working in a 20' deep trench that collapsed on them as they worked and there was no protective system in place. Trench shields were sitting beside the excavation not being used, which could have saved their lives if installed.

During trenching and excavation operations, there are various procedures that should be followed to ensure the safety of the crew.

There are certain requirements for protective systems for an excavation that meets certain criteria. If an excavation is more than 5' in depth, a protective system such as sloping, benching, shields, or shoring must be implemented for the protection of any crew member that may enter the excavation in the case of a cave-in and tabulated data should be referenced when constructing the protective system. Excavations should be inspected daily by a trained Competent Person (CP) and if determined by the CP that an excavation that is less than 5' in depth has the potential for cave-in, a protective system can be put in place.

In an excavation where oxygen deficiency (atmospheres containing less than 19.5% oxygen) or a hazardous atmosphere could reasonably be expected to exist, atmospheric testing should be performed before employees enter an excavation greater than 4' in depth. Ensure that the air monitor(s) on site used for atmospheric testing are calibrated per manufactures recommendations.

While working in a proposed excavation area, ensure that all marked out utilities are potholed using hand tools to safely verify their location. Maps or drawings can be referenced for utility location, but the crews should reference the mark outs as their final reference for the utility location. Pneumatic tools/equipment should not be used within the tolerance zone per CA Law code 4216.

FAQ

Q: How do I learn more about Requirements for Protective Systems?

A: Go to "Cal/OSHA 1541.1 Requirements for Protective Systems" and/or click [here](#)

OBSERVATIONS FROM THE FIELD

During the past month, SDG&E safety observers performed jobsite inspections on almost all SDG&E jobsites and observed 44,614 construction activities. Of these there were 368 at-risk conditions documented and corrected in the field. Of the at-risk conditions observed, 91% were low risk, with the majority of them being PPE gaps. There were 34 medium at-risk observations and 0 high risk observations during the month.

At-Risk Observations (August 2023)	At-Risk Behaviors
Air monitor issues	There has been an increase in observations where crews when required are either not using air monitors, they are not onsite at all, or if they are onsite, they are not functioning properly or calibrated.

NOTABLE AT-RISK OBSERVATIONS

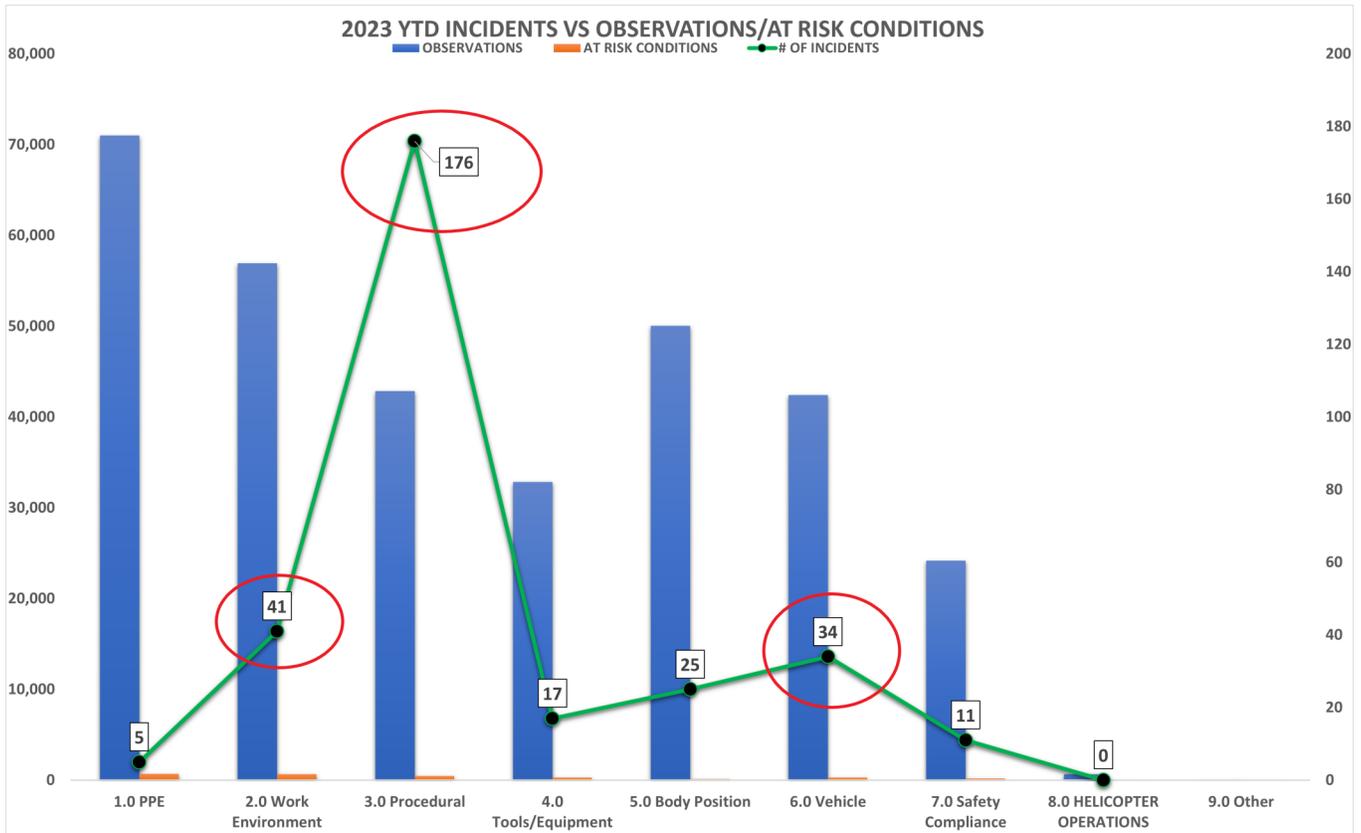
Medium-High Risk Observations (August 2023)	Potential Mitigation
There was an open trench without road plates placed over them, so residents had no access to their homes. There was also no barricades or signs to indicate an open trench.	All unattended open holes should be plated or barricaded for the safety of the public and crew.
Foreman was not aware that some fire tools had been moved to another truck during night work. Subsequently he was performing cutting operations without all proper fire tools on site.	All vehicles should have the necessary fire tools available and accessible. Ensure compliance with ESP 113.1/G8325
Contractor was conducting directional boring without the grounding rod to the unit in place.	If performing directional drilling operations, ensure ground rods are in place to provide an approved ground connection.
After inspecting each air monitor on the jobsite, it was discovered that all of the air monitors onsite were not in compliance and needed to be replaced.	Prior to work beginning, ensure that all tools/materials/equipment are in good working order. If any item is out of compliance or not working, it should be removed from service and replaced to maintain a safe work site.

MONTHLY INCIDENTS/NEAR MISSES

Incidents (August 2023)	Potential Mitigation
Fire Incident - As a contracted crew was installing ground rods, they noticed that the back of their work truck had caught on fire. There were wooden templates being stored behind the generator and had caught fire from the heat of the generator.	Ensure the work truck is organized and that no fire hazards are near the generator or compressor.
Electric Incident - Contracted crew was performing a pole replacement. While in the process of moving the wire, it was identified that there was too much tension, so the crew covered the wire with line hose to avoid contact with steel pole. While lowering the wire to relieve tension, the wire rolled out of the rubber hose and contacted the steel pole, causing the circuit to fault.	Ensure adequate cover is in place over wires to help prevent a circuit fault in the event of an unintended contact with the wire.
OSHA Incident - Crew member was working in a canyon that was covered in poison oak and later developed a rash due to coming in contact with the poison oak. He received medical treatment due to the severity of the rash.	Wear the proper Personal Protective Equipment when working in an area where there is exposure to poison oak, such as gloves, long sleeve shirt, and long pants. If contact is made with poison oak, try to wash off the area as soon as possible.
SIF Potential Incident - Contracted crew was tasked with weighing FM200 cylinder tanks. After the crew had weighed one of the cylinders, they brought it back to the electrical room and as they were discussing what to do next, they began to hear a hissing sound coming from the pilot valve of the cylinder. The cylinder then propelled itself across the room, causing various damage in the electrical room.	When handling or storing cylinders, valves should be kept tightly closed, with valve caps, pins, safety features, and/or valve protection in place.

Electric - 1 Gas - 0 OSHA - 1 DART - 0 SIF Potential - 1 Serious Safety Incident - 0

*SIF Potential Event = Serious Injury/Fatality Potential



FUTURE FOCUS AREAS

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- Procedural gaps
- Vehicle
- Work Environment

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Contractor Safety Talks

Electrical Safety Awareness

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.

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When working around any device that has electricity running through it, especially low or high voltage electrical lines, there are certain precautions that should be taken to ensure the safety of the crew as these lines can be very hazardous. The goal is to protect employees exposed to dangers such as electric shock, electrocution, fires, and explosions.

When tasked with working around or on electrical lines, it is important to have a thorough tailboard completed and review it with the whole crew so everyone is aware of the tasks/plan for the day, the hazards to be aware of, and the proper PPE to wear. Some examples of additional PPE that is used when working around energized electrical lines are approved insulated gloves and/or insulated tools that have been inspected prior to use. It is also very important to have a step by step plan in place for the crew to follow to ensure their safety and reduces the risk of an injury. If the work scope changes during the work day for any reason, the crew should stop the job to re-tailboard to ensure every crew member is clear on the new work scope and is aware of how to proceed safely.

Protection from electrical hazards can only be accomplished by following proper safety, working, and Temporary Personal Protective Grounding/ EPZ procedures. A majority of incidents that occur in the electrical industry today, are from the **failure to properly Identify, Isolate, Test De-energized, and Ground/ EPZ** the system to be worked. Grounding is the only positive way of verifying that the lines and equipment are de-energized. A grounded transmission or distribution line no longer energized at its normal operating potential can still carry voltage or current that can be deadly. The last step, Grounding and establishing an all-inclusive EPZ, is the most important part of the process. Working safely helps avoid an employee being severely injured by an unintentional electrical contact and can save lives.

FAQ

Q: How do I learn more about Grounding for the Protection of Employees?

A: Go to "Cal/OSHA 2940.15 "Grounding for the Protection of Employees" and/or click [here](#)

Did you know: [Link](#)

Between 2011 and 2021 there was a total of 1,201 workplace fatalities involving electricity reported by OSHA and 1,653 electrical fatalities reported by the BLS. During this time period, 69% of all electrically related deaths happened in non-electrically related occupations.

The top 3 sources of these electrical fatalities are from overhead electrical line contact, unexpected contact with energy, and working on energized parts. The top 3 occupations involved in electrical fatalities are electricians, non-construction laborers, and construction laborers.



OBSERVATIONS FROM THE FIELD

During the past month, SDG&E safety observers performed jobsite inspections on almost all SDG&E jobsites and observed 34,289 construction activities. Of these there were 284 at-risk conditions documented and corrected in the field. Of the at-risk conditions observed, 97% were low risk, with the majority of them being PPE gaps. There were 28 medium at-risk observations and 0 high risk observations during the month.

At-Risk Observations (September 2023)	At-Risk Behaviors
Traffic control	There has been an increase in observations where crews do not have adequate traffic control in place to protect the crew and the public.

NOTABLE AT-RISK OBSERVATIONS

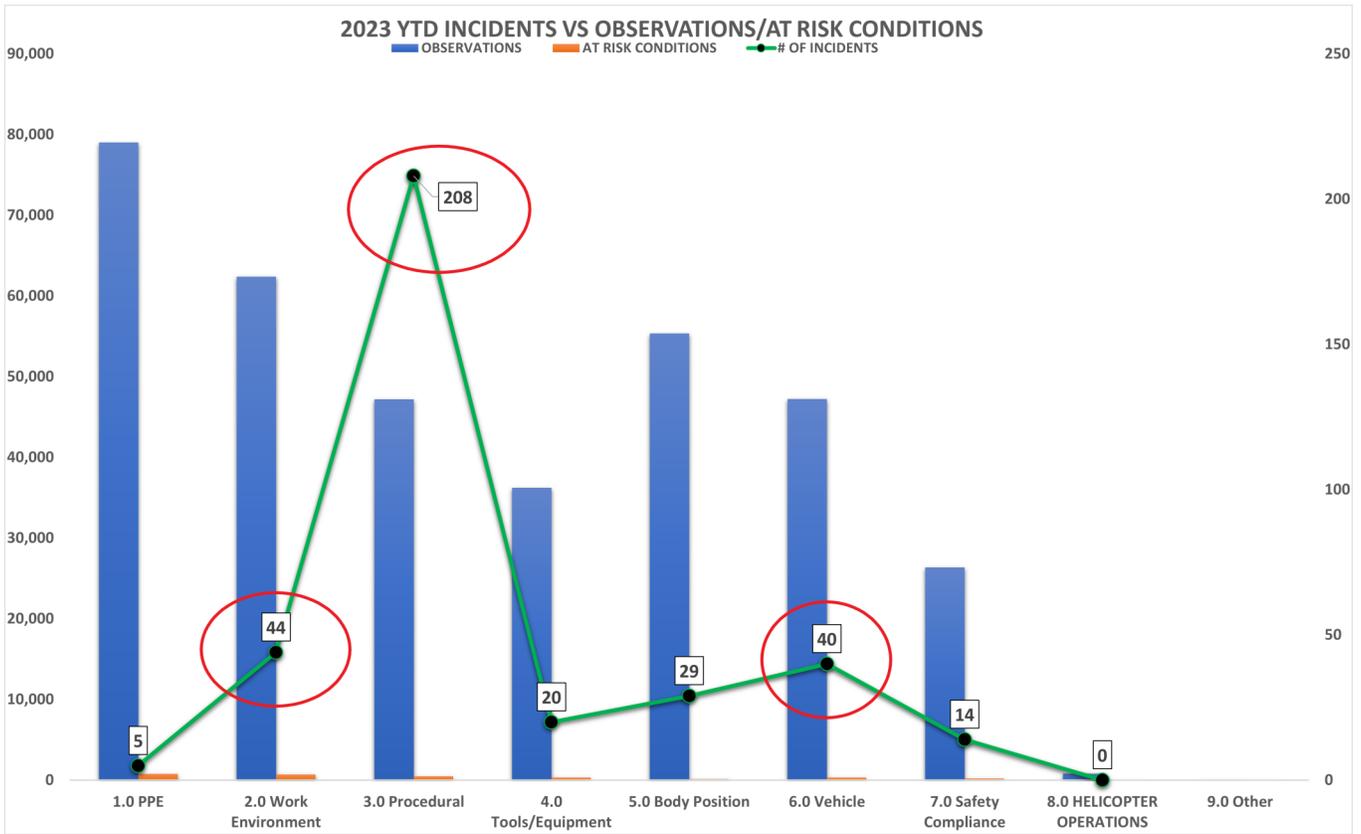
Medium-High Risk Observations (September 2023)	Potential Mitigation
Crew member was grinding meter rings and had removed the wheel guard from their grinder prior to cutting the rings.	Wheel guards should remain in place at all times to ensure the safety of the user.
Crew parked their work vehicle in a lane that was not blocked off by traffic control to unload signs and to also talk to other crew members while cars drove around them.	Crew members should unload materials/equipment in a safe area that is either within the traffic control zone or in an area away from oncoming traffic.
It was observed that the crew had began work for the day and there was no JHA/tailgate complete at all.	A Job Hazard Analysis (JHA) should always be completed thoroughly and reviewed with the crew prior to work starting so the crew is aware of the tasks for the day and potential hazards.
Crew did not have the proper traffic control set up to protect both the crew and the public. There were also open excavations that were not barricaded in an area with many pedestrians walking by as well as traffic.	Ensure that is an approved traffic control plan set up to ensure the safety of the crew and pedestrians. Open holes or trenches should be barricaded .

MONTHLY INCIDENTS/NEAR MISSES

Incidents (September 2023)	Potential Mitigation
DART Incident - While a contracted employee was hand pulling a 500 MCM wire, the mule tape broke and the employee fell back onto the concrete curb, injuring his shoulder and knee. Due to his injuries, he was placed on modified duty.	Ensure the correct tool/material is used for the task at hand and is rated to withstand any pressure or weight that could be applied.
OSHA Incident - While the crew was performing tree trimming, one of the crew members got stung by a bee and happened to be allergic to bees. Fortunately, he had his EpiPen onsite and it was administered, followed by being taken to the hospital and was released the same day.	Take the necessary precautions if one has any serious allergies and ensure the crew knows where the nearest emergency facility is located, which should be discussed during the morning tailgate meeting.
SIF Potential Incident - A contractor crew was performing overhead electric transmission work. While performing the work, one of the contractor's employees received voltage via induction.	Always utilize proper grounding procedures, be aware and identify other live circuits in the vicinity of your work location, and wear the proper PPE at all times.
Serious Safety Incident - While performing overhead electrical work, a contracted Journeyman Lineman made contact with 12kv (distribution electrical system).	Prior to performing any work on overhead electrical lines, ensure a work plan is in place, reviewed with the crew, and all steps are followed. Also utilize proper grounding procedures, and the proper PPE is being worn at all times.

Electric - 0 Gas - 0 OSHA - 2 DART - 2 SIF Potential - 1 Serious Safety Incident - 1

**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
- Vehicle
- Work Environment

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Contractor Safety Talks

Safe Driving/Operating Practices

Special Points of Interest:

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Did you know:

According to the U.S. Department of Health and Human Services, National Institute of Occupational Safety and Health, each year more than 100 workers are killed and over 20,000 are injured in the highway and street construction industry.

In 2023 so far, SDG&E has had approximately 45 contractor related incidents that involved a crewmember either operating a piece of heavy equipment or a work vehicle and causing property damage due to lack of awareness, not performing a 360 degree walk around, or not using a spotter when they should have been.

Whether operating a piece of heavy equipment or driving a vehicle on the jobsite, it's the employee's responsibility to operate the equipment safely.

Many jobsites can be congested or have restricted space with many crew members doing various tasks throughout the day. Due to all the commotion that can come with a jobsite, anyone operating a piece of equipment or a vehicle should keep various things in mind when driving. Prior to operation, the operator should do a daily inspection of their equipment to ensure its in good working order. During operations, the operator should avoid distractions such as being on a cell phone and be aware of their surroundings, especially if operating in a tight space. To increase awareness, the operator can do a 360 degree walk around to ensure they identify any hazards prior to moving their equipment. This reduces the chances of the operator potentially damaging a piece of property or causing an injury to another team member.

Using a spotter is also very important when operating, especially if backing up or maneuvering in close quarters. Having clear communication, whether verbal or non-verbal, is essential in preventing an accident from occurring. Spotters should wear high-visibility apparel, be knowledgeable of the drivers blind spots, and be trained on non-verbal hand signals to be able to effectively communicate with the operator. Training on equipment is critical, but also learning good behind the wheel habits, learning vehicle/equipment blind spots, and best practices for backing can create better operators, leading to a safer jobsite.

FAQ

Q: How do I learn more about safe operating practices?

A: Go to "Cal/OSHA 1592 "Warning Methods" and/or click [here](#)

Q: How do I learn about preventing backovers?

A: Go to "OSHA Safety & Health Topics "Preventing Backovers" and/or click [here](#)

OBSERVATIONS FROM THE FIELD

During the past month, SDG&E safety observers performed jobsite inspections on almost all SDG&E jobsites and observed 35,696 construction activities. Of these there were 214 at-risk conditions documented and corrected in the field. Of the at-risk conditions observed, 96% were low risk, with the majority of them being PPE gaps. There were 32 medium at-risk observations and 0 high risk observations during the month.

At-Risk Observations (October 2023)	At-Risk Behaviors
Suspended Loads	There has been an increase in observations where crews members are standing directly under or within the drop zone of a suspended load, putting themselves in an unsafe position.

NOTABLE AT-RISK OBSERVATIONS

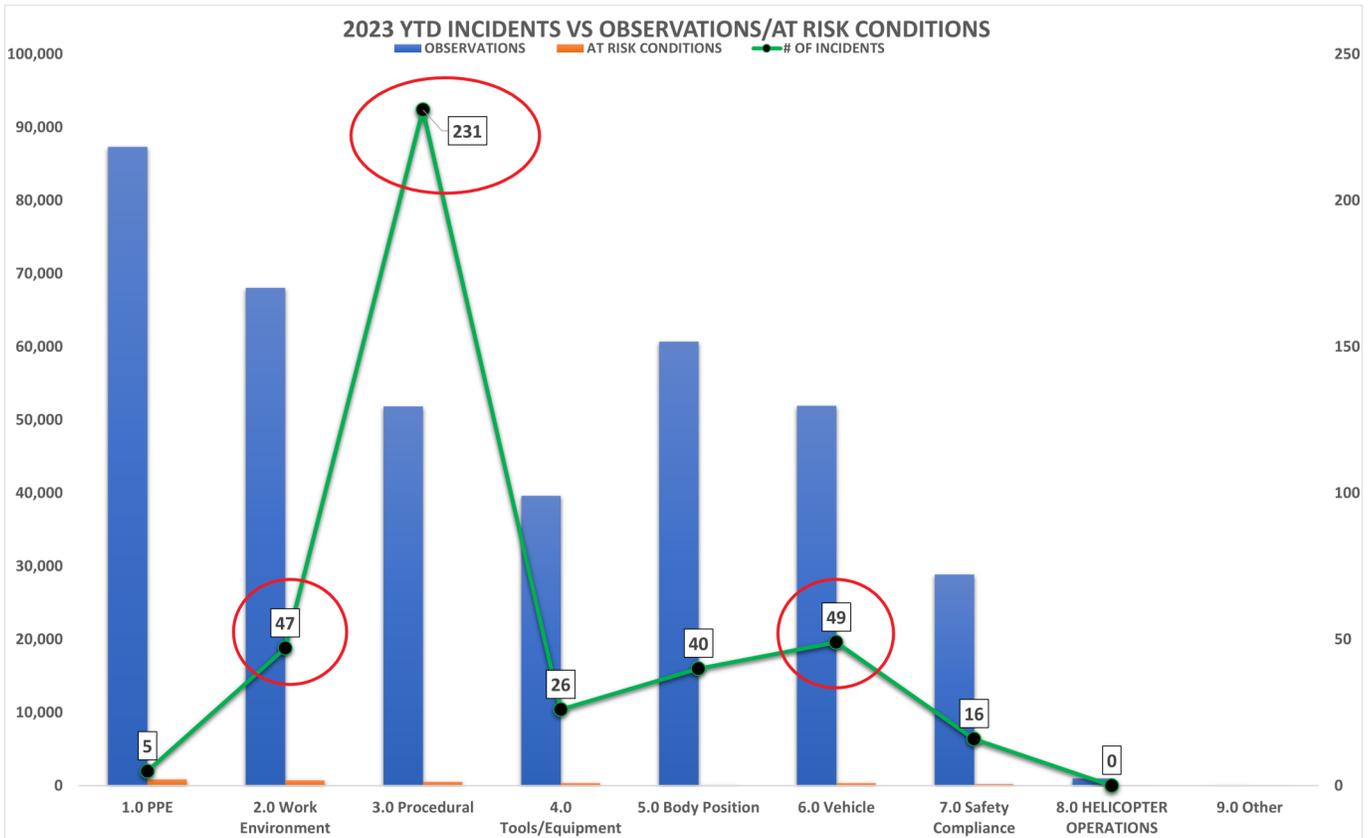
Medium-High Risk Observations (October 2023)	Potential Mitigation
Crew member was wearing a full face respirator and had a beard/facial hair, which prevents the respirator from having an airtight seal.	A fit test should be conducted prior to an employee where a half/full face respirator. During that test and every time the employee has to wear the respirator, the employee should not have any facial hair so the respirator can maintain a full seal.
A crane service spotter was standing almost completely under a suspended load during crane operations to set a box.	If loads must be passed over workers, ensure safety measures are in place to prevent loads from becoming disengaged. If the operator is not moving a suspended load, no employee should be within the fall zone, per Cal OSHA 5002 Overhead Loads.
Contractor performed their own traffic control and one flagger was directing traffic without a Stop/Slow paddle. The second flagger left the flagger station to go fuel a chainsaw to remove brush.	Ensure an approved traffic control plan is in place and that there are qualified designated flaggers in place.
While welding operations were being conducted, the fire watch did not have a fire extinguisher within a 35' diameter of the welding area.	If there is hot work being conducted, a fire watch should be present at all times and ensure compliance with ESP 113.1/G8325.

MONTHLY INCIDENTS/NEAR MISSES

Incidents (October 2023)	Potential Mitigation
DART Incident - While a crew member apprentice was making final adjustments to a distribution pad mounted transformer with its lid open, the lid started to shift closed. A nearby traffic control crew member realized what was happening and rushed over to try to assist before the lid closed on the apprentice. In the process, the traffic control employee's thumb got pinched in the closing lid, fracturing it.	Ensure any crushing hazards are identified prior to beginning work and put in place a safeguard such as sling to prevent an object from falling or closing unintentionally.
DART Incident - Crew member was performing work when he stepped on a rock, rolling his ankle, causing swelling and throbbing. After evaluation, the employee's right foot was determined to be fractured.	While performing work operations, be aware of your surroundings as well as maintain good housekeeping the jobsite.
Electric Incident - A contracted crew was tasked with replacing a live-front transformer. The switching plan had gone through several revisions and during the execution of the switching plan, there was an unplanned outage. The outage was due to a misinterpretation of the plan and inconsistent verbiage that should have been caught by the crew prior to execution of the plan.	Clear and concise language should be used when writing a switching procedure. Proper training should be provided to any crew member that will be involved in a switching procedure.
Property Damage - Contracted crew was tasked with relocating three six-packs of nitrogen cylinders that were on wheels. The six-packs were secured with 2inch load straps against the stake bed truck's headache rack. During transport, while partially through a turn, the load straps became loose, allowing the three six-packs to shift to the right and struck and broke the front side panel on the stake bed truck. The three six-packs then rolled out onto the ground and fortunately there was no release of pressure in any of the cylinders.	Ensure a properly trained, licensed, and certified driver is used for transport for this kind of task. Also, identify load classifications by a qualified driver/personnel.

Electric - 2 Gas - 0 OSHA - 0 DART - 4 SIF Potential - 0 Serious Safety Incident - 0

*SIF Potential Event = Serious Injury/Fatality Potential



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