



TO:

All parties in interest

Via: E-Mail Transmission

DATE

08/30/2023

RE:

**Reminder Notice of next Joint
Red Book Safety Committee
Meeting**

E-MAIL: JWEAVER@WESTERNLINENECA.ORG

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

- **Tuesday, September 5, 2023, at 1:30pm** at Cal-Nevada JATC Training Center in Riverside, CA

The Minutes for the June 7, 2023, are posted on the Chapters Website and can be found through the following link:

Thanks, and stay safe!

Jules W. Weaver
Chapter Manager

MEETING MINUTES
IBEW 47-1245 / WLCC-NECA JOINT SAFETY COMMITTEE
June 7, 2023
Cal-Nevada JATC – Woodland Training Center

Present:

Mgmt:

James Stapp
Lon Peterson
AJ Zartman
Raul Guardado
Chris Burt
Larry Lopez
Casey Kelley
Matt Short
Todd Barton
Jeremy Atchison
Nicholas Stark
Chris Larson
Gerald Munkins
Casey Wilson
Matt Tedder Jr.
Sonny Mendez
Desmond Lindsey
Charles T. Roper
Laub Neff
Neil Treffers
Janet Andrews
Walter Posey
Cheyna Cochran
Ben Nelson
Ryan Ritchie
Frank Farwell
Jason Falske
Lito Wilkins
Chris Hess
Ross Cramer
Jules Weaver – Secretary

IBEW:

Ralph Armstrong – Chairman
Ben Contreras
Colin Lavin
Ralph Kenyon
Cory Pederson
Arnold Trevino
Charlie Randall
Jeremy Newman

Cal-NEV
JATC/Guest:

Jimmy Skinner, Cal-Nevada JATC
Eugene Gloudeman, Cal-Nevada JATC
Kleet Jonte, Cal-Nevada JATC

Meeting called to order by Chairman Armstrong at 1:05pm.

Chairman Armstrong 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 **March 30, 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 were also discussed. The following contractors noted they had no accidents or incidents to discuss: Hampton Tedder Electric; Iron Step; Pro-Traffic; Source Power Services; Mountain Engineering; Diversified Utility Services and Ferreira Power.

JATC Reports: Training Director Gloudeman 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. Gloudeman 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 of the apprentices. Mr. Gloudeman also discussed an incident where a 7th Step apprentice accidentally cut his buck squeeze and went to the ground. Luckily he is expected to make a full recovery. Director Skinner then discussed specific statistics on apprentice accidents/incidents and noted that vehicle accidents are a large part of the overall incidents that involve apprentices.

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

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

Exhibits attached hereto:

Exhibit B – Various Safety Bulletins from SCE

Observations: If you are allergic to bees, hornets etc. make sure your crew is aware and that you have an EpiPen available, and the crew knows where you keep it. In addition, watch out for snakes with the summer heat that is now upon us. Also be cognitive of the effects of heat stress and hydrate often and stay away from consuming energy drinks. Also discussed was the use of helicopters in rescues and the fact if you use a company or contracted helicopter service to medivac an injured employee there is probably no place at the hospital for that helicopter to land at. Always keep the local hospital and emergency contact info available to the crew.

Old Business:

1. Chairman Armstrong noted that the Red Safety Book Subcommittee is continuing to work on cleanup and proposed edits to the Red Safety Book’s full Safety Committee and noted that the goal is for that to occur sometime this year. In addition, Mr. Colin Lavin announced the appointment of Mr. Casey Lavin to the vacant spots on the Red Book Subcommittee and the full Safety Committee due to Mr. Rod Peterson resigning from those positions.
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. Secretary Weaver ask the group to send him vehicle accident reports for a 3D video the Chapter will be putting together like the other videos that are available on the **Chapters Safety & Training Website**: https://www.westernlinenece.org/document_list_details.php?id=39.
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:

Wednesday– September 5, 2023, at 1:30pm at the Cal-Nevada JATC Training Center located in Riverside, CA.

Meeting adjourned at 3:00pm

IBEW 47 - 1245 / WLCC - NECA
3rd Quarter 2023 Accident/Incident Reports

| <u>Date Of Incident</u> | <u>Occupation</u> | <u>Type of Incident</u> | <u>Body Part / Root Cause</u> | <u>Description</u> |
|-----------------------------------------|-------------------|-------------------------|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Contractor Significant Accidents | | | | |
| 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. |
| 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. |
| 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. |

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| 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. |
| 7/17/2023 | Outside Crew | Injury | Heat Illness | 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. |
| 6/23/2023 | Outside Crew | Injury | Lacerations to Head & Shoulder | 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. |

| Date Of Incident | Occupation | Type of Incident | Body Part / Root Cause | Description |
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| 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.</p> <p>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> |
| 6/19/2023 | Outside Crew | Injury | Finger Burn | <p>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.</p> |
| 6/12/2023 | Traffic Control Crew | Injury | Civilian Assault Laceration to Face | <p>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 were 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.</p> |
| 6/12/2023 | Outside Crew | Injury | Finger Contusion | <p>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.</p> |

| <u>Date Of Incident</u> | <u>Occupation</u> | <u>Type of Incident</u> | <u>Body Part / Root Cause</u> | <u>Description</u> |
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| 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). |
| 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. |

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| 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. |

| <u>Date Of Incident</u> | <u>Occupation</u> | <u>Type of Incident</u> | <u>Body Part / Root Cause</u> | <u>Description</u> |
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| 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 |
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| 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 wiggly 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, troublemendetemined 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> |

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| 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 ½ 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. |

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| Contractor Circuit Interruption Incidents | | | | |
| 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. |
| 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. |

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| 7/10/2023 | Outside Crew | CCII | Operator Error | <p>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.</p> <p>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.</p> <p>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.</p> |
| 5/22/2023 | Tree Crew | CCII | Operator Error | <p>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.</p> |
| 5/22/2023 | Outside Crew | CCII | Operator Error | <p>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.</p> |
| 5/10/2023 | Gas Crew | CCII | Improper Pothole | <p>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.</p> |
| 4/3/2023 | Outside Crew | CCII | Operator Error | <p>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.</p> |

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| 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. |

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| 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. |

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| Contractor Other Incidents | | | | |
| 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. |
| 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. |

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| 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. |
| 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. |

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| 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. |
| 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. |

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| 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. |
| 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. |

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| 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. |
| 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. |

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| 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. Gusty 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. |

| <u>Date Of Incident</u> | <u>Occupation</u> | <u>Type of Incident</u> | <u>Body Part / Root Cause</u> | <u>Description</u> |
|-------------------------------------|-------------------|-------------------------|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Customer Accidents/Incidents | | | | |
| 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. |
| 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 Troublemaker | Fatality | Inadvertent Contact w/Energized Source | Fatality - January 16, 2023, A SCE Troublemaker (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. |



4/14/2023
Expiration: Current until Archived

Ref. No. HL-0523

Enhancement to the existing Generation Interconnect process for Construction Field Personnel prior to end point testing

Purpose

This bulletin is intended for both SCE and contractor personnel. The purpose of this Hotline Bulletin is to provide guidance on new procedures for end point testing and energizing of third-party generation interconnection to the Southern California Edison (SCE) system.

Background

A Co-Gen Wind Farm Interconnection Potential Transformer failed catastrophically during an end point test on a Remote-Control Switch.

Discussion

During installation by the third-party interconnection customer. An incorrect Potential Transformer (PT) was installed and not wired correctly.

The current SCE processes to validate and approve customers equipment prior to end point testing are inadequate.

Action

1. Enhanced Generation Interconnection process for Construction Field Personnel prior to end point testing:
 - a. Validate Interconnection Customer's single line diagram and line side connected equipment to verify proper voltage ratings are adequate for incoming line
 - b. Crew to perform physical verification prior to commencing end-point testing that the Interconnection Customer's main protection device (RAR or CB) is open, and

PT disconnected to the line side of the Interconnection Customer's protection device.

- i. Enforce verification of any changes in the Interconnection Customer's equipment and connectivity prior to end point testing.
- ii. After the end point test has been conducted, the crew to leave the switch in the open position and coordinate with the Switching Center to close the switch remotely. When end point testing is complete, and Switching Center approval, then Interconnection Customer to be informed to tap up PT.

Standards Affected

N/A

Contact Information

- SCE Employees – contact JOSHUA.LEIBELT@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



4/18/2023
Expiration: Current until Archived

Ref. No. OB-0523

Arc Flash Manual Updates

*****Supersedes OB-0223*****

Purpose

The purpose of this bulletin is to inform T&D and Contractor personnel of important updates to the Arc Rated Personal Protective Equipment (AR PPE) requirements as listed in the [Substation Arc Flash Manual \(SAFM\)](#), [Transmission Arc Flash Manual \(TAFM\)](#), and the [Distribution Arc Flash Manual \(DAFM\)](#) (collectively, AFMs). **This superseding bulletin is meant to update OB-0223, dated 2/22/2023.**

Background

The AFMs and associated appendices are live documents that may change with or without notice, depending upon system changes and engineering innovations. It is vital to always refer to the appropriate AFM and appendix before any work commencement. The previously communicated minimum calorie requirement of 25 cal/cm² system-wide has been canceled and work is to again follow the AFM appendices, which have been updated as of April 19, 2023.

Discussion

All AFM appendices have been revised and the "Required PPE" has been updated as appropriate. The cal/cm² listed is to be adhered to when within an arc flash boundary (AFB).

As a reminder, not all circuits are currently listed in the manual. A process to obtain calculations prior to work commencement has been determined. When calculations are required, send an email to Arc.Flash@sce.com at least five (5) working days prior to work commencement to request the calorie count.

Do not utilize Section 9.0 *Beyond Branch Line Fusing (BLF)* in the DAFM. For planned work, a P-Spec should review the DAFM appendices to see if the work location and task being performed exceeds 8 cal/cm² to determine the fuse type to see if they are approved to reduce AR/PPE to 8 cal/cm². If they do NOT reduce the incident energy, reach out to Field Engineering to determine if they can be used to reduce AR/PPE. Field Engineering will advise either to change fuse type or if no change is possible to reduce AR/PPE.

There is no need to contact Field Engineering if after reviewing the DAFM appendices it has been determined that the incident energy is already at 8 cal/cm².

Leverage the following table if Branch Line Fusing is a mitigation option for AR PPE.

Fusing for Arc Flash IE Reduction (16kV and Below)

Within 2/0 or 4/0 Grounding Area (Potential Fault Duty > 9kA)

| | |
|---------------------------|---------------------------------------|
| Approved | Contact Field Engineering |
| UG CLF, ELF, or X-Limiter | Fault Tamer, SMU 20 or all Fuse Links |

Within #2 Str. Grounding Area (Potential Fault Duty < 9kA)

| | |
|------------------------------------------------------------------------------------|----------------------------------|
| Approved | Contact Field Engineering |
| UG CLF, ELF, X-Limiter, Fault Tamer, SMU 20, or Enclosed/Box Cutout with Fuse Link | Open Style Cutout with Fuse Link |

Important Notes:

- At NO time is a Liquid fuse or Oil Filled Cutout to be used to reduce the level of PPE required.
- If fusing type is not shown above, refer to the DAFM or contact Field Engineering to determine what level of AR/PPE is required.
- Crew must field verify the fuse type before any arc flash hazardous task can begin if they are using the fuse for the purpose of reducing their AR/PPE requirements.
- Crew shall not change fuse types/sizes without contacting Field Engineering first to provide a recommendation.
- AR/PPE requirements may not be reduced when working on pole/equipment that contains fuses intended to be used for arc flash incident energy reduction (OH Cutout, PMH, BURD, LBFC, etc.). The exception would be PMEs, where the internal fusing can potentially be used to reduce AR/PPE requirements when operating load side elbows.
- If employee can stay outside of the AFB, the level of AR/PPE required would be 8 calories.

Action

Effective immediately, it is the responsibility of the crew to verify calorie count for the Transmission Line, Substation, and Circuit being worked during the crew's Tailboard. Refer to the appropriate AFM appendix and Table 3: Arc Flash Hazardous Work Activities, in the applicable AFM. Always check the appropriate AFM appendix before contacting engineering.

The manuals can be accessed via the field tools, provided links herein, or by navigating to Edison Portal > Transmission & Distribution > Common Links > T&D Publications > Arc Flash Manuals.

Review the updated AFM appendices, discuss, and ensure understanding of AR PPE layering during tailboards, safety meetings, etc. and Table 3: Arc Flash Hazardous Work Activities.

Affected

[Substation Arc Flash Manual](#)

[Transmission Arc Flash Manual](#)

[Distribution Arc Flash Manual](#)

[AR PPE FAQs](#)

[Arc Flash Training](#) (Course TD-TC-AFAC_Y23 in My Learning)

Contact Information

- SCE Employees – contact your Supervisor, your Safety Advisor, 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



7/14/2023
Expiration: Current until Archived

Ref. No. HL-0823

Fault Tamer Quarantine and Issuing of Fusing MPFR

Purpose

The purpose of this communication is to inform SCE and contractor personnel of the S&C Fault Tamer fuse quarantine, an alternative to using the Fault Tamer fuse, and issuing MPFRs for fusing equipment.

Background

SCE's Material Performance and Failure Reporting (MPFR) system has tracked field failures of Fault Tamer fuses manufactured by S&C and Asset Engineering has requested the available inventory be quarantined and collected at one supply chain location. New fuses will be provided following release of approved new Fault Tamer fuses by the manufacturer.

Per SCE DOH PR 128, continuity test all fuses prior to installation.

In the event any current limiting fuse (including the Fault Tamer) is dropped, it shall also be returned for salvage.

Action

Effective immediately, take the following action:

1. All districts and warehouses return the following Fault Tamer fuses and Fault Tamer accessories:

| SAP Number | Description |
|-------------------|------------------------------------------------------|
| 10107405 | Fault Tamer, Complete Assembly including fuse holder |
| 10108640 | Fault Tamer fuse only. Does not include fuse holder |
| 10108451 | Backup Limiter for Fault Tamer fuse |

Send any item in the table above to: Company Warehouse 0921 (Metro West/Dominguez Hills). Mark the shipment: "Fault Tamer Quarantine" and include the work location, quantity of each item being returned, and date of shipment.

This effort should be completed within two weeks of published date of this bulletin.

Also note:

1. The ELF fuse can be used as the alternative to the Fault Tamer fuse. Refer to DOH PR 107 (ELF Fuse – 15 kV Rating) for SAP codes.
2. Existing Fault Tamer fuse installations may remain in operation. Change out all fuses if one or more existing Fault Tamer fuse requires replacement.
3. If a fuse or fuse holder of any type fails in an unexplained manner, remove and retain the failed device(s) along with any other fusing equipment at the installation (e.g., adjacent fuses and fuse holders). Create an MPFR, per requirements in DOM MP-1, and send the devices/equipment to:

**Attn: Failure Analysis
SSID, MSS Bldg.**

Standards Affected

DOH PR 107 (15 kV ELF Fuse Table)
DOH PR 128 (Fusing Practices, Fault Tamer Application)

Contact Information

- SCE Employees – contact David.Melendrez@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

Heads-Up Communication



Published by T&D Construction Methods, Chino

7/14/2023
Expiration: Current until Archived

Ref. No. HU-1123

Updates to [HL-0523](#):

Enhancement to the Existing Generation Interconnection Process for Construction Field Personnel Prior to End Point Testing

Purpose

The purpose of this communication is to provide guidance to Southern California Edison (SCE) and contract personnel on the updated procedure for end point testing and energizing of a generation customer's interconnection to the SCE system.

Background

A Co-Gen wind farm interconnection potential transformer (PT) failed catastrophically during an end point test.

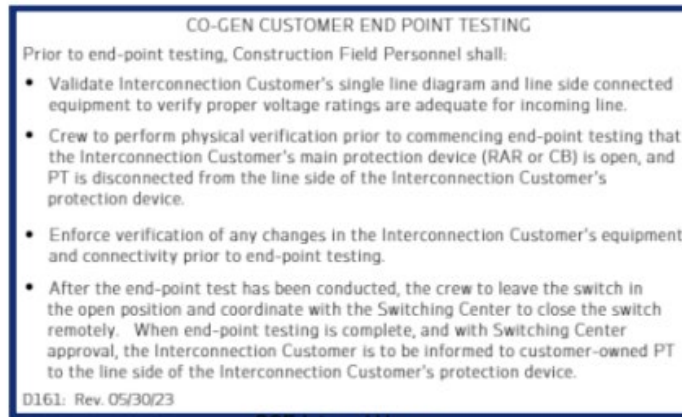
Discussion

During installation by an interconnection customer, an incorrect PT was installed on a RCS and wired incorrectly.

Following a review, it was determined that the current SCE process to validate and approve customer's equipment prior to end point testing are inadequate.

Action

1. Updated Generation Interconnection process for field personnel prior to end point testing:
 - a. End point test Deca# D161 shall be placed on the work order maps for the line side PT that needs special consideration during end point testing.



NOTE: The purpose of the decal is to include verbiage on the work order maps to inform the crew there is a line side PT in the circuit and identify the PT on the single line diagram

- b. Production Specialist (P-SPEC) shall verify that any PT installed on the line side of the customer's interconnection device ahead of the switch is disconnected, and any other customer protection device ahead of the switch, and main protection device (RAR or CB) is open before end point testing.
- c. Validate customer's single line diagram and line side equipment to verify proper voltage ratings are adequate for incoming line.
- d. Crew shall perform physical verification prior to commencing end point testing and affirm the customer's main protection (RAR or CB) is open, and any PT installed on the line side of the customer's protection device disconnected.
 - i. Affirm any changes to the customer's equipment and connectivity prior to end point testing with the responsible planner or engineer.
 - ii. After the end point test has been conducted, the crew is to leave the switch in the open position and coordinate with the Switching Center to close the switch remotely. When end point testing is complete, and with Switching Center approval, the customer will be informed that the PT may be connected.

Standards Affected

N/A

Contact Information

- SCE Employees – contact JOSHUA.LEIBELT@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



7/14/2023

Ref. No. OB-0923

Expiration: Current until Archived

Use of Aluminum Covered Conductors (CC) Within One Mile of the Coast

Purpose

The purpose of this operating bulletin is to reinforce standards for installing Hard Drawn Copper (HDCU) covered conductor in coastal areas and provide awareness surrounding additional inspection criteria for Covered Conductors (CC).

Background

SCE design standards specify the installation of HDCU covered conductor within one mile from the coast. These standards have been developed with the understanding that copper conductors are more resistant to corrosion than aluminum (ACSR) in the long-term. Recently, advanced corrosion of ACSR CC has been identified in certain coastal installations.

A focused inspection effort for investigating the extent of the advanced ACSR CC corrosion is being developed. The effort will also address remediation. Guidance for addressing ACSR CC corrosion should it be identified with other work, is provided in the Action section below. SCE standards and training materials are being reviewed for potential updates.

Action

1. When CC is to be installed within one mile of the coast, HDCU CC must be used. In-flight work orders are expected to be compliant with the installation of HDCU CC.

2. Create an E1P1 notification for repair where bulging of ACSR CC cutbacks (See Figures 1 & 2) is identified within one mile of the coast during inspections or other work being performed. Also, submit a Material Performance Failure Report (MPFR) for ACSR CC identified with bulging at the cutback.
 - 2a. Notifications for the advanced corrosion situations must be reviewed by gate keepers. The preferred repair is to re-conductor with HDCU CC between existing

dead-ends. Where reconductoring with HDCU CC is not immediately feasible, refer to paragraph 2b, below.

2b. New ACSR CC may be spliced as a short-term repair to replace degraded sections. It is recommended to remove at least 3-ft beyond the cutback for splicing. Vibration dampers may need to be relocated to adjacent poles, or alternately larger sections can be removed to avoid splices interfering with the damper. Create an E1P2 notification for a future, longer-term repair reconductoring the aluminum CC with copper CC.

3. Troublemakers, other SCE first responders, or repair crews are to report any downed wire events believed to have been caused by corrosion at the ACSR CC cutback to Failure Analysis Engineering by submitting an MPFR. Contact the Construction Methods Help Desk for questions.
4. It is expected this corrosion issue is limited to ACSR CC within one mile of the coast. If either ACSR CC outside of the coastal environment or any HDCU CC is found with bulged covering, report the condition to the Construction Methods Help Desk (CMHelpdesk@sce.com).
5. Send any removed bulged CC sections via PONY to: SSID, Failure Analysis, Westminster. Send only the cutback bulged sections in a 3-6ft length and include the structure number associated with the installation.

Standards Affected

- DDS 10 - 5.1 Design Criteria - Covered Conductor
- DOH CC Section - Covered Conductor

Contact Information

- SCE Employees – contact [Niousha Tavakoli](mailto:Niousha.Tavakoli@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

Figure 1: Examples of bulging covering at the CC cutback

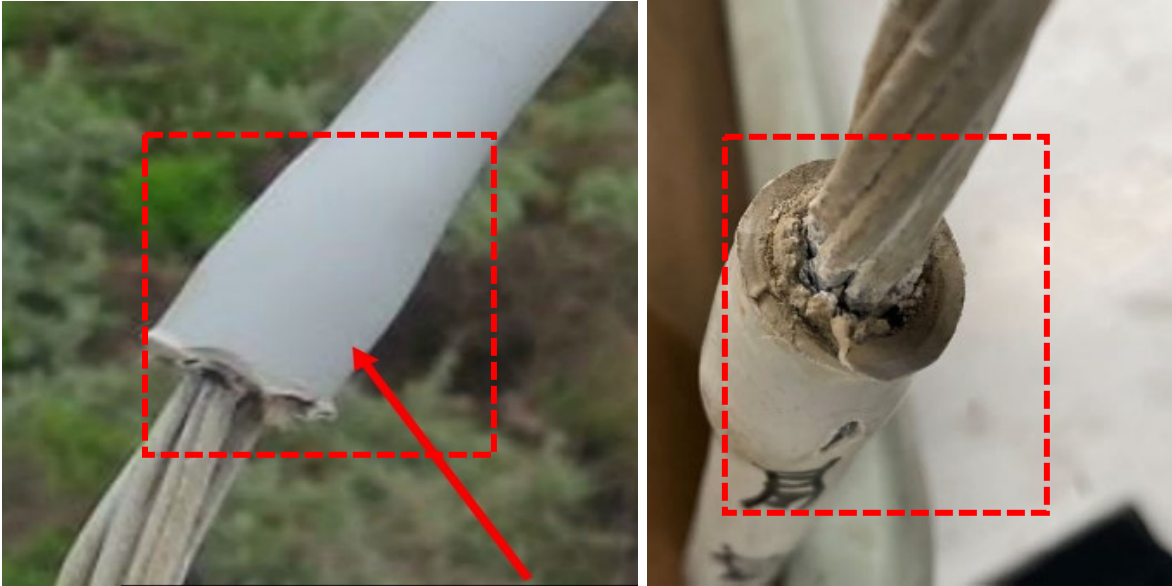
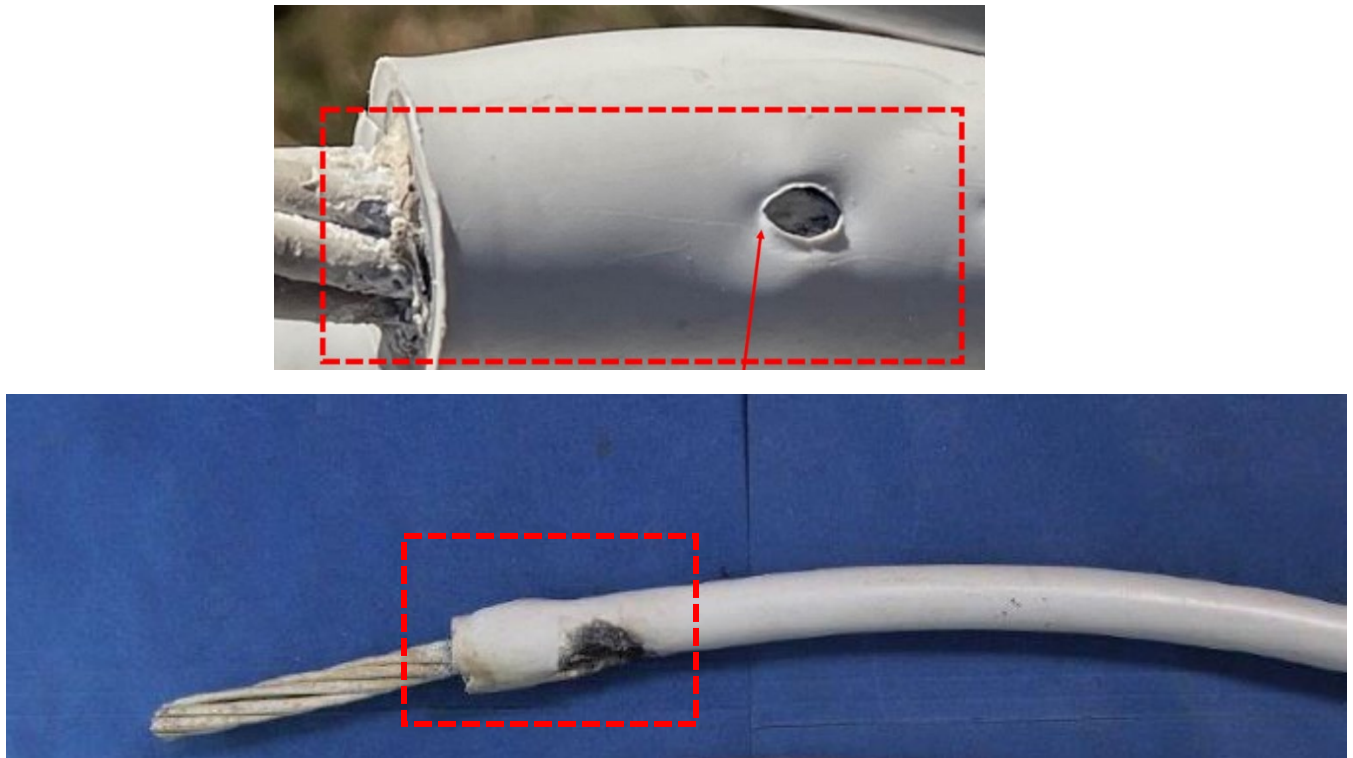


Figure 2: Examples of tearing created by bulging at the CC cutback



Transmission & Distribution TOOL NEWS



Published by Construction Methods, Chino

7/19/2023

Ref. No. TN-0823

Expiration: Current until Archived

Greenlee Cutter Recall

Purpose

The Purpose of this Tool News is to communicate the recall for repair process of certain Greenlee Cutters.

Background

Greenlee Tools, Inc. recently determined a risk that the hydraulic pressure release valve on Greenlee ESG45LX / ESG45X models made from October 2016 to April 2023 (the “Tool”) could become obstructed, causing the Tool’s pump cylinder housing to experience over-pressurization and sudden rupture resulting in the release of pressurized hydraulic oil. This sudden release of high-pressure hydraulic oil can result in personal injury.

Discussion

Please take immediate steps to inspect all ESG45LX / ESG45X tools in your possession according to the instructions in the “Action” section of this bulletin.

Action

STEP 1 – Inspect the tool decal to determine tool’s model (see, Figure 1). If the tool model shows “ESG45X” or “ESG45LX”, continue to Step 2. No other Greenlee models are affected by this Notice.

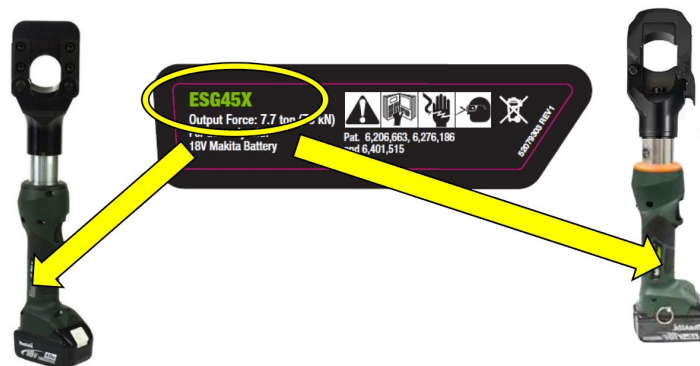


Figure 1

STEP 2 – Remove battery from tool. Look into the battery shoe area, to determine if there is a White Dot as shown in Figure 2. If there is a White Dot, this tool has already been reworked and is not part of this notice. If there is no White Dot, continue to Step 3.

STEP 3 – If there is no White Dot, determine the two-character tool Date Code by looking at the serial number label (See Figure 3). If serial number label is missing, contact [Construction Methods](#) for assistance. If the two-character Date Code listed on the tool serial number label is: KT, KV, KW, KX, KY, KZ, K1, LN, LP, LQ, LR, LS, LT, LV, LW, LX, LY, LZ, L1, MN, MP, MQ, MR, MS, MT, MV, MW, MX, MY, MZ, M1, NN, NP, NQ, NR, NS, NT, NV, NW, NX, NY, NZ, N1, PN, PP, PQ, PR, PS, PT, PV, PW, PX, PY, PZ, P1, QN, QP, QQ, QR, QS, QT, QV, QW, QX, QY, QZ, Q1, RN, RP, RQ, RR, RS, RT, RV, RW, RX, RY, RZ, R1, SN, SP, SQ, SR, or SS, and no White Dot is present your ESG45X/ESG45LX is affected and must be returned to Greenlee.



Figure 2



Figure 3

Do not continue to use the Tool. Again, note this bulletin is not applicable if your tool contains a White Dot or does not contain the Tool Date Codes listed above.

If your tool has a matching Date Code (Step 3) and NO White Dot is present (Figure 2) **your Tool is affected and must be returned to Greenlee. Do not continue to use the affected Tool.** You must immediately contact Greenlee Technical Service, either via email at ProToolsTechService@Emerson.com or by phone at 844-789-8665 to arrange for a free shipping code to send the Tool back to Greenlee for inspection and service work. Should you have additional questions or need help determining if your Tool unit is affected, please contact Greenlee Technical Service, either via email at ProToolsTechService@Emerson.com or by phone at 844-789-8665 for assistance.

Contact Information

- SCE Employees – contact Name [Brad Potter](#) 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



7/28/2023
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Ref. No. HL-0923

Use of Impact Drills on Overhead Electrical Connections

*****This Bulletin Supersedes HL-0119*****

Purpose

The purpose of this communication is to reiterate to SCE and Contractor personnel of the prohibition of the use of battery powered or hydraulic powered Impact Drills to tighten overhead electrical connections.

Background

Over the past few years, several transformers with damaged high voltage bushings have been reported through the MPFR system. This is a system wide problem, and in each reported case, the eyebolt on the bushing that holds the primary lead is either missing or broken. Based on the evidence, it has been determined that the most likely cause of failure is over-torquing.

Reports also indicate impact drills are being used to tighten the eyebolt connections. The problem with using these tools in this manner is that all impact drills have torque ratings that exceed the HV bushing terminal torque rating. The bushing eyebolt installation torque shouldn't exceed 20ft-lbs. The Milwaukee M18 Impact drills that have the One Key technology cannot be lowered to 20ft-lbs. of torque. Milwaukee has not been able to validate the lowest setting on a M12 impact, and Makita cannot confirm its lowest torque rating. The manufacturers have only been able to provide the top torque ratings.

Discussion

After identifying the transformer bushing failures due to the use of impact drills, all overhead bolted connections have been evaluated and it has been determined that overtightening overhead electrical connections (parallel groove clamps i.e. One Bolts, Two Bolts, Three Bolt Bricks) is detrimental to the life of the connector, conductor, and electrical equipment. In some test cases, there is no visible indication of damage or failure to the connector or conductor, but damage has still occurred.

Action

Effective immediately, stop using impact drills **when installing** overhead wire to wire and wire to apparatus/equipment electrical connections.

Torque bolt per the Distribution Overhead Constriction Standards CO 480

All overhead electrical connections are to be made tight with hand tools.

The use of impact drills for removing electrical connectors and equipment connections that will not be re-used is still allowed.

Standards Affected

Currently no standards are affected per this bulletin.

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 Bulletin

Knife Safety

This **Safety Bulletin** is to address recent cut and puncture injuries related to the improper use of knives. Multiple material-coded tools are available that **shall** be used in the place of knives while performing work in the overhead, underground, and during your daily duties.

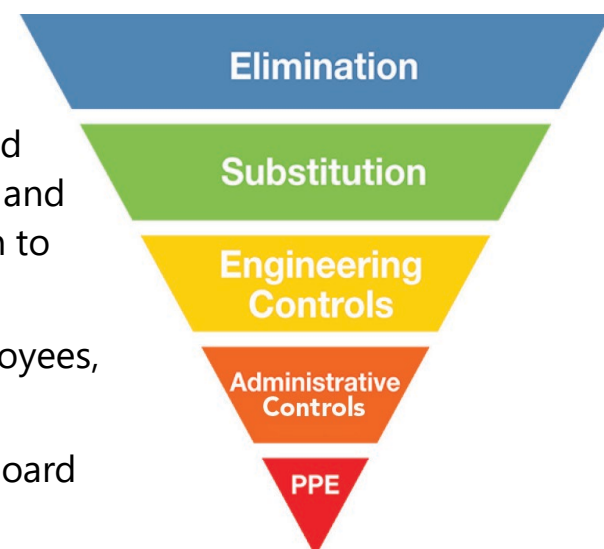
Background

Injuries are caused by the misuse of knives or using a knife in place of tools designed for specific tasks.

Skin abrasions and lacerations have the highest occurrence of traumatic hand injuries in our workplace from the use of cutting tools such as knives, razors and power tools. Injuries from a laceration can range from a simple skin abrasion to more serious injuries like severed nerves, tendons, fingers and limbs.

Workplace injuries and accidents can be painful and cause hardship to employees, co-workers, and their families.

It is crucial to discuss and apply the **Hierarchy of Controls** during your tailboard to ensure your safety, and to assist in eliminating cut and puncture injuries.



Review the actions to take when using knives

Approved tools shall be used for each of the tasks listed in the chart below. You must use the tools provided by the company. See chart below. *The list of tasks and tools is not comprehensive; for tasks not listed employees should avoid the use of knives when alternate tools are available.*

A knife may be used when there are no other tools designed to complete the task. To eliminate any possibility of a puncture or laceration injury, use proper knife safety protocols and wear required PPE, including cut- and puncture-resistant gloves. (See [T&D Cut Resistant Glove Policy](#))

Remember the proper use of knives is critical – PPE (gloves) are at the bottom of the **Hierarchy of Controls** pyramid as the least effective way of preventing injuries. The last line of defense for your hands is to wear the proper type of cut- and puncture-resistant gloves for the task to reduce the risk of injury.

| Task | Tool |
|---------------------------------------------|-------------------------------------------------------|
| Cutting tie-wraps | Lineman pliers |
| Beveling insulation on primary UG cable | Approved chamfer tool |
| Scratching oxidation of bare wire/conductor | Approved scratch tool, Madi brush knife |
| Removing semi-con from primary cable | Approved stripping tool |
| Skinning OH and UG cable | Approved stripping tool |
| Skinning weather head wire | Approved stripping tool |
| Cutting tape on cable, triplex, etc. | Lineman pliers (e.g., Klein), diagonal cutting pliers |
| Unwinding preforms and armor rod | Lineman pliers, thread chaser, screwdriver, by hand |
| Cutting Rope (mule, cotton) | Lineman pliers |
| Cutting Rope (Boline, larger rope) | Knife, power cutting plier |
| Opening boxes | Retractable boxcutter |
| Opening bags on elbows, etc. | Retractable boxcutter |



VIDEO RESOURCE:

Click [HERE](#) to watch a video on utilizing the proper tools for stripping overhead covered conductor

Safety Bulletin

Knife Safety

These **approved tools shall be used** when performing the tasks found in the table on page 1.
This list of tools is not comprehensive.

Chamfering Tools



SAP Number
 10146681
 10146680

Speed Systems CT-1 (small cable) and CT-2 (large cable) Used for "pencil" or chamfering cable insulation. Chamfering cable is cutting approximately 1/8-inch of the end of the insulation at a 45-degree angle, allowing pre-molded terminations to be easily installed.

Semi-Con Scoring Tools



SAP Number
 10185520

Ripley SCS Tool
 This semi-con scoring tool is capable of longitudinal, spiral, and square cuts on cable from #2-1000mcm, becoming very common the past few years.



SAP Number
 10145794 10142980
 10145793

Ripley BP Series "Banana Peeler"
 Used for circumference & length scoring of semi-con. Was a go-to tool for semi-con scoring before the SCS was available.



SAP Number
 10145787
 10174019

Speed Systems 1800 Adjustable Blade Scorer
 This is a common tool used in the field. The Semi-Con Scorer with adjustable blade depth is capable of spiral and square cuts.

Insulation Stripping Tools



SAP Number
 10147042

Speed Systems 1542-2AS Series Stripper
 Designed to strip insulation as well as score semi-con with precise accuracy. This is the go-to tool for removing insulation. Cable range is 1/2-inch to 1 3/4-inch.



SAP Number
 10146641

Speed Systems Mark II Stripper
 For larger cables 1 3/4-inch to 3-inch.



SAP Number
 10145849

Ripley WS 64 Series 5-35 kV Adjustable Cable Stripper for Cable Jackets and Insulation
 This tool can be used easily for stripping jacketing or insulation of large and small diameter cable, primary, or secondary cable.

Cable Stripping Tools



SAP Number
 10146874 10178824
 10178822 10178825
 10178823

4x4 Secondary Cable Stripper
 Designed for use on secondary cable. This tool makes a bevel cut edge.



SAP Number
 10146688
 10148678

Power Drill Adjustable Primary Cable Stripper
 Bushing insert fits over cable - presets cutting blade depth and can be changed easily and quickly.



SAP Number
 10146690
 10148681

Power Drill Adaptable Secondary Cable Stripper
 Used for secondary cable with bushings when splicing, jointing and terminating both HV and LV overhead power, transmission and distribution cables.

Pliers and Boxcutters



SAP Number
 10145113
 10145366

Diagonal Pliers



SAP Number
 10201044

Klein Pliers



SAP Number
 10142673

Boxcutter

Heads-Up Communication



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8/2/2023

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SOB 326 Fast Curve Settings for Incident Energy Reduction

Purpose

Advise SCE employees and contractors of the use of Fast Curve Settings (FCS) to, in most cases, reduce incident energy should an arc flash event occur.

Discussion

In a recent deep dive and thorough assessment, Engineering confirmed that when enabled, FCS will in most cases reduce incident energy. In those limited cases where a FCS does not reduce incident energy, the Arc Rated PPE required for the task under normal operating conditions must be worn. The Distribution AFM will soon be revised to include a new FCS appendix.

It is critical that the DAFM be referenced daily when selecting AR PPE because the appendices will be continually updated.

Action

When selecting AR PPE, review the DAFM to identify which circuits are Fast Curve Enabled. An example of DAFM Appendix 1 is provided below. Where a dash appears, the circuit does not have a FCS and the 'Normal Operation' column indicates the required AR PPE.

| Required PPE (cal/cm2) | | Arc Flash Boundary (ft) | | Required PPE Outside 18kA Ring (cal/cm2) | | Arc Flash Boundary (ft) | | Required PPE Outside 9kA Ring (cal/cm2) | | Arc Flash Boundary (ft) | |
|------------------------|--------------------|-------------------------|--------------------|------------------------------------------|--------------------|-------------------------|--------------------|-----------------------------------------|--------------------|-------------------------|--------------------|
| Normal Operation | Fast Curve Enabled | Normal Operation | Fast Curve Enabled | Normal Operation | Fast Curve Enabled | Normal Operation | Fast Curve Enabled | Normal Operation | Fast Curve Enabled | Normal Operation | Fast Curve Enabled |
| 25 | - | 5 | - | 25 | - | 5 | - | 12 | - | 4 | - |
| 25 | 12 | 5 | 4 | 25 | 8 | 5 | 3 | 8 | 8 | 3 | 3 |
| 25 | 12 | 5 | 4 | 25 | 8 | 5 | 3 | 8 | 8 | 3 | 3 |
| 25 | 8 | 5 | 3 | 25 | 8 | 5 | 3 | 8 | 8 | 3 | 3 |
| 25 | 8 | 5 | 3 | 12 | 8 | 4 | 3 | 8 | 8 | 3 | 3 |
| 25 | 8 | 5 | 3 | 25 | 8 | 5 | 3 | 8 | 8 | 3 | 3 |
| 12 | 12 | 4 | 4 | 8 | 8 | 3 | 3 | 8 | 8 | 3 | 3 |
| 25 | 12 | 5 | 4 | 25 | 8 | 5 | 3 | 8 | 8 | 3 | 3 |
| 40 | 8 | 6 | 3 | 25 | 8 | 5 | 3 | 12 | 8 | 4 | 3 |
| 25 | 12 | 5 | 4 | 25 | 8 | 5 | 3 | 8 | 8 | 3 | 3 |
| 25 | - | 5 | - | 25 | - | 5 | - | 8 | - | 3 | - |
| 25 | 8 | 5 | 3 | 25 | 8 | 5 | 3 | 8 | 8 | 3 | 3 |
| 8 | - | 3 | - | 8 | - | 3 | - | 8 | - | 3 | - |
| 8 | - | 3 | - | 8 | - | 3 | - | 8 | - | 3 | - |
| 40 | 8 | 6 | 3 | 40 | 8 | 6 | 3 | 12 | 8 | 4 | 3 |
| 8 | - | 3 | - | 8 | - | 3 | - | 8 | - | 3 | - |

New No Test Order (NTO) / Fast Curve Setting templates have been developed to assist in the request of this function. For non-emergency work, request the FCS be enabled at least 48 hours in advance. See System Operating Bulletin 326 for additional guidance.

FCS will only be available for circuits that are in normal operating status. The crew shall contact Field Engineering for circuits that are abnormal operating status.

The request template for FCS will be located where the No Test Order requests are housed. Also, the same timelines apply for NTO's and FCS (48 hours). A switching program with NTO's and FCS requires 14 calendar days.

An AR PPE Pre-tailboard Check List has been developed and is meant as a reference guide to use before starting work and while checking the DAFM. Please print out a version and hand out. A laminated version is being created and will be distributed to each work location in Q3 2023. The Check List is an 11x17 two-sided, colored job aid.

Standards and Documents Affected

[SOB 326](#)

[Distribution Arc Flash Manual \(DAFM\)](#) and associated appendices

[AR PPE Pre-Tailboard Check List](#)

[Meeting in a Box](#)

Contact Information

- SCE Employees – contact Tim Hauducoeur at (909)226-2900, Shane Ito at (626)788-7622, or the CMHelpDesk@sce.com at (909)548-7188
- 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





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