Incident Investigation Report Attachments SED Incident E20210825-01 (Mule Fire)

PACIFIC GAS AND ELECTRIC COMPANY

ELECTRIC INCIDENT REPORT FORM

TO: CALIFORNIA PUBLIC UTILITIES COMMISSION

PG&E Reference Number: EI210825A

CPUC Website	August 25, 2021 at 1950 hours
CPUC Recipient	**Date & Time CPUC Notified**
1-800-235-1076	PG&E
Telephone Number	**Reported by**
	415-973-2782
	Telephone Number

Report Type: 20-Day Report

☐ ***INJURY/FATALITY:*** An incident which results in a fatality or personal injury to an employee or 3rd party rising to the level of in-patient hospitalization and is attributable or allegedly attributable to utility owned electric facilities. Incidents involving motor vehicles are not reportable unless they result in death or injury attributable or allegedly attributable to electrical contact with the utility owned electric facilities.

☐ ***MEDIA:*** An incident that is attributable or allegedly attributable to Pacific Gas and Electric owned electric facilities and is subject to significant public attention and/or media coverage.

☒ ***PROPERTY DAMAGE:*** A single electric incident where property damage of the utility or a single 3rd party is estimated to exceed $50,000 and is attributable or allegedly attributable to utility owned electric facilities.

☐ ***OPERATOR JUDGEMENT:*** Any incident that is significant in the judgement of the operator, even though it may not meet the incident reporting criteria.

20-Day Report Sent to CPUC – Date: September 23, 2021	**Initial Report Sent to CPUC – Date:** August 25, 2021

PACIFIC GAS AND ELECTRIC COMPANY

ELECTRIC INCIDENT REPORT FORM

TO: CALIFORNIA PUBLIC UTILITIES COMMISSION

PG&E Reference Number: EI210825A

20-Day Report

Date and Time of Incident:	August 25, 2021 at 1400 hours				
Date and Time Incident Determined Reportable:	August 25, 2021 at 1820 hours				
Location of Incident:	[redacted]				
City:	Redding	**Division:**	North Valley	**County:**	Shasta
Circuit/Facility:	Girvan 1101	**Voltage:**	12kV		
Service Interrupted (Date and Time):	August 25, 2021 at 1300 hours	**Total Customers Affected:**	385		
Service Restored (Date and Time):	August 26, 2021 at 0945 hours				

Description of Incident:

On August 25, 2021 at 1145 hours, a five man PG&E electric distribution contract crew arrived at [redacted] in Redding ("Incident Location") to replace a grey (UV damaged) customer service, eliminate a tree connect on the service, and install a new service clearance pole. A transformer level outage was planned for this work. The crew foreman conducted a group tailboard and walked the job with the crew. The bushing mounted liquid fuses on the service transformer were identified as a potential hazard if operated energized. Because of this, the crew decided to not operate the bushing mounted liquid fuses, keeping the transformer and service energized while doing the work. The crew was working in Fire Index Area (FIA) 245 which had a Fire Index Rating of R4 on August 25, 2021. The crew possessed all tools required by Utility Standard: TD-1464S Attachment 1 for a R5 working situation and utilized a working fire watch.

At 1300 hours, the crew removed the meter from the Incident Location. A subcontractor dug the hole for the clearance pole and set the pole. At 1400 hours, while cutting the second hotleg of the service, the contracted journeyman lineman's bolt bite style cutters contacted a hot-leg and the neutral conductor at the same time. The contact generated sparks that ignited vegetation around the pole. The crew attempted to control the fire with the fire mitigation tools at the jobsite but were unsuccessful. The crew contacted emergency services and fled to safety.

A CAL FIRE airtanker was flying over the Incident Location around the time of the ignition and responded, dumping retardant along the front of the fire. CAL FIRE engines responded shortly after.

At 1435 hours, PG&E dispatched a troubleman who arrived at the Incident Location at 1505 hours. The troubleman observed CAL FIRE mopping up the fire, a damaged garage, and two poles that needed replacement due to fire damage. The troubleman opened Fuse 10779 to de-energize the tap line, de-energizing 5 customers. The troubleman then instructed the crew to open the jumpers on the span, source side of Fuse 10779 due to burned and hazardous trees.

CAL FIRE reports that the fire was contained at 2005 hours on the same day. The reported fire size is 10 acres.

PACIFIC GAS AND ELECTRIC COMPANY

ELECTRIC INCIDENT REPORT FORM

The fire was named the "Mule Fire" and caused damage to a detached garage at the Incident Location, a contractor pickup truck, a contractor water buffalo and two PG&E poles. PG&E retained a transformer, two poles, three conductor wires, a steel arm, two insulators (attached together), two dead end insulators, and two moldings as evidence. This evidence is being stored at the [redacted] evidence warehouse.

Two PG&E contractors received minor burns from attempting to control the fire. Both contractors were treated on site and released.

380 customers were de-energized on August 26, 2021 at 0855 hours to complete the repairs. PG&E completed the repairs by 0950 hours on August 26, 2021 and all customers were restored. Two poles, a transformer, and service wire to the Incident Location were replaced.

Meteorology data was collected from a site two miles away from the Incident Location. On August 25, 2021, the high temperature was 90.0°F at 1640 hours and the low temperature was 58.5°F at 0700 hours. The relative humidity was as high as 52% at 0700 hours and as low as 14% at 1640 hours. The strongest wind gust recorded on this day was 12.4 mph out of the south-southwest at 1350 hours. At 1400 hours, the temperature was 85.6°F and the relative humidity was 20%.

This incident was reported on August 25, 2021 under the Property Damage criterion, as the damages were anticipated to exceed $50,000. On September 7, 2021, PG&E received a claim from a nearby property claiming $19,780 for damages to recently planted trees, irrigation, fencing, and the electrical hardware for the driveway gate. On September 11, 2021, PG&E received an additional claim from another nearby property claiming $30,000 for painting, property clean up, and a fence around the front yard.

PG&E is performing a "Serious Injury and Fatality - Potential" apparent cause evaluation, which is identifying corrective actions. On September 7, 2021 a Five Minute Meeting ("5MM") was dispersed to Electric Operations and Electric Operations Contract crews regarding work requirements during R4 and R5 Fire Index Rating conditions. The General Requirements in the 5MM establish additional requirements beyond those required in Utility Standard: TD1464S, such as having a dedicated fire watch, preparation and testing of the water buffalo, as well as removal of fuels below the facility to bare mineral soil in a 15-foot radius if working energized.

This information is preliminary, and all the times, customer numbers, and measurements mentioned in this report are approximate. PG&E is fully cooperating and communicating with external agencies as required.

Attachments:

- Attachment 01_2018 GO165 patrol records_CONF.pdf
- Attachment 02_2019 GO165 patrol records_CONF.pdf
- Attachment 03_2020 GO165 inspection records_CONF.pdf
- Attachment 04_2021 GO165 inspection records_CONF.pdf
- Attachment 05_EC tag_119117143_CONF.pdf
- Attachment 06_EC tag_121957559_CONF.pdf
- Attachment 07_EC tag_121958005_CONF.pdf
- Attachment 08_ ILIS_21-0107004_CONF.pdf

- Attachment 09_ ILIS_21-0109338_CONF.pdf
- Attachment 10_CAL FIRE Incident Page.jpg
- Attachment 11_Evidence Photos.pdf
- Attachment 12_Post Incident Photos.pdf
- Attachment 13_Tree Connect Photo.pdf
- Attachment 14_Incident Diagram_CONF.pdf
- Attachment 15_Fire Index Rating for 8_25_2021.gif
- Attachment 16_5MM Work During R4_R5_CONF.pdf

Preventing and Mitigating Fires While Performing PG&E Work

SUMMARY

This standard establishes precautions for PG&E employees and contractors to follow when traveling to or performing work on any forest, brush, or grass-covered land.

The information in this standard supplements the instructions contained in local, state, and federal fire regulations and permits. However, if a local or state fire regulation or permit contains provisions more stringent than those in this document, the more stringent provisions **must** be followed.

TARGET AUDIENCE

This standard targets all PG&E employees and contractors working on or near facilities located on any forest, brush, or grass-covered lands using equipment, tools, and/or vehicles whose use could result in the ignition of a fire.

Training (SAFE-1503WBT: Fire Danger Precautions) targets PG&E employees working on any forest, brush or grass-covered lands. This training is profiled to the target audience as mandatory, to be completed annually between January 1 and April 1.

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REQUIREMENTS

1 Safety

1.1 Performing utility work on any forest, brush, or grass-covered lands presents a danger of fire, in addition to the hazards inherent to utility work.

1.2 Following the directives in this standard are essential to mitigating fire danger and protecting the environment, the utility system, personnel, and the public.

1.3 Perform all operations or action within hazardous fire areas in accordance with Utility Standard SAFE-1001S, “PG&E Injury & Illness Prevention Plan (IIPP),” and the *Code of Safe Practices*.

2 General Requirements

The requirements laid out in this section must be taken regardless of the Daily Fire Index Rating when performing work that could produce a spark on any forest, brush, or grass-covered lands.

2.1 The work supervisor / local superintendent must ensure the following actions are taken:

1. Identify and comply with the local, state, and federal fire authority permits and/or restrictions in the area where the work is to be performed, including Federal Energy Regulatory Commission (FERC) project requirements.

2. Ensure a tailboard is completed for all work being performed and review the Wildfire Mitigation Matrix (Attachment 1) and the Wildfire Risk Checklist (Attachment 2) to help facilitate discussions about the work being performed and the planned mitigations for the work. Discussions should include the following topics:

    a. The activities being performed

    b. The mitigations being taken

    c. Evacuation routes

    d. Awareness of the communications protocols needed on the jobsite

2.2 Any person in charge (PIC) of working personnel must follow locally changing meteorological conditions as well as be aware of the possibility of increased fire danger during the time work is in progress.

2.3 When traveling or when operating off designated roadways where there is forest, brush, or grass-covered lands, all personnel must take the following actions:

1. **Do not drive** off designated roadways (through fields, forests, etc.) except when performing required work or during an emergency.

2. Ensure that required tools, at a minimum, are available on vehicles.

    a. All vehicles are required to have one fire extinguisher in good working order. Supplement the fire extinguisher with the following tools, as necessary:

    b. Passenger vehicle:

        - One shovel

    c. Trucks (1/2 ton or larger) and all-terrain vehicles (ATVs):

        - One shovel or McLeod fire tool
        - One 5-gallon backpack pump or larger – filled with water

2.3 (continued)

d. Heavy machinery or equipment***** (e.g., tractors, tub grinders, whole tree chippers, excavators, bulldozers):

- One shovel or McLeod fire tool
- One 5-gallon backpack pump or larger – filled with water

***NOTE**
When multiple vehicles are traveling together to a jobsite, or when tools do not properly fit on a piece of machinery, each vehicle or piece of heavy machinery is not required to carry a full set of tools; however, there **must** be the required tools available for personnel at the jobsite to extinguish a fire, if required. Tractors **must** have at least one shovel on them while operating.

3. While driving off paved roadways (i.e., gravel or dirt roadways), maintain situational awareness and look for potential ignitions that could occur when driving on dry brush, grass, or other vegetation.

4. Ensure vehicles are parked in an area cleared of vegetation.

a. IF unable to park in a cleared area

THEN ensure the proper fire extinguishing tools are on the vehicle, as described above. Maintain situational awareness and monitor for potential ignitions. And clear all vegetation around the exhaust.

***NOTE**
It is important to remember when operating a vehicle with a Diesel Particulate Filter (DPF) System to always park on a paved, gravel, or bare-mineral soil surface. The exhaust remains extremely hot before, during, and after the regeneration process, even while the vehicle is off. This can result in an ignition.

5. Turn off the motors of unoccupied vehicles when parking them off road **unless** the vehicle and the motor needs to remain running for work purposes. Maintain situational awareness for potential ignitions.

6. When idling a vehicle, the vehicle **must** be parked on a cleared area; paved, gravel, or on dirt cleared down to bare-mineral soil.

2.4 **Before starting work** on or near any forest, brush, or grass-covered lands, all personnel **must** perform the following actions:

1. Review and understand the daily Fire Index Rating.

Preventing and Mitigating Fires While Performing PG&E Work

2.4 (continued)

2. Review Wildfire Mitigation Matrix (Attachment 1) and assess the required mitigations based on Fire Index Ratings provided by PG&E's Meteorology team.

   a. This matrix is set up with work activities and activity descriptions down the left, and the required mitigations dependent on the Fire Index Ratings across the top.

   b. Activities requiring additional mitigations are referenced in the corresponding box in blue text.

   c. During Red Flag Warnings, assume the Wildfire Mitigation Matrix (Attachment 1) contains Extreme Fire Index Rating mitigations.

3. Participate in a tailboard for any of the work activities listed in the Wildfire Mitigation Matrix (Attachment 1) and use the Wildfire Risk Checklist (Attachment 2) to facilitate discussions about the work being performed and the planned mitigations for the work.

2.5 Major work operations require a sealed box of tools to be at the jobsite. The box must be easily accessible for fire-suppression purposes. This sealed toolbox must contain:

1. One 5-gallon, backpack-type fire extinguisher filled with water

2. Two axes

3. Two McLeod fire tools

4. Enough shovels for each employee at the operation

5. One or more serviceable chainsaw(s) with at least 3½ horsepower with a 20-inch cutting bar. (This tool does not have to be in the sealed box, but must be on the work operation jobsite.)

***NOTE**

All vegetation management operations on or near any forest, brush or grass-covered lands that are removing entire trees must have the sealed box of tools with the above noted tools; along with all necessary permits including, but not limited to, Utility Right of Way Exemption or Timberland Conversion Permits.

2.6 The specific fire-fighting tools are meant to be kept at the jobsite and are required to meet state law and provide an option for personnel or first responders to have additional tools onsite. At no time will any PG&E employee or contractor be asked to fight any fire beyond their experience or training.

2.7 When working at the jobsite, all personnel **must** perform the following actions:

1. Observe all laws, rules, and regulations of local, state, and federal fire authorities having jurisdiction over areas in which they are working.

2. Perform prevention and mitigation measures as described in this standard during any operation or action that could result in an uncontrolled fire.

3. Do **not** start any fire that could escape control through careless or negligent actions.

4. While performing stationary ground level jobs or activities from which a spark, fire, or flame may originate (e.g., welding, cutting, grinding), all flammable material (e.g., grass, leaf litter, including snags[1]) **must be removed** down to the mineral soil around the operation for a minimum of 10 feet.

    a. IF the jobsite is not stationary

    OR IF it cannot be sufficiently cleared due to environmental concerns (e.g., vegetation clearances along Electric Distribution circuit or erosion)

    AND the fire index rating is R1, R2, or R3

    THEN there must be a **Working** Fire Watch assigned at the jobsite.

    b. IF the jobsite is not stationary

    OR IF cannot be sufficiently cleared due to environmental concerns (e.g., vegetation clearances along electric distribution circuit or erosion)

    AND the fire index rating is R4 or R5,

    THEN there must be a **Dedicated** Fire Watch equipped with at least 120 gallons of water with 200 feet of hose and 40 pounds per square inch (psi) at the nozzle.

5. When responding to an emergency, follow all the requirements included this standard, as applicable, if possible.

2.8 When fires ignite on the jobsite, personnel must perform the following actions:

1. Call emergency services (9-1-1) to report the ignition, even if the fire has been suppressed.

2. Take safe, reasonable suppression actions consistent with PG&E training.

[1] Snag: A standing dead or dying tree.

2.9 Call emergency services (9-1-1) to report the ignition, even if the fire has been extinguished.

1. Take safe, reasonable suppression actions consistent with the person’s experience and training

2. If necessary, evacuate to a safe location and provide any information possible to first responders when they arrive.

3. **After** contacting emergency services, the jobsite supervisor must call the Wildfire Safety Operations Center (WSOC) at 1-800-255-7593 to report the fire. The supervisor must include the following information, at a minimum:

   - Location
   - Source of ignition
   - Impacted assets

4. All jobsite personnel MUST report incidents to their direct supervisors and follow any further reporting procedures, as required (e.g., notify Control Centers).

2.10 Smoking (including but not limited to cigarettes, cigars, vape pens, etc.) is only allowed when the Utility FPI rating is R1, R2, or R3, and the following mitigations have been taken:

1. There is a cleared location (down to mineral soil) at the jobsite with a 3-foot radius.

2. There is a means to extinguish any potential ignition.

3. There is a water-filled or sand-filled receptacle (e.g., a metal bucket) to extinguish cigarettes, cigars, etc.

4. Smoking is prohibited when the Utility FPI ratings are R4, R5, or R5-Plus.

3 Electric Operations Requirements

Apply the following restoration and testing procedures when the Fire Index Rating is R4, R5, or R5-Plus.

3.1 Replacing Fuses

1. Personnel should not begin to replace fuses until the following actions are completed:

   a. The overhead (OH) line is successfully patrolled and hazards are cleared.

   b. Conditions at the base of the pole do **not** support ignition of the rapid spread of fire in the event or arcing or sparking.

3.1 (continued)

2. Electric Distribution and Transmission OH Patrol Requirements

   a. This information **does not** apply to fuses.

   b. Refer to Utility Procedure TD-1464P-01, “Fire Index Patrol and Non-Reclose Procedure,” for information about patrolling and preventing automatic testing in Fire Index Areas with R4 and above fire ratings.

4 Fire Index Process

4.1 Fire Index Areas are geographical areas where fire danger ratings are decided. These areas were originally developed by the United States Forest Service (USFS) Pacific Southwest Research Station and are still used by U.S. Forest Service-California Department of Forestry and Fire Precaution (CAL FIRE) and federal (e.g., USFS) agencies.

Over the years, these geographical areas have been modified for PG&E operations. A map of the Fire Index Areas is available on the PG&E Intranet at: http://wwwt2/Weather/EO/FireIndex/fireindex_2018.pdf.

The PG&E Meteorology team operates a high-resolution, weather and fire danger coupled model. This model outputs granular (2 kilometer [km]) fire-weather and danger parameters.

Model outputs are leveraged to produce fire-danger adjective ratings ranging from R1 to R5-Plus for each Fire Index Area within the PG&E service territory.

Fire Weather Watches and Red Flag Warnings issued by the National Weather Service are also incorporated as R5 in the weather component of the model.

4.2 The fire index rating predicts the most severe rating expected for each area from midnight to midnight. This information is posted and updated daily on the Fire Potential Index website.

1. Fire index ratings are effective from 6 a.m. (0600) and remain in effect for 24 hours.

NOTE
Intraday updates are rare but may occur if the fire danger conditions or other circumstances warrant the update.

2. The Fire Potential Index website allows personnel to perform the following actions:

   a. Filter information by Grid Control Center Area, Distribution Control Center Area, or Fire Index Area.

   b. Subscribe to receive, either by email or epage, the daily (issued at 6:15 a.m.) “Fire Adjective Index” summary.

5 Mitigations

5.1 When the Fire Index Rating is R1, R2 or R3, personnel must follow the requirements provided in Section 2, “General Requirements,” starting on Page 2, when performing work in any forest, brush, or grass-covered lands.

5.2 When the Fire Index Rating is R4, personnel must take the following mitigations in addition to the mitigations listed in Section 2:

1. Ensure there is at least 120 gallons of water at the jobsite with at least 200 feet of hose with 40 psi at the nozzle.
2. Evaluate weather conditions throughout the day to ensure it remains safe to work and to confirm that mitigations are appropriate based on the Fire Index Rating.
3. Assign a **Working** Fire Watch to monitor for fire at the jobsite while performing normal work duties.
    a. The Working Fire Watch must remain at the jobsite for 30 minutes after work ends.

5.3 When the Fire Index Rating is R5 or R5-Plus, personnel must take one or more of the following mitigations, in addition to the mitigations previously listed:

1. Ensure there is a **Dedicated** Fire Watch at the jobsite while performing normal work duties.
    a. The Fire Watch must remain on the jobsite for at least 30 minutes after work ends.
2. Ensure there is a trailer-mounted water tank, water tender, or other water-delivery/fire-suppression method (e.g., CAFS unit) at the jobsite while performing work.
    a. There must be an extinguishing agent (i.e., water, fire retardant, or CAFS) in the immediate area with a hose long enough to reach the entire jobsite while performing normal work duties.
    b. When the trailer-mounted water tank, or other water-delivery device, leaves the jobsite to refill, personnel must stop work until it returns **unless** the jobsite is sufficiently treated.
3. Personnel should consider additional vegetative fuel modifications before starting work. Modifications include the following methods:
    - Mowing
    - Masticating
    - Disking
    - Pretreating surrounding fuels with fire retardant

5.3 (continued)

4. **Suspend planned work during R5-Plus conditions**, as defined in the Wildfire Mitigation Matrix (Attachment 1).

5. For any **emergency work** being performed in R5-Plus conditions, personnel **must ensure that one of the following safety measures is in place:**

   a. A Safety and Infrastructure Protection Team (SIPT) **must** be at the jobsite on standby while work is performed,

   OR

   b. A 300-gallon, trailer-mounted water tank, water tender, or other water delivery/fire suppression device **must** remain at the jobsite and must be dedicated to fire suppression.

END of Requirements

DEFINITIONS

Dedicated Fire Watch: A crew member whose **only** assigned job responsibility is to stand by at a jobsite to watch for possible or new fire ignitions while work is being performed. This person should have complete situational awareness, help to extinguish fires quickly, and stop work, when needed, due to safety.

Designated roadway: Paved, gravel, or dirt roadway used by PG&E personnel. These roadways are completely cleared of all ground litter, grass, and vegetation.

Disking: A disc-shaped tool used to till soil for vegetation removal.

Fire Index Area: A geographical area over which fire danger determinations are produced.

Fire Index Rating: A rating to determine the risk of fire and its likely behavior. Its calculation and scale from Low to Extreme-Plus considers fuel moisture, humidity, wind speed, air temperature, and historical fire occurrence. These ratings are as follows:

- **R1:** Very little or no fire danger.
- **R2:** Moderate fire danger.
- **R3:** Fire danger is so high that care must be taken using fire-starting equipment. Local conditions may limit the use of machinery and equipment to certain hours of the day.
- **R4:** Fire danger is critical. Using equipment and open flames is limited to specific areas and times.
- **R5:** Fire danger is so critical that the use of some equipment and open flames may be prohibited.
- **R5-Plus:** The greatest level of fire danger where rapidly moving, catastrophic wildfires are possible. This typically occurs when fire danger is Extreme, “plus” there are high-risk weather triggers (e.g., strong winds).

DEFINITIONS (continued)

Fire Tools: The tools used to fight fires. Fire tools include the following equipment:

- **Shovel**: A standard, round point shovel at least 42 inches long.
- **McLeod**: A hand tool used for raking and scraping.
- **Pulaski**: An axe-like fire hand tool used for cutting, chopping or grubbing.
- **Backpack pump**: A portable 5-gallon water pack with a hose and nozzle used to extinguish fires. These can be collapsible backpacks, plastic or steel tanks.
- **Chainsaw:** A mechanical power-driven cutting tool that must be at least 3½ horsepower and have at least a 20-inch cutting bar.

Fire Weather Watch: A type of watch issued by the National Weather Service to alert fire officials and firefighters of potentially dangerous fire weather conditions in the next 24 to 36 hours.

Jobsite: (For the purposes of this standard) An area where work is being performed on any forest, brush or grass-covered lands.

Major Work Operation: An industrial-style job where work activities or staging resources consist of multiple crews and employees in and out of the jobsite spanning multiple days. (This excludes single-crew work such as performing a pole changeout or switching.)

Masticating: Reducing vegetation into small chunks to assist in removing small trees (e.g., snags).

Overland Travel: Areas that are overgrown with grass and/or brush without a visible road.

Red Flag Warning: A warning issued by the National Weather Service to alert fire officials and firefighters of potentially dangerous and imminent fire weather conditions.

Safety and Infrastructure Protection Team (SIPT): This in-house team consists of two-person crews composed of International Brotherhood of Electrical Workers- (IBEW-) represented employees who are trained and certified safety infrastructure protection personnel. They provide standby protection and asset protection services in support of crews and protect critical utility infrastructure within PG&E’s service territory, especially in areas at higher risk of wildfire.

Stationary Work: Work being performed in a single location for an extended period of time that is neither intended nor expected to move.

Working Fire Watch: A crew member responsible for fire detection, risk mitigation, and total situational awareness while work is being performed **in addition to** normal assigned work duties. This crew member is also responsible to help extinguish fires and stop work, when required, due to safety hazards.

IMPLEMENTATION RESPONSIBILITIES

The senior director in charge of the Community Wildfire Safety Program is responsible for approving and revising this standard, as well as ensuring its distribution.

The directors responsible for field and operational teams within the following organizations must ensure that their employees, whose actions could result in igniting a fire, are aware of and comply with this standard:

- Electric operations
- Gas operations
- Power generation
- Information technology
- Customer operations
- Shared services

GOVERNING DOCUMENT

NA

COMPLIANCE REQUIREMENT / REGULATORY COMMITMENT

- California Public Resources Code – Prohibited Activities
- California Health & Safety Code
- United States Forest Service
- U.S. Forest Service – California Department of Forestry and Fire Precaution (CAL FIRE)

REFERENCE DOCUMENTS

Developmental References

General:

- *Code of Safe Practices*
- Numbered Document 015225, "Cutouts, Fuses, and Disconnects for Overhead Distribution Lines"
- Safety and Health Procedure SH&C 236, "Fire Prevention during Welding, Cutting and other Hot Work"

REFERENCE DOCUMENTS (continued)

Utility Procedures:

- TD-1464P-01, “Fire Index Patrol and Non-Reclose Procedure”
- TD-4640P-01, “Hot Work Control – Fire Prevention”

Utility Standards:

- SAFE-1001S, “Safety and Health Program Standard”
- TD-4160S, “Welding Control”

Supplemental References:

- CAL FIRE (Department of Forestry and Fire Protection) *Power Line Fire Prevention Field Guide*, “Statutes and Regulations Pertaining to Overhead Powerline Infrastructure”
- *California Public Resource Code*
- National Wildfire Coordinating Group, *NWCG User Guide for Glossary of Wildland Fire*
- United States Department of Agriculture (USDA) Forest Service, “National Fire Danger Rating System”

APPENDICES

NA

ATTACHMENTS

Attachment 1, “Wildfire Mitigation Matrix”

Attachment 2, “Wildfire Risk Checklist”)

DOCUMENT REVISION

This utility standard cancels and supersedes Utility Standard TD-1464S, “Preventing and Mitigating Fires While Performing PG&E Work,” dated 05/05/2020.

DOCUMENT APPROVER

[redacted], Senior Director, Emergency Preparedness & Response

Preventing and Mitigating Fires While Performing PG&E Work

DOCUMENT OWNER

[redacted] Director, Wildfire Safety Operations

DOCUMENT CONTACT

[redacted] Senior Business Analyst, Wildfire Safety Operations Center

REVISION NOTES

Where?	What Changed?
Section 2	Adding clarifying language to ensure this standard is only applicable when performing work that has potential to spark a fire or flame or when driving on any forest, brush, or grass-covered lands.
Section 2, Vehicle Requirements	All vehicles are required to have one fire extinguisher.
Section 2, Vehicle Requirements	Trucks and four-wheel drive vehicles defined as ½ ton or larger.
Section 2, Vehicle Requirements	All 5-gallon Backpack Pumps must be filled with water.
Section 2, Vehicle Requirements	Heavy machinery requires a shovel.
Section 2, Major Work Operations Sealed Box of Tools	Sealed boxes of tools are required for all vegetation management crews working on harvestable timber.
Section 2.2.6	The fire-fighting tools are required per California state law. No PG&E employee or contractor will ever be asked to suppress a fire that is beyond their experience or training.
Section 2.4, Vehicle Parking	Do not park DPF Vehicles on any vegetation.
DEFINITIONS	Added a definition for "Chainsaw." Added a definition for "Jobsite." Updated the definition for "Major Work Operation."

Preventing and Mitigating Fires While Performing PG&E Work

SUMMARY

This utility standard establishes precautions for PG&E employees and contractors to follow when traveling to, performing work, or operating outdoors on any forest, brush, or grass-covered land.

The information in this standard supplements the instructions contained in local, state, and federal fire regulations and permits. However, if a local or state fire regulation or permit contains provisions more stringent than those in this document, the more stringent provisions **must** be followed.

TARGET AUDIENCE

This standard targets all PG&E employees and contractors working on or near facilities located on any forest, brush, or grass-covered lands using equipment, tools, and/or vehicles whose use could result in the ignition of a fire. This includes areas that may seem urban or suburban but have vegetation that can aid in the spread of an ignition.

Training (SAFE-1503WBT; Fire Danger Precautions) targets PG&E employees working on any forest, brush or grass-covered lands. This training is profiled to the target audience as mandatory, to be completed annually between January 1 and April 1.

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REQUIREMENTS

1 Safety

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1.2 Following the directives in this standard are essential to mitigating fire danger and protecting the environment, the utility system, personnel, and the public.

1.3 Perform all operations or action within hazardous fire areas in accordance with Utility Standard SAFE-1001S, “PG&E Injury & Illness Plan (IIPP)” and the *Code of Safe Practices*.

2 General Requirements

The requirements laid out in this section must be taken regardless of the Daily Fire Index Rating when performing work that could produce a spark fire or flame on or near any forest, brush, or grass-covered lands.

2.1 The work supervisor / local superintendent must ensure the following actions are taken:

1. Identify and comply with the local, state, and federal fire authority permits and/or restrictions in the area where the work is to be performed, including Federal Energy Regulatory Commission (FERC) project requirements.

2.2 Any person in charge (PIC) of working personnel must follow locally changing meteorological conditions as well as be aware of the possibility of increased fire danger during the time work is in progress.

2.3 When traveling to the jobsite, or when operating off designated roadways, all personnel must take the following actions:

1. **Do not drive** off designated roadways (through fields, forests, etc.) except when performing required work or during an emergency.

2. Ensure that required tools, at a minimum, are available on vehicles.

   a. All vehicles are required to have one fire extinguisher in good working order. Supplement the fire extinguisher with the following tools as necessary:

   b. Passenger vehicle:

      - One shovel

2.3.2 (continued)

c. Trucks (1/2 ton or larger), and all-terrain vehicles (ATVs):

- One shovel or McLeod fire tool
- One 5-gallon backpack pump or larger capacity water (or Compressed Air Foam System [CAFS]) pump/delivery system

d. Heavy machinery or equipment (e.g., tractors, tub grinders, whole tree chippers, excavators, bulldozers):

- One shovel or McLeod fire tool
- One Pulaski
- One 5-gallon backpack pump or larger capacity water (or CAFS) pump/delivery system

NOTE

When multiple vehicles are traveling to a jobsite, a full set of tools is not required for all vehicles. This situation includes heavy machinery that cannot accommodate the tools. However, the required tools must be available for personnel at the jobsite to extinguish a fire. Tractors **must** have at least one shovel on them while operating.

3. While driving off or parking off paved roadways (i.e. gravel or dirt roadways), maintain situational awareness and look for potential ignitions that could occur when driving on or parked in the vicinity of dry brush, grass, or other vegetation.

4. Ensure vehicles are parked in an area cleared of vegetation.

   a. IF unable to park in a cleared area

      THEN ensure the proper fire extinguishing tools are easily accessible on the vehicle, as described above and clear all vegetation around the exhaust. Maintain situational awareness and monitor for potential ignitions.

NOTE

It is important to remember when operating a vehicle with a Diesel Particulate Filter (DPF) System to always park on a paved, gravel or bare mineral soil surface. The exhaust remains extremely hot before, during and after the regeneration process even while the vehicle is off and can result in an ignition.

5. Turn off the motors of unoccupied vehicles when parking them off road **unless** the vehicle and the motor needs to remain running for work purposes. Maintain situational awareness for potential ignitions.

2.3 (continued)

6. When idling, the vehicle **must** be parked on a cleared area defined as a paved, gravel, or on dirt cleared down to bare mineral soil.

2.4 **Before starting work** on or near any forest, brush, or grass-covered lands, all personnel **must** perform the following actions:

1. Review and understand the daily PG&E Fire Index Application.

   a. For areas that are not within an FIA with a Fire Index Rating, but still working on or near flammable vegetation, forest, brush or grass-covered lands, employees will use the Fire Index Rating of the nearest FIA.

2. Job Site Tailboard Requirements

   a. As part of the job site safety tailboard, wildfire risks must be assessed and proactively addressed. During the tailboard review all work being performed, review Attachment 1, “Wildfire Mitigation Matrix” and complete Attachment 2, “Wildfire Risk Checklist”[1] prior to commencing work.

3. Attachment 2 – As noted above, the following information must be reviewed.

   a. Work Description

   b. Work Location

   c. Environmental Conditions (e. g., FIA, Fire Danger Rating, Red Flag Status)

   d. Fire Risk Mitigations (e. g., required actions)

   e. Fire Suppression Tools (e. g., required tools and availability)

   f. Emergency Response (e. g., evacuation plan, local fire agency, fire agency dispatch)

4. Attachment 1 is set up with work activities and activity descriptions down the left, and the required mitigations dependent on the Fire Index Ratings across the top.

   Activities requiring additional mitigations are referenced in the corresponding box in blue text.

[1] Organizations can use other suitable means to review and document their Wildfire Risk tailboard (e. g., Online app, incorporation into LOB procedures) as long as the minimum requirements in Attachment 2 are covered.

2.4.4 (continued)

During Red Flag Warnings, assume Attachment 1 contains R5 Fire Index Rating mitigations.

2.5 Major work operations require a sealed box of tools to be at the jobsite. The box must be easily accessible for fire-suppression purposes. This sealed box of tools must contain:

1. One backpack-type fire extinguisher filled with water

2. Two axes

3. Two McLeod fire tools

4. Enough shovels for each employee at the operation

5. One or more serviceable chainsaw(s) with at least 3 ½ horsepower with a 20-inch cutting bar. This tool does not have to be in the sealed box but must be at the jobsite.

NOTE

All vegetation management operations on or near any forest, brush or grass-covered lands that are removing entire trees must have the sealed box of tools with the above noted tools; along with all necessary permits including, but not limited to Utility Right of Way Exemption or Timberland Conversion Permits.

2.6 The specific firefighting tools are meant to be kept at the jobsite and are required to meet state law and provide an option for personnel or first responders to have additional tools onsite. At no time will any PG&E employee or contractor be asked to fight any fire beyond their experience or training.

2.7 When working at the jobsite, all personnel **must** perform the following actions:

1. Observe all laws, rules, and regulations of local, state, and federal fire authorities having jurisdiction over areas in which they are working.

2. Perform prevention and mitigation measures as described in this standard during any operation or action that could result in an uncontrolled fire.

3. Do **not** start any fire that could escape control through careless or negligent actions.

2.7 (continued)

4. While performing stationary ground level jobs or activities from which a spark, fire, or flame may originate (e.g., welding, cutting, grinding), all flammable material (e.g., grass, leaf litter, including snags[2]) **must be removed** down to the mineral soil around the operation for a minimum of 10 feet.

   a. IF the jobsite is not stationary

      OR IF it cannot be sufficiently cleared due to vegetation density at the base of a pole, erosion concerns, or when work is being performed at the top of a pole or tower (e. g., install and removal of master grounds on a de-energized transmission line adjacent to an energized transmission line)

      AND the fire index rating is "R1", "R2", "R3" or "R4" or not within a fire index area

      THEN there must be a **Working** Fire Watch assigned at the jobsite.

   b. IF the jobsite is not stationary

      OR IF it cannot be sufficiently cleared due to vegetation density at the base of a pole, erosion concerns, or when work is being performed at the top of a pole or tower (e. g., install and removal of master grounds on a de-energized transmission line adjacent to an energized transmission line)

      AND the fire index rating is "R5"

      THEN there must be a **Dedicated** Fire Watch equipped with at least 120 gallons of water with 200 feet of hose and 40 pounds per square inch (psi) at the nozzle.

5. When responding to an emergency, follow all the requirements included this standard, as applicable, if possible.

2.8 When fires ignite on the jobsite, personnel must perform the following actions:

1. Call emergency services (9-1-1) to report the ignition, even if the fire has been suppressed.

2. Take safe, reasonable suppression actions consistent with PG&E training.

3. If necessary, evacuate to a safe location and provide any information possible to first responders when they arrive.

[2] Snag: A standing dead or dying tree.

2.8 (continued)

4. **After** contacting emergency services, the jobsite supervisor must call the Hazard Awareness and Warning Center (HAWC) (formerly the WSOC) at 1-800-255-7593 to report the fire. The supervisor must include the following information, at a minimum:

   - Location
   - Source of ignition
   - Impacted assets

5. All jobsite personnel MUST report incidents to their direct supervisors and follow any additional reporting procedures, as required (e.g., notify Control Centers).

2.9 Smoking (including but not limited to cigarettes, cigars, vape pens, etc.) is only allowed when the Utility FPI rating is “R1”, “R2” or “R3” and the following mitigations haven been taken:

1. There is a cleared location (down to mineral soil) at the jobsite with a 3-foot radius.

2. There is a means to extinguish any potential ignition.

3. There is a water-filled or sand-filled receptacle (e.g., a metal bucket) to extinguish cigarettes, cigars, etc.

4. Do NOT smoke when the utility FPI ratings are “R4”, “R5” or “R5-Plus”

3 Electric Operations Requirements

Apply the following restoration and testing procedures when the Fire Index Rating is “R4,” “R5,” or “R5-Plus.”

3.1 Replacing Fuses

1. Personnel should not begin to replace fuses until the following actions are completed:

   a. The overhead (OH) line is successfully patrolled, and hazards are cleared.

   b. Conditions at the base of the pole do **not** support ignition or the rapid spread of fire in the event of arcing or sparking.

2. Electric Distribution and Transmission OH Patrol Requirements

   a. Refer to Utility Procedure TD-1464P-01, "Fire Index Patrol and Non-Reclose Procedure" for information about patrolling and preventing automatic testing in Fire Index Areas with “R4” and above fire ratings.

4 Fire Index Process

4.1 Fire Index Areas are geographical areas where fire danger ratings are decided. These areas were originally developed by the United States Forest Service (USFS) Pacific Southwest Research Station and are still used by U.S. Forest Service-California Department of Forestry and Fire Precaution (CAL FIRE) and federal (e.g., USFS) agencies.

Over the years, these geographical areas have been modified for PG&E operations. Mapping of the Fire Index Areas is available from the PG&E GIS department.

The PG&E Meteorology team operates a high-resolution, weather and fire danger coupled model. This model outputs granular (2 kilometer [km]) fire-weather and danger parameters.

Model outputs are leveraged to produce fire-danger adjective ratings ranging from R1 to R5-Plus for each Fire Index Area within the PG&E service territory.

Fire Weather Watches and Red Flag Warnings issued by the National Weather Service are also incorporated as "R5" in the weather component of the model.

For additional information on Fire Index Areas and the relationship between High Fire Threat Districts (HFTD) and High Fire Risk Areas (HFRA) please see Attachment 3, Relationship Between Fire Index Areas, High Fire Threat Districts, and High Fire Risk Areas.

4.2 The fire index rating predicts the most severe rating expected for each area from midnight to midnight. This information is posted and updated daily on the Fire Potential Index website.

1. Fire index ratings are effective from 6 a.m. (0600) and remain in effect for 24 hours.

NOTE
Intraday updates are rare but may occur if the fire danger conditions or other circumstances warrant the update.

2. The Fire Potential Index website allows personnel to perform the following actions:

   a. Filter information by Grid Control Center Area, Distribution Control Center Area, or Fire Index Area.

   b. Subscribe to receive, either by email or Epage, the daily (issued at 6:15 a.m.) "Fire Adjective Index" summary.

5 Mitigations

The mitigations outlined in this standard are considered minimum requirements. Additional mitigations can be implemented if the PIC deems them to be necessary.

5.1 When the Fire Index Rating is R1, R2 or R3, personnel must follow the requirements provided in Section 2, “General Requirements,” starting on Page 2, when performing work in any forest, brush, or grass-covered lands.

5.2 When the Fire Index Rating is R4, personnel must take the following mitigations in addition to the mitigations listed in Section 2:

1. Ensure there is at least 120 gallons of water at the jobsite with at least 200 feet of hose with 40 psi at the nozzle.

2. Evaluate weather conditions throughout the day to ensure it remains safe to work and to confirm that mitigations are appropriate based on the Fire Index Rating.

3. Assign a **Working** Fire Watch to monitor for fire at the jobsite while performing normal work duties.

    a. The Working Fire Watch must remain at the jobsite for 30 minutes after work ends.

5.3 When the Fire Index Rating is R5 or R5-Plus, personnel must take one or more of the following mitigations, in addition to the mitigations previously listed:

1. Ensure there is a **Dedicated** Fire Watch at the jobsite while performing normal work duties.

    a. The Fire Watch must remain on the jobsite for at least 30 minutes after work ends.

2. Ensure there is a trailer-mounted water tank, water tender, or other water-delivery/fire-suppression method (e.g., CAFS unit) at the jobsite while performing work.

    a. There must be an extinguishing agent (i.e., water, fire retardant, or CAFS) in the immediate area with a hose long enough to reach the entire jobsite at all times while performing normal work duties.

    b. When the trailer-mounted water tank, or other water-delivery device, leaves the jobsite to refill, personnel must stop work until it returns **unless** the jobsite is sufficiently treated.

5.3 (continued)

3. Personnel should consider additional vegetative fuel modifications before starting work. Modifications include the following methods:

- Mowing
- Masticating
- Disking
- Pretreating surrounding fuels with fire retardant

4. **Suspend planned work during R5-Plus conditions**, as defined in Attachment 1.

5. For any **emergency work** being performed in R5-Plus conditions, personnel **must ensure that one of the following safety measures is in place:**

   a. A Safety and Infrastructure Protection Team (SIP-T) **must** be at the jobsite on standby while work is performed,

   OR

   A 300-gallon, trailer-mounted water tank, water tender, or other water delivery/fire suppression device **must** remain at the jobsite and must be dedicated to fire suppression.

6 Quality Reviews

6.1 Each organization must have a method to verify employees and contractors' adherence to the requirements of this standard and the attachments.

1. The Predictive Solutions SafetyNet Safety Observation Program is an enterprise-wide program that allows leaders to interact with employees and contractors to reinforce positive safety behaviors and increase safety awareness.

   a. Use the **Wildfire Mitigation** observation card to perform fire risk mitigation observations.

   b. Engage in dialogue with field employees on best practices and gaps.

6.2 The Regional Safety Organization will perform regular, documented safety observations to identify safe and at-risk behaviors while providing immediate guidance and recommendations on how to control/mitigate potential risks and the sharing of best practices observed during the observations with our employees and sub-contractors.

6.3 The Utility Standard TD-1464S document owner will perform enterprise-level trend analysis and develop plans to communicate best practices and address identified gaps with the respective lines of businesses.

END of Requirements

DEFINITIONS

Dedicated Fire Watch: A crew member whose **only** assigned job responsibility is to stand by at a jobsite to watch for possible or new fire ignitions while work is being performed. This person should have complete situational awareness, help to extinguish fires quickly, and stop work, when needed, due to safety.

Designated roadway: Paved, graveled, and/or maintained dirt roads used by PG&E personnel. These roadways are completely cleared of all ground litter or grass.

Disking: A disc-shaped tool used to till soil for vegetation removal.

Fire Index Area: A geographical area over which fire danger determinations are produced.

Fire Index Rating: A rating to determine the risk of fire and its likely behavior. Its calculation and scale from R1 to R5-Plus considers fuel moisture, humidity, wind speed, air temperature, and historical fire occurrence. These ratings are as follows:

- **R1:** Very little or no fire danger.
- **R2:** Moderate fire danger.
- **R3:** Fire danger is so high that care must be taken using fire-starting equipment. Local conditions may limit the use of machinery and equipment to certain hours of the day.
- **R4:** Fire danger is critical. Using equipment and open flames is limited to specific areas and times.
- **R5:** Fire danger is so critical that the use of some equipment and open flames is not permitted.
- **R5-Plus:** The greatest level of fire danger where rapidly moving, catastrophic wildfires are possible. This is typically when fire danger is Extreme, “plus” there are high-risk weather triggers (e.g., strong winds). PSPS triggering event is an example.

Fire Tools: The tools used to fight fires. Fire tools include the following equipment:

- **Shovel**: A standard, round point shovel at least 42 inches in length.
- **McLeod**: A hand tool used for raking and scraping.
- **Pulaski**: an axe-like fire hand tool used for cutting, chopping or grubbing.

- **Backpack pump**: A portable 5-gallon water pack with a hose and nozzle used to extinguish fires. These can be collapsible backpacks, plastic or steel tanks.
- **Crosscut felling saw:** Two-man operated saw at least 6 feet long.
- **Double-bit axe:** An axe with 2 blades. The axe must have a 36-inch handle.
- **Felling wedge:** A smooth wedge that is placed in a tree while cutting to prevent the chainsaw or saw from getting stuck.

Fire Weather Watch: A type of watch issued by the National Weather Service to alert fire officials and firefighters of potentially dangerous fire weather conditions in the next 24 to 36 hours.

High Fire Threat Districts (HFTD): High Fire Threat Districts (HFTDs) are CPUC-approved delineated areas, where there is an elevated or extreme risk (including likelihood and potential impacts on people and property) from utility associated wildfires

High Fire Risk Area (HFRA): The High Fire Risk Area (HFRA) Map is a purpose-built map using the same methodology as the HFTD Map for the use in scoping PSPS events and aims to ensure that all areas of catastrophic wildfire risk are fully captured in PG&E’s PSPS Program. The HFRA Map is built off of the Tier 2 and Tier 3 and does not include Zone 1. This map considers catastrophic fire risk factors and utility infrastructure and was developed by factoring in incremental changes to the HFTD map boundaries to add areas (HFRA Additions) where risk factors for the potential of catastrophic fire from utility infrastructure ignition during offshore wind events is higher

Major Work Operations: A job where work activities or staging of resources will be concentrated in and out of a staging area. Jobsites where people stage and conduct construction-type activities typically are large.

Masticating: Reducing vegetation into small chunks to assist in removing small trees (e.g. snags).

Overland Travel: Areas that are overgrown with grass and/or brush without a visible road.

Red Flag Warning: A warning issued by the National Weather Service to alert fire officials and firefighters of potentially dangerous and imminent fire weather conditions.

Safety and Infrastructure Protection Team (SIPT): This in-house team consists of two-person crews composed of IBEW-represented employees who are trained and certified safety infrastructure protection personnel. They provide standby protection and asset protection services in support of crews and protect critical utility infrastructure within PG&E’s service territory, especially in areas at higher risk of wildfire.

Sealed Box of Tools: The sealed box of tools required on major work operations must remain sealed unless being used for firefighting purposes only. The box that contains the tools can be made of any material or can be in a single compartment on a truck as long as the box can be closed with a latch or other method. The box is not required to be locked per California Public Resource Code.

Stationary Work: Work being performed in a single location for an extended period of time that is neither intended nor expected to move.

Working Fire Watch: A crew member responsible for fire detection, risk mitigation, and total situational awareness while work is being performed **in addition to** normal assigned work duties. This crew member is also responsible to help extinguish fires and stop work, when required, due to safety hazards.

IMPLEMENTATION RESPONSIBILITIES

The Vice President, PSPS Operations and Execution, is responsible for approving and distributing this standard.

The directors responsible for field and operational teams within the following organizations must ensure that their employees, whose actions could result in igniting a fire, are aware of and comply with this standard:

- Electric Operations
- Gas Operations
- Power Generation
- Information Technology
- Customer Care
- Shared Services
- Other groups not mentioned above who travel to, perform work, or operate outdoors on any forest, brush, or grass-covered land.

GOVERNING DOCUMENT

NA

COMPLIANCE REQUIREMENT / REGULATORY COMMITMENT

California Health & Safety Code

California Public Resources Code – Prohibited Activities

United States Forest Service

U.S. Forest Service-California Department of Forestry and Fire Precaution (CAL FIRE)

Records and Information Management:

PG&E records are company assets that must be managed with integrity to ensure authenticity and reliability. Each Line of Business (LOB) must manage Records and Information in accordance with the Enterprise Records and Information (ERIM) Policy, Standards and Enterprise Records Retention Schedule (ERRS). Each Line of Business (LOB) is also responsible for ensuring records are complete, accurate, verifiable and can be retrieved upon request. Refer to GOV-7101S, “Enterprise Records and Information Management Standard” for further records management guidance or contact ERIM at Enterprise_RIM@pge.com.”

REFERENCE DOCUMENTS

Developmental References

General:

- *Code of Safe Practices*
- Numbered Document 015225, “Cutouts, Fuses, and Disconnects for Overhead Distribution Lines”
- Safety and Health Procedure SHC-236, “Fire Prevention during Welding, Cutting and other Hot Work”

Utility Procedures:

TD-4640P-01, "Hot Work Control- Fire Prevention"

Utility Standards:

- SAFE-1001S, “PG&E Injury & Illness Prevention Plan (IIPP)”
- TD-1460S, "Welding Control"

Supplemental References:

- CAL FIRE (Department of Forestry and Fire Protection) *Power Line Fire Prevention Field Guide*, “Statutes and Regulations Pertaining to Overhead Powerline Infrastructure”
- *California Public Resource Code*
- National Wildfire Coordinating Group, *NWCG User Guide for Glossary of Wildland Fire*
- United States Department of Agriculture (USDA) Forest Service, “National Fire Danger Rating System”

APPENDICES

NA

ATTACHMENTS

Attachment 1, “Wildfire Mitigation Matrix”

Attachment 2, “Wildfire Risk Checklist”

Attachment 3, “Relationship Between Fire Index Areas, High Fire Threat District, and High Fire Risk Areas”

DOCUMENT REVISION

This utility standard cancels and supersedes Utility Standard TD-1464S, “Preventing and Mitigating Fires While Performing PG&E Work,” Rev. 4, dated 6/17/2020.

DOCUMENT APPROVER

Mark Quinlan, Vice President, PSPS Operations & Execution

DOCUMENT OWNER

[redacted], Director, Wildfire Safety Operations

DOCUMENT CONTACT

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REVISION NOTES

Where?	What Changed?
Target Audience	Added in “This includes areas that may seems urban but have vegetation that can aid in the spread of an ignition”
Section 2, “General Requirements”	Included “For areas that are not within an FIA with a Fire Index Rating, but still working on or near flammable vegetation forest, brush, or grass-covered lands, employees should use the Fire Index Rating of the nearest FIA.”
Section 2.2.7.4	Clarified language about stationary work being performed that can produce a spark ember fire or flame. During R1 – R3 & when not in an FIA there will be a Working Fire Watch. – addresses induction arcing issue summarized in a recent Safety Flash
Section 2.4.3 Wildfire Risk Checklist	Clarified expectations for use of the Wildfire Risk Checklist.
Section 4.2	Clarified that the source for FIA and FPI rating maps is Enterprise GIS
Section 5, “Mitigation”	Added language: “These mitigations should be taken at a minimum. If the PIC feels there should be additional mitigations employees should take the additional mitigation.”
Definitions	Clarified definition for a Sealed Box of Tools
Section 6	Added section 6, Quality Review Expectations
Attachment 1, Line items 5, 8, and 9	Added language to clarify expectations for a lone worker or 2-man crew.
Attachment 2	Updated Wildfire Risk Checklist by adding in Sealed Toolbox as a checklist item
Attachment 3	Added this attachment to the standard. This document clarifies the relationship between Fire Index Areas, High Fire Threat Districts, and High Fire Risk Areas
Document Owner	Updated to Vice President, PSPS Operations and Execution

Preventing and Mitigating Fires While Performing PG&E Work

Attachment 1, Wildfire Mitigation Matrix

********READ BEFORE STARTING WORK********

BEFORE starting work on or near any forest, brush, or grass-covered lands, all personnel must review this attachment and assess the required mitigations based on the Utility Fire Potential Index Rating produced by PG&E's Meteorology team. (Please subscribe using the link above.)

This "Wildfire Mitigation Matrix" (referred to as Matrix from here) is set up with work activities and activity descriptions listed down the left, and generic mitigations based on the Utility Fire Potential Index Ratings across the top.

Activities requiring additional mitigations are referenced in the corresponding box in blue text.

Please refer to the standard for more detailed information on the general requirements and other mitigations listed in this document.

NOTE: When Red Flag Warnings are in effect, personnel must take **R5** Fire Index Rating mitigations.

The mitigations for all R1, R2, and R3 Fire Index Ratings are described in more detail in Utility Standard TD-1464S, Section 2, "General Information."

✔ Denotes a work activity that requires general requirements (**R1, R2,** and **R3** Fire Index Ratings mitigations).

✔ Denotes a work activity that requires ALL general requirements (**R1, R2,** and **R3** Fire IndexRatings mitigations) AND the mitigations from **R4**.

✔ Denotes a work activity that requires ALL general requirements (**R1, R2,** and **R3** Fire Index Ratings mitigations), mitigations required for **R4** Fire Index Ratings, AND mitigations required for **R5** and **R5-Plus**.

✘ Denotes the work activity is **not** allowed.

Blue Text – Denotes mitigations to be taken **in addition** to the respective mitigations listed at the beginning of the matrix.

If the work being performed requires an exemption during an R5+ Fire Index Rating, contact the Hazard Awareness & Warning Center (HAWC) (formerly the WSOC) at WildfireSOC@pge.com or 1-800-255-7593.

Preventing and Mitigating Fires While Performing PG&E Work

Attachment 1, Wildfire Mitigation Matrix

a. **General Requirements for R1, R2,** and **R3**

1. Prepare for work being performed (review standard).
2. Review the Fire Index Rating each morning during tailboard.
3. Evaluate weather conditions throughout day to ensure work safety, update mitigations or stop work, when necessary.

TOOLS

4. Jobsite **must** have enough tools to outfit all crew members at the operation.
5. Major work operation must have a sealed box of tools as described in Section 2.2.5 including one serviceable chainsaw
6. Tools should be readily available on the jobsite
7. Ensure the proper tools are available on the below vehicles as described in Section 2.3.2

   Passenger vehicles must carry
   - One shovel
   - one fire extinguisher

   Trucks/4-wheel drive vehicles (1/2 ton or larger) must carry
   - one shovel
   - one 5-gallon backpack pump

   Heavy machinery must carry
   - one shovel or McLeod
   - one Pulaski
   - one 5-gallon backpack pump

TRAVEL and VEHICLES

8. Maintain situational awareness when driving off designated roadways.
9. Unoccupied vehicles should not be parked on any vegetation.

Work and Ignitions while working

10. When performing stationary work that can produce a spark, or when using machinery with an internal combustible engine, personnel **must** either
    - Clear a 10-foot radius down to mineral soil OR have a Working Fire Watch if the area cannot be cleared or is not stationary.
    - IF the work is not stationary and the jobsite cannot be cleared a w**orking fire watch** is required

    ***This rule does **not** pertain to vehicle travel.*
11. If there is an ignition, jobsite personnel **must** call emergency services (9-1-1) to report it, even if the fire is extinguished.
    - **Then,** phone the WSOC (800-255-7596) with the location, source, and impacted assets.
12. **Do not smoke** unless there is a 3-foot cleared area (down to mineral soil), an extinguishing agent, and butt receptacle with water in the smoking area.

R4 ratings must meet all the below requirements in addition to the requirements for **R1, R2,** and **R3** ratings:

b. 120 gallons of water at the jobsite with 200 feet of hose
c. Evaluate weather conditions to ensure it remains safe to work.
d. **Working** Fire Watch assigned to the jobsite.

For **R5** ratings must meet all the below requirements, in addition to the requirements for **R1**, **R2**, **R3**, and **R4** ratings:

e. **Dedicated** Fire Watch
f. Must have a trailer-mounted water tank or alternative water delivery method at the jobsite.
g. Consider additional modification to the fuel sources surrounding jobsite.
h. Suspend all planned work during an **R5-Plus** fire rating.
i. During all emergency work being performed during an **R5-Plus** fire rating, personnel **must** have SIP-T on standby or a 300-gallon water tender available.

Attachment 1, Wildfire Mitigation Matrix

Activity Number	Work Activity	Description	R1 / R2 / R3	R4	R5 OR Red Flag Warning	R5-Plus
Vehicle, Roads, Inspections						
1	**Vehicle Travel on Unpaved/ off Designated Roadways**	Anything that propels, moves, or draws on unpaved surfaces. This includes transporting materials.	✓	✓	✓	✓
2	**Using Heavy Equipment**	General construction, water, bars, culvert cleaning/repair grading /excavation, digging For example, blades, dozers, skid steers, excavators, back hoes	✓	✓	✓	✗

Attachment 1, Wildfire Mitigation Matrix

Activity Number	Work Activity	Description	R1 / R2 / R3	R4	R5 OR Red Flag Warning	R5-Plus
Unmanned Aerial Vehicle (UAV)						
3	**Unmanned Aerial Vehicle (UAV)** **Routine work**	Inspections/ Surveys	✓	✓ Pilot and Sensor Operator or dedicated fire watch must be within 50 ft of the UAV being flown Crew must have 5-gallon backpack pump (in place of the 120-gallon requirement) and a round point shovel at the base of the structure being flown Crew must use a 5'-0" min LZ Mat for take-off and landing	✓ Operations in Tier 2 or 3 areas are not authorized Operations in Non-Tier areas is at the discretion of the pilot in command for local wind speed within UAV operating area Flying between parallel ETL's is prohibited when less than 60' (+ drone diameter) apart	✗
4	**Unmanned Aerial Vehicle (UAV)** **Non-routine work**	Inspections, PSPS Patrols, Investigations, Emergency Response	✓	✓ Pilot and Sensor Operator or dedicated fire watch must be within 50 ft of the UAV being flown Operations is at the discretion of the pilot in command for local wind speed within UAV Operating limits There must be a 5-gallon backpack pump (in place of the 120-gallon requirement) and a round point shovel at the base of the structure being flown Crew must use a 5'-0" min LZ Mat for take-off/landing Wind meter must be used	✓ For Operations in Tier 2 or 3. In addition to R4 requirements After authorization from accountable organization's Director (or above), all flights to be coordinated with the LOB's (e.g., EO) Aerial Inspections Lead & UAS Operations Supervisor. Flying between parallel ETL's prohibited when less than 60' (+ Drone Diameter) apart Maintain two points of egress on maintained road. If only one point of egress, SIPT crew must be on site during the operations Fiberglass fire blanket and emergency communication device available. Maintain dedicated fire watch within 50' of UAV being flown	✓ (Please see R5 conditions to the left)

Attachment 1, Wildfire Mitigation Matrix

Activity Number	Work Activity	Description	R1 / R2 / R3	R4	R5 OR Red Flag Warning	R5-Plus
Electrical Equipment/Maintenance						
5	**Electrical Equipment Repair and Replacement**	Including tasks related to conductors, pole, and OH equipment from which a spark, fire, or flames may originate	✓	✓	✓	✗
6	**Routine work for lone worker or 2-person crews**	This includes installing new services, disconnect and reconnect services, etc.	✓	✓ Crews should have a 5-gallon backpack pump within 25 ft of the work being performed	✓ Crews should have a 5-gallon backpack pump within 25 ft of the work being performed	✗
7	**Restoring and Testing Electric**	Replacing blown fuses	✓	✓ Must patrol and clear the hazard Ensure conditions at the base of the pole do not support ignition or the rapid spread of fire	✓ Must patrol and clear the hazard Ensure conditions at the base of the pole do not support ignition or the rapid spread of fire	✓ Must patrol and clear the hazard Ensure conditions at the base of the pole do not support ignition or the rapid spread of fire
8	**Switching**		✓	✓ When performing switching, ensure that personnel have a 5-gallon backpack-style pump and a round point shovel within 25 feet of the work location. The vehicle used for travel should also be equipped per the details in TD-1464S, Section 2	✓ Perform the analysis of the work (e.g., switching operation type, time of day, need for a dedicated fire patrol). Consulting an Electric Public Safety Specialist is highly recommended	✓ Perform an analysis of the work. The Task Force Leader (TFL) MUST consult an electric Public Safety Specialists (PSS)

Attachment 1, Wildfire Mitigation Matrix

Activity Number	Work Activity	Description	R1 / R2 / R3	R4	R5 OR Red Flag Warning	R5-Plus
Vegetation Management						
9	**Mowing Hot Saw or Masticating Equipment**	This includes gas and electric-powered lawn mowers and masticating equipment, but does NOT pertain to weed eaters	✓	✓ **In-lieu-of the 120-gallons, you MUST have a 5-gallon backpack-style pump and a round point shovel within 25 feet of the work location. (This ONLY pertains to single or two-man teams performing this operation)**	✗	✗
10	**Pole/Tower Ground Clearance**	10 feet of clearance around poles and tower structure (power tools)	✓	✓	✓ **In-lieu-of the 120-gallons, you MUST have a 5-gallon backpack-style pump and a round point shovel within 25 feet of the work location. (This ONLY pertains to single or two-man teams performing this operation)**	✗
11	**Conductor Vegetation Clearance**	Trim and occasional remove trees to maintain required, mandated clearances	✓	✓	**Extreme:** ✓ ** **Red Flag Warning:** ✓ [1]	✗
12	**Harvesting Timber on PG&E Lands**		**Follow conditions and standards in the Timber Harvest Plan (THP). Ensure the mitigations in this matrix are followed based on work performed (e.g., using chainsaws).**			

[1] May perform work only after consulting with Meteorology and ensuring there is a 5-gallon backpack pump onsite in-lieu-of the 120 gallons of water. Jobsite personnel know how to access the information needed to determine if it is too dangerous to start working or, if a job is in progress, when it is too dangerous to continue working. When danger exists, **stop all work**.

Attachment 1, Wildfire Mitigation Matrix

Activity Number	Work Activity	Description	R1 / R2 / R3	R4	R5 OR Red Flag Warning	R5-Plus
Other Activities						
13	**Construction Hot Work**	Any temporary operation involving open flames or that produces heat and/or sparks. This includes, but is not limited to, **brazing**, **cutting**, **grinding**, **soldering**, **torch-applied materials**, and **welding**	✓	✓	✓	✗
14	**Using Equipment with an Internal Combustion Engine** **Requires Spark Arrestor** **(Excluding Vehicles)**	Frequently used for hand-held leaf blowers, chainsaws, and weed whackers. Portable and stationary equipment includes compressors, generators, etc.	✓	✓	✓ **Unmanned generators may be used to ensure:** **1. Public Safety** **2. Safety of company assets and maintain assets** **Ensure a clearance of 10 feet down to mineral soil. Onsite water is NOT required**	✗ **Unmanned generators may be used to ensure:** **1. Public Safety** **2. Safety of company assets and maintain assets** **Ensure a clearance of 10 feet down to mineral soil. Onsite water is NOT required**

Preventing and Mitigating Fires While Performing PG&E Work

Attachment 1, Wildfire Mitigation Matrix

Activity Number	Work Activity	Description	R1 / R2 / R3	R4	R5 OR Red Flag Warning	R5-Plus
15	**Using Portable Tools Powered by an Internal Combustion, Power Cord**	Leaf blowers, chainsaws, weed whackers, drills, saws, lawn mowers, and similar tools with engine or motor	✓	✓	✓	✗
16	**Battery Powered Equipment**	Such as lawn mowers, weed whackers, leaf blowers, drills, survey equipment	✓	✓	✓	✗
17	**Blasting (Explosives)**		**Must follow the mitigations identified in the State Fire Marshall's Use Permit.**		✗	✗

Attachment 1, Wildfire Mitigation Matrix

Activity Number	Work Activity	Description	R1 / R2 / R3	R4	R5 OR Red Flag Warning	R5-Plus
Burning						
18	**Open Burning**	Burn any brush, stumps, logs, fallen timber, fallows, slash, grass-covered lands, brush-covered lands, or other flammable materials	**Zone A – Always requires a burn permit and compliance with the permit's terms** **Zone A:** Includes Mono, Inyo, San Bernardino, Santa Barbara, Ventura, Los Angeles, Orange, Riverside, San Diego, and Imperial Counties. **Zone B – Permit when required** **Zone B:** Includes any county and portion of any county that is not included in Zone A.	✗	✗	✗
Substation **NOTE: The activities below only pertain when there is vegetaion near the work being performed.**						
19	**Activities that can produce arcing, sparks, or fire ≤ 15 feet from inside the substation fence**	Any substation activities	✓	✓	✗	✗
20	**Activities that can produce arcing, sparks, or fire > 15 feet from inside the substation fence**	Any substation activities	✓	✓	✓	✗

Preventing and Mitigating Fires While Performing PG&E Work

Attachment 1, Wildfire Mitigation Matrix

REVISION NOTES

Where?	What Changed?
Item 6	Added line Item 6, “Routine work for lone worker or 2-person crews,” on Page 5.
Added UAV section	Added the section on “Unmanned Aerial Vehicle (UAV)” on Page 4.

Preventing and Mitigating Fires While Performing PG&E Work

Attachment 2: Wildfire Risk Checklist

Date:____________ Time:____________ Work Supervisor Name:____________

Work Description:____________ Supervisor Signature:____________
(Align with activity # in the Work Mitigation Matrix)

WORK LOCATION

Nearest Address:____________

Cross Street:____________

Latitude: N____________ Longitude: W____________

Local Fire Agency:____________

(Please see the Job Packet for more location information)

ENVIRONMENTAL CONDITIONS

PG&E Index Area:____________ Fire Danger Rating:____________ Red Flag: Y/N

Evacuation Plan:____________

____

FIRE RISK MITIGATIONS

- ☐ **Vehicles are safely parked,** and vegetation cleared underneath it
- ☐ **Vegetation Clearance** of 10 feet surrounding the work area
- ☐ **Wetting down the jobsite**
- ☐ **Welding Blanket or tent** is being used on the jobsite
- ☐ **Working Fire Watch** is assigned
- ☐ **Dedicated Fire Watch** is on the jobsite
- ☐ **Fire extinguisher** located within 25 feet of operating internal combustion engines
- ☐ **Water delivery system** is on the jobsite with 40 pounds of pressure at the nozzle and 200 feet of hose

Other:____________

FIRE SUPPRESSION TOOL INVENTORY

- ☐ Backpack-style water pump
- ☐ Pressurized water extinguisher with foam 2A10BC
- ☐ Fire extinguisher(s)
- ☐ Fire extinguishers charged and current certification from CASFM
- ☐ **Shovel**
- ☐ **Pulaski**
- ☐ **McLeod**
- ☐ **Sealed Toolbox**
- ☐ ____________**(Other)**
- ☐ ____________**(Other)**

Attachment 2: Wildfire Risk Checklist

Fire Mitigations

For Fire Danger Ratings "R1", "R2," and "R3":

General Requirements listed in Utility Standard TD-1464S, Section 1.

NOTE: Perform the tailboard before beginning work. Use this checklist to review all fire mitigation requirements.

1. Review the Fire Index Rating each morning during the tai board.
2. Review the Fire Mitigation Matrix.
3. Evaluate weather conditions throughout the day to ensure it is safe to work. Update mitigations or stop work, when necessary.

TOOLS

4. Jobsite must have enough tools to outfit all crew members.
5. Major work operations must have a sealed box of tools as described in Section 2.5, including a serviceable chainsaw.
6. Tools should be readily available on the jobsite.
7. When traveling off designated roadways, the following is required:

   Passenger vehicles must carry
   a. One Shovel
   b. One fire extinguisher

   Trucks/4-wheel drive vehicles (1/2 ton or greater) must carry
   a. One shovel or McLeod fire tool
   b. One 5-gallon backpack pump or larger-capacity water (or Compressed Air Foam System [CAFS]) pump/delivery system

   Heavy machinery or equipment
   a. One shovel or McLeod fire tool
   b. One 5-gallon backpack pump or larger-capacity water system or CAFS
   c. One Pulaski

TRAVEL AND VEHICLES

8. Maintain situational awareness when driving off a designated roadway.
9. Park unoccupied vehicles on paved, gavel, or bare mineral soil. If it is not feasible, turn off the vehicle, verify the proper fire extinguishing tools are available, and clear all vegetation around the exhaust.

Work and Ignitions while Working

10. When performing stationary work that can produce a spark, or when using machinery with an internal combustion engine, personnel **must** either:
    a. Clear a 10-foot radius down to bare mineral soil, OR
    b. Have 120-gallons of water onsite
11. If there is an ignition at the jobsite, it **must** be reported to emergency services (9-1-1) and then to the Wildfire Safety Operations Center (WSOC) at (800) 255-7593 with the location, source, and impacted assets.
12. DO NOT smoke unless there is a 3-foot cleared area (down to bare mineral soil), an extinguishing agent, and a receptacle with water in the smoking area.

For Fire Danger Ratings "R4":

13. Ensure there is at least 120 gallons of water with 200 feet of hose and 40 pounds per square inch (psi) of pressure at the nozzle.
14. Assign a WORKING Fire Watch.

For Fire Danger Ratings "R5" and "R5-Plus":

15. Have a DEDICATED Fire Watch with an extinguishing agent and a hose long enough to reach the work being performed.
16. Consider additional fuel modifications surrounding the jobsite.
17. Suspend all planned work during **"R5-Plus."**
18. Ensure all emergency work performed during **"R5-Plus"** has a standby SIPT crew or a 300-gallon water tender onsite.

Preventing and Mitigating Fires While Performing PG&E Work

Attachment 3, Relationship Between Fire Index Areas, High Fire Threat District, and High Fire Risk Area

This Attachment 3 defines and provides information on the relationship between Fire Index Areas (FIAs), High Fire Threat District (HFTD), and High Fire Risk Areas (HFRA).

TABLE OF CONTENTS

Section	Title	Page
1	Fire Index Area	2
2	High Fire Threat District	3
3	FIAs and HFTD Tier 2 and Tier 3 areas	5
4	High Fire Risk Area	6

Preventing and Mitigating Fires While Performing PG&E Work

Attachment 3, Relationship Between Fire Index Areas, High Fire Threat District, and High Fire Risk Area

1 Fire Index Area

A Fire Index Area (FIA) is a geographical area over which fire danger determinations are produced, which will determine the proper mitigations required as laid out in [Utility Standard TD-1464S, "Preventing and Mitigating Fires While Performing PG&E Work"] and [Utility Procedure TD-1464P-01, “Fire Index Patrol and Non-Reclose Procedure”]. The map was developed by USDA, Forest Service – Pacific Southwest Forest and Range Experiment Station in 1959. The 109 FIAs were originally developed to enable fire rating based on local conditions. In 2018 PG&E adjusted the FIAs to align with Tier 2 and Tier 3 areas as well as making further adjustments to minimize crossing of circuits where possible. FIAs are used as the basis for daily fire index ratings.

Figure 1: Fire Index Areas

Attachment 3, Relationship Between Fire Index Areas, High Fire Threat District, and High Fire Risk Area

2 High Fire Threat District

High Fire Threat Districts (HFTDs) are CPUC-approved delineated areas, where there is an elevated or extreme risk (including likelihood and potential impacts on people and property) from utility associated wildfires.

The districts are designated under three levels:

- Zone 1: High Hazard Zones on the U.S. Forest Service-California Department of Forestry and Fire Protection (CAL FIRE) joint map of Tree Mortality High Hazard Zones
- Tier 2: Elevated risk for utility-associated wildfires
- Tier 3: Extreme risk for utility associated wildfires

Table 1: High Fire Threat District Definitions

Tier Level	Definition	Distinctions
HFTD Zone 1 – High Hazard Zones	HHZ on the USFS-CAL FIRE joint map of Tree Mortality HHZs, excluding areas in Tier 3 or Tier 2. These are areas where tree mortality directly coincides with critical infrastructure. They represent direct threats.	Zone 1 is defined as a Tree Mortality HHZ (as determined by California's Tree Mortality Task Force), a subset of Tier 1 of the CPUC HFTD Map. Zone 1 excludes areas in the Elevated Risk of Tier Level 2, and the Extreme Risk of Tier Level 3 risk areas but is included in the HFTD due to specific hazards to utilities. Tree mortality areas are identified by the USFS, CAL FIRE, and other State and Regulatory Agencies as determined by published district maps and are subject to updates.
HFTD Tier 2 – Elevated Risk	Elevated risk (including likelihood and potential impacts of occurrence) for utility associated wildfires.	Tier 2 is distinguished from Zone 1 and other areas outside the HFTD by having greater likelihood of fire initiation and growth that would impact people or property, from utility- associated wildfires, and where enhanced utility regulation could be expected to reduce utility-fire risk.
HFTD Tier 3 – Extreme Risk	Extreme risk (including likelihood and potential impacts of occurrence) for utility associated wildfires.	Tier 3 is distinguished from Tier 2 by having highest likelihood of fire initiation and growth that would impact people or property from utility-associated fires, and where the most restrictive utility regulations are necessary to reduce utility-fire risk.

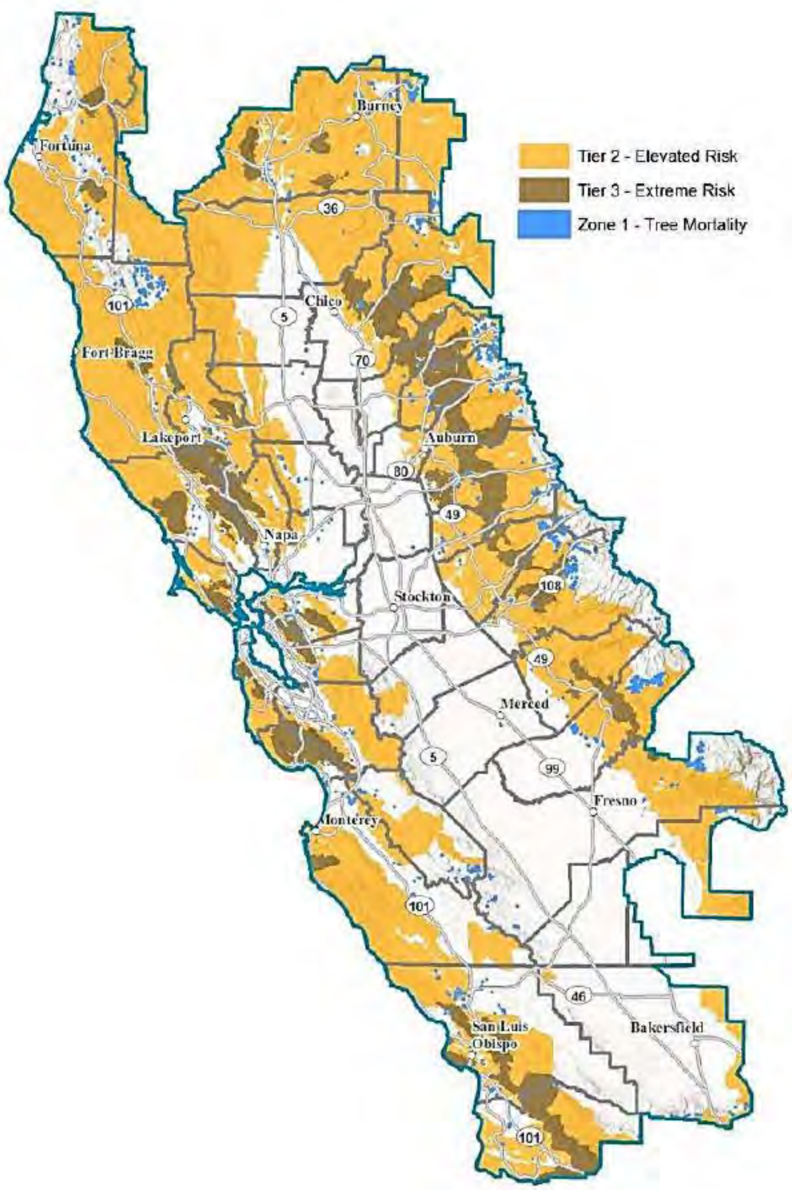
The HFTD is a foundational tool to identity areas of elevated or extreme wildfire risk for utilities. The map was not developed at the electric asset level and is not operationally informed for PSPS Program scoping and execution.

Preventing and Mitigating Fires While Performing PG&E Work

Attachment 3, Relationship Between Fire Index Areas, High Fire Threat District, and High Fire Risk Area

Figure 2 shows and overview including Zone 1, Tier 2, and Tier 3.

Figure 2: HFTD Zone 1, Tier 2, and Tier 3



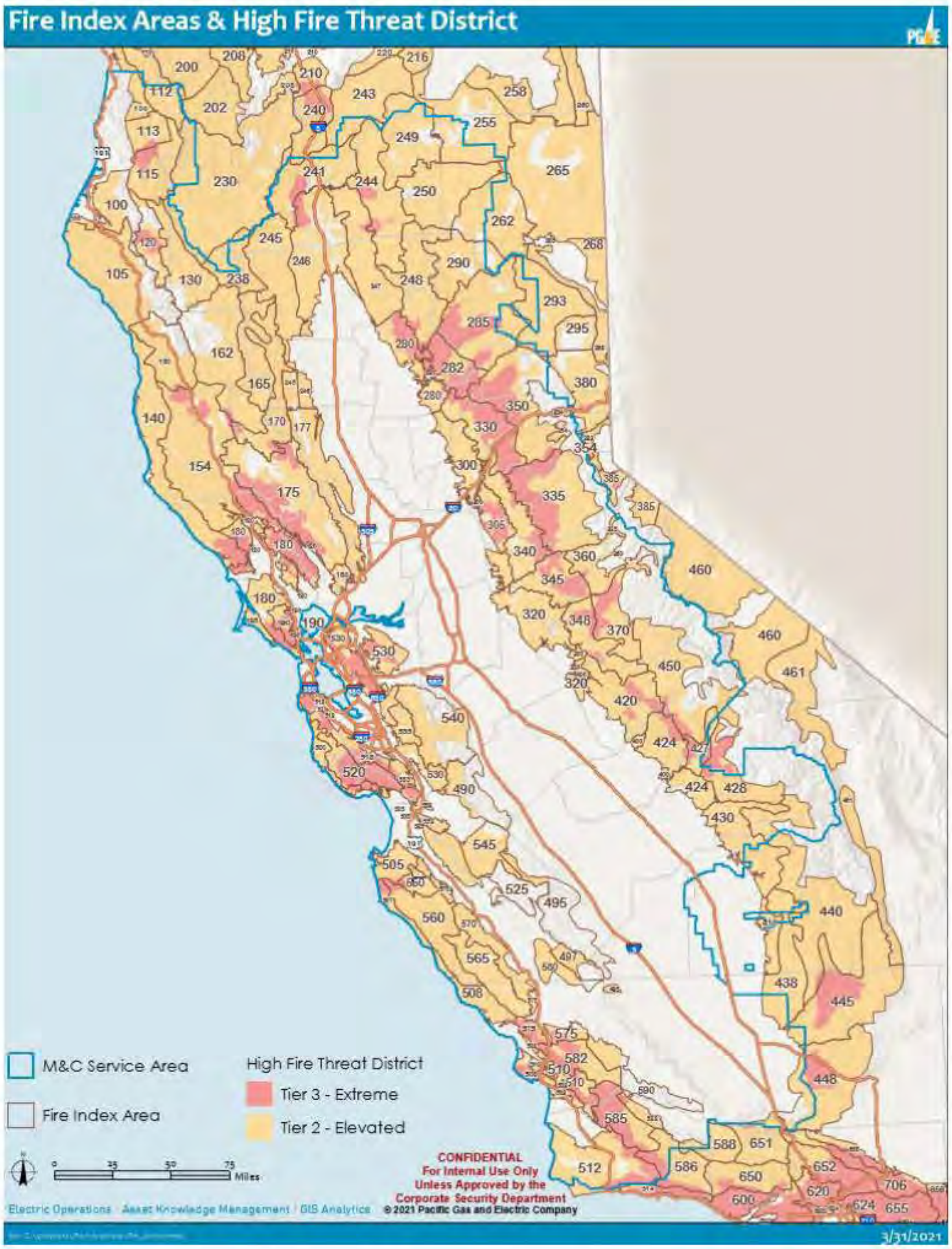
Preventing and Mitigating Fires While Performing PG&E Work

Attachment 3, Relationship Between Fire Index Areas, High Fire Threat District, and High Fire Risk Area

3 FIAs and HFTD Tier 2 and Tier 3 areas

FIAs to align with Tier 2 and Tier 3 areas.

Figure 3: FIAs with HFTD Tier 2 and Tier 3



Attachment 3, Relationship Between Fire Index Areas, High Fire Threat District, and High Fire Risk Area

4 High Fire Risk Area

The High Fire Risk Area (HFRA) Map is a purpose-built map using the same methodology as the HFTD Map for the use in scoping PSPS events and aims to ensure that all areas of catastrophic wildfire risk are fully captured in PG&E's PSPS Program. The HFRA Map is built off of the Tier 2 and Tier 3 and does not include Zone 1. This map considers catastrophic fire risk factors and utility infrastructure and was developed by factoring in incremental changes to the HFTD map boundaries to add areas (HFRA Additions) where risk factors for the potential of catastrophic fire from utility infrastructure ignition during offshore wind events is higher.

Figure 3 shows the total HFRA map.

Figure 4: Total HFRA Map

Attachment 3, Relationship Between Fire Index Areas, High Fire Threat District, and High Fire Risk Area

Figure 5 shows an example of an HFRA “Addition” to Tier 2.

Addition Rationale:

- High fuel load
- Significant area for fire to grow momentum
- Steep slopes to west with communities downwind
- Consistent with Surrounding Tier 2

Figure 5: Example HFRA Tier 2 Addition (Cloverdale 1101)

[redacted]

CPUC Tier 2 Boundary

Proposed HFRA map Addition

12kV OH Distribution Line

Preventing and Mitigating Fires While Performing PG&E Work

Attachment 3, Relationship Between Fire Index Areas, High Fire Threat District, and High Fire Risk Area

REVISION NOTES

Where?	What Changed?
N.A.	New document

Electric Overhead Tag

Notification #: 119117143

Priority: E **Sub Priority:**

PM Order #: 35257460

Date Identified: 06/06/2020

Date Required: 06/06/2021

Identified in Field By: [redacted]
Street Address:

City: Reddimg
Cross Street: Mule town rd
Division: North Valley
Latitude: [redacted]
Longitude:
Description: TREE_DECA_INPL - [redacted] Reddimg

Plat: Q2604
Circuit: 10340-1101, GIRVAN
SSD: 10779
Equipment #:
Pin #: ____________________
Pole #: ____________________
OIS #: ____________________
SAP Func. Location: ED.87-Q260400000.STRU.POLE
SAP Equipment: 101494005
Accessibility Tier:

Item Details

	Facility Type	Damage	Cause	Action
Item 3	TREE Tree/Vine	DECA Decayed/Rotten		INPL Install CL Pole
	☒ Completed ☐ Canceled			
Item 2	COND Conductor	CLER Clearance Impaired		ADJU Adjust
	☒ Completed ☐ Canceled			
Item 4	TREE Tree/Vine	OVRG Overgrown		TRIM Trim
	☒ Completed ☐ Canceled			

☐ Pole Test Sheet

User Status

Conductor/Operating Information		Field Identification		Field Condition (Exposure)		Field Condition (Accessibility)		Other	
Status	**Description**	**Status**	**Description**	**Status**	**Description**	**Status**	**Description**	**Status**	**Description**
SEC	Secondary	INSP	Inspection	FRAB	HFRA Within Both	BTKA	Bucket/Lift Truck Accessible	PROG	Internal Program Requiremen
CLR	Clearance Required			TER3	Tier3 Wildfire	CITY	City Moratorium	ESTR	Estimate Required
OH	Overhead			FMOB	Submitted from Mobile			GO	General Order
								COMP	Completed
								CPGD	Completed by PG&E - Division

Job Estimates

Est. Total Hrs. to Complete: 0

Main Work Center: REDDING, Redding

Funded Repair Date:

Issued To

Est. Electric Crew Size: 03 WTC: 311, 07D_Pole Replacement

Gas Crew Size: 00 MAT: 07D, Pole Repl

Reviewed By: ____________________ Date of Field Review: ____________________

Completed or Canceled in Field By (LAN ID): [redacted] If No LAN ID Last Name, First Name: ____________________

Complete or Cancel Date: 08/26/2021 Actual Hours: 18.00 *Check One: PG&E Crew ☐ T-Man ☐ Contractor ☐

*Check One: Completed ☒ Canceled ☐ Found Completed Upon Arrival ☐

Signature: ____________________

I verify that all maintenance on this notification is addressed (completed, canceled, or found completed upon arrival)

Electric Overhead Tag

Notification #: 119117143

Priority: E **Sub Priority:**

PM Order #: 35257460

Date Identified: 06/06/2020

Date Required: 06/06/2021

***Public Safety & Regulatory Reviewer: If notification was canceled, check one (required):**

- ☐ **CONV:** Converted to another Notif-Type
- ☐ **DUMM:** "Dummy" for order only
- ☐ **DUPL:** Duplicate EC for Same Location
- ☐ **EROR:** Created in Error (Desk Cancelation)
- ☐ **NCOA:** All Found Completed/Resolved on Arrival
- ☐ **NOCR:** No Compelling/Regulator Condition Exist
- ☐ **PROG:** Completed under another Program

List of Tasks on Notification

Completed Completed By: [redacted] Completion Date: 08/26/2021

Field Comments:

Comments

06/06/2020 11:36:07 PST INSPECTCPIC (INSPECTCPIC)

- Location : 1

Secondary service attached to tree “Tree Attach” secondary service is rubbing hard against tree due to hard strain. Tree is dying. Need to install secondary pole. Small dirt road, only access in dry condition. Back yard machine preferably.

10/19/2020 09:14:22 PST [redacted]

Override from:

Elec Hrs=00014,

Override to:

Elec Hrs=00000,

secondary attatched to dead tree.

04/19/2021 06:32:50 PST INSPECTCPIC (INSPECTCPIC)

Safety Reassessment

Inspected by [redacted]

Field Submission Date/Time: Apr 19, 2021 at 06:32 AM

Suggested New Due Date: Apr 20, 2022

003-21. Condition needs to be addressed within the next 12 months

Comments: Why are you still on tree needs to install Clarence pool

Additional Comments: Field Safety Assessment completed for Tier 2/3 EC notifications that are not in 2021 work execution plan or scheduled for detailed inspection

06/10/2021 19:31:55 PST [redacted]

SAP ID: 103643934

06/17/2021 11:39:34 PST [redacted]

SENT TO [redacted] FOR [redacted].

Electric Overhead Tag

Notification #: 119117143
PM Order #: 35257460
Priority: E **Sub Priority:**
Date Identified: 06/06/2020 **Date Required:** 06/06/2021

06/24/2021 13:10:10 PST [redacted]

CORRECTIONS MADE, ALL DOCUMENTS UPLOADED TO SAP AND ROUTED TO [redacted]

06/28/2021 13:21:14 PST [redacted]

35257460E Mapping Pre-Post Completed

07/22/2021 04:37:55 PST [redacted]

07/22/2021_Submitted by [redacted] Update Order and Notification Descriptions for HFTD 8/31 Population_WO0000001025772.

07/30/2021 13:47:53 PST [redacted]

PG210245FY / 35257460E; SAC RMC JPD, INTENT, SKETCH AND LOAD CALCS SENT TO UTILITY E-MAIL BOX; 45-DAY FOLLOW-UP. MAP ATTACHED TO ORDER. DS42 COMPLETE, AWAITING APPROVAL TO COMPLETE PC20.

07/31/2021 07:34:12 PST [redacted]

PG210245FY / 35257460E- SAC RMC JPD-JOINT POLE INTENT EARLY RELEASED TO MEET COMPLIANCE REQUIREMENTS. PC20 COMPLETED, DOCUMENTS ATTACHED.

08/02/2021 17:59:33 PST S. [redacted]

35257460 FRESNO DESIGN CENTER DMD VERIFIED ALL REQUIRED TASKS ARE COMPLETE. E-MAIL NOTIFICATION WAS SENT TO FRESNO DESIGN CENTER OMD ON 8/2/21 FOR ASSEBMLY OF THE CONSTRUCTION PACKAGE. OMD WILL CHANGE THE USER STATUS TO UNSC SRDY AND COMPLETE THE PC25 TASK.

08/03/2021 05:46:58 PST [redacted]

35257460 E: Fresno RMC/OMD Prepared ‘ConPkgCompl’ (A69) and attached to EDMS. No critical dependencies to be met. PC25 completed.

08/31/2021 14:43:54 PST [redacted]

ALL VEG WORK COMPLETED BY [redacted] ON 08/23/2021

09/23/2021 14:24:57 PST [redacted]

8/24/21 VEGETATION CREW COMPLETED TRIMMING/VEG CLEARING.

8/25/21 [redacted] AND ROKSTAD CONTRACT CREW COMPLETED POLE INSTALL.

8/26/21 PG&E ECF [redacted] COMPLETED SERVICE WORK.

FDA		New	Priority	Comp
Anchor				
Broken/Damaged	Repair		E	
	Replace		E	
Corroded	Repair		E	
	Replace		E	
Missing	Install		F	
Soil/Eroded/Graded	Adjust		F	
	Replace		F	
Animal Mitigation				
Broken/Damaged	Replace		E	
Mitigation Missing	Install		E	
Bird Protection				
Bird Protection	Replace		E	
CB Pole				
Broken/Damaged	Replace		F	
Burnt	Replace		E	
Decayed/Rotten	Replace		F	
Booster/Regulator				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
Excessive Operation	Overhaul		E	
Leaks/Seeps/Weeps	Clean		E	
	Repair		E	
	Replace		E	
Capacitor				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
	Replace		E	
Leaks/Seeps/Weeps	Clean		B	
	Repair		E	
	Replace		E	
Climbing Space				
Obstructed	Adjust		F	

FDA		New	Priority	Comp
Conductor				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
	Replace		E	
Clearance Impaired	Adjust		E	X
	Install CL Pole		E	
	RayChem		E	
Floater	Repair		E	
Idle Facilities	Remove		E	
Improper Connection	Adjust		E	
Overloaded	Test		E	
Sag/Clearance	Adjust		E	
	Replace		E	
	Install Spreader Bracket		E	
Connector				
Burnt	Replace		E	
Corroded	Repair		E	
	Replace		E	
Incorrectly Installed	Replace		E	
Temp Differential	Replace		E	
Crossarm				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
	Replace		E	
Decayed/Rotten	Repair		E	
	Replace		E	
Cutout				
Broken/Damaged	Repair		E	
	Replace		E	
Clearance Impaired	Adjust		E	
Flashed	Repair		E	
	Replace		E	
Decorative Streetlight				
Broken/Damaged	Replace		E	
Missing	Install		E	
Fault Indicators				
Broken/Damaged	Replace		E	
Ground				
Broken/Damaged	Repair		B	
	Replace		B	
Exposed	Repair		F	
Missing	Install		E	
Guy				
Broken/Damaged	Repair		E	
	Replace		E	
Clearance Impaired	Adjust		F	
Corroded	Repair		E	
	Replace		E	
Loose	Adjust		F	
Missing	Install		F	
Overgrown	Trim		E	
Strain/Abrasion	Adjust		F	
	Remove		F	
Guy Marker				
Missing	Install		F	
	Replace		F	

FDA		New	Priority	Comp
Hardware/Framing				
Bird Prot Required	Install		E	
Birdcage	Install		E	
Broken/Damaged	Repair		E	
	Replace		E	
Loose	Adjust		E	
Missing	Install		E	
High Sign				
Missing	Install		F	
Insulator				
Broken/Damaged	Replace		E	
Flashed	Replace		E	
Primary Squatter	Repair		E	
	Replace		E	
Secondary Squatter	Repair		E	
	Replace		E	
Jumper				
Burnt	Replace		E	
Clearance Impaired	Adjust		E	
	Replace		E	
LAPP Insulator				
Broken/Damaged	Replace		E	
Lightning Arrester				
Broken/Damaged	Repair		E	
	Replace		E	
Flashed	Repair		E	
	Replace		E	
Marking				
Broken/Damaged	Replace		F	
Missing	Install		F	
Molding				
Broken/Damaged	Repair		F	
	Replace		F	
Loose	Adjust		F	
Missing	Install		F	
OH Facility				
Bird Prot Required	Install		E	
Customer Related	Access		B	
	Appointment		B	
	Refusal		B	
Graffiti	Paint		E	
Idle Facilities	De-Energ		E	
	Remove		F	
	Transfer		F	
Limited Access	Inspect		B	
	Patrol		E	
	Remove		E	
Obstructed	Inspect		B	
	Remove		E	
	Replace		B	
Transmission Issue	Create LC		B	

FDA		New	Priority	Comp
Pole				
Broken/Damaged	Re-Frame		E	
	Repair		E	
	Replace		E	
	Pole Stub		E	
Burnt	Repair		E	
	Replace		E	
	Pole Stub		E	
Clearance Impaired	Repair		E	
	Replace		E	
Decayed/Rotten	Pole Top Repair		E	
	Repair		E	
	Replace		E	
	Pole Stub		E	
Idle Facilities	Remove		F	
Leaning	Adjust		E	
	Replace		E	
Overloaded	Replace		E	
	Test		E	
No Safe Access to Pole	Inspect		B	
Woodpecker Damage	Assessment		E	
Recloser/Sectionalizer				
Broken/Damaged	Repair		E	
	Replace		E	
Excessive Operation	Overhaul		E	
Flashed	Repair		E	
	Replace		E	
Leaks/Seeps/Weeps	Clean		E	
	Repair		E	
	Replace		E	
Riser/Pothead				
Broken/Damaged	Repair		E	
	Replace		F	
Installed in Error	Relocate		E	
Flashed	Repair		E	
	Replace		F	
RTVI				
Interference	Repair		E	
	Replace		E	
SCADA/PDAC				
Broken/Damaged	Repair		F	
	Replace		F	
Leaks/Seeps/Weeps	Repair		F	
	Replace		F	
	Test		B	
Steel Lattice Pole				
Guarding Missing	Install		E	
Pole Step				
Clearance Impaired	Remove		F	
Streetlight				
Broken/Damaged	Repair		E	
	Replace		E	
Missing	Install		E	
Steel Lattice Tower				
Broken/Damaged	Replace		E	
Switch				
Broken/Damaged	Repair		E	
	Replace		E	
Trans_Dist Pole				
Bonding Broken	Repair		E	

EMERGENCY ONLY Check Cause (Required)	
☐ Animal	☐ Bird
☐ Equip Failed	☐ Fire
☐ Lightning	☐ Pole Rotten
☐ Third Party	☐ Tree Branch
☐ Tree Contact	☐ Tree Fell
☐ Unknown	☐

All FDA's identified in field
Priority = Default Priority for B, E, G, & F-Regulatory FDA's
Comp = Check if completing FDA in Field

Printed By: [redacted], 09/23/2021

Notification #: 119117143

Electric Overhead Tag

Notification #: 119117143

Priority: E **Sub Priority:**

PM Order #: 35257460

Date Identified: 06/06/2020

Date Required: 06/06/2021

FDA		New	Priority	Comp
Tie Wire				
Broken/Damaged	Replace		E	
Loose	Replace		E	
Transformer				
Broken/Damaged	Repair		E	
	Replace		F	
Corroded	Replace		E	
Flashed	Repair		E	
	Replace		E	
Idle Facilities	Remove		F	
No Common Neutral	Relocate		E	
Overloaded	Test		E	
Parallel	Replace		E	
Leaks/Seeps/Weeps	Clean		B	
	Repair		F	
	Replace		E	
Tree/Vine				
Clearance Impaired	Remove		E	
	Trim		E	
Decayed/Rotten	Install CL Pole		E	X
Overgrown	Remove		E	
	Trim		E	X
Tree Connect	Assessment		B	
	Install CL Pole		E	
Trip Saver				
Broken/Damaged	Repair		E	
	Replace		E	
Under-Arm Bus				
Broken/Damaged	Repair		F	

GENERAL INFORMATION

- Bushing-mounted clip style, part 73B cutouts, are only approved to replace broken bushing mounted cutouts during a storm and are no longer available for purchase.
- Before operating the fuse, reduce or eliminate load.
- Use only hot sticks less than 16 feet long to operate bushing-mounted cutouts.
- Always assess and identify all risks before proceeding with work.
- Do not operate damaged cutouts.
- Blown liquid fuses are hazardous waste.

Tools:

Approved Hot Stick with fuse attachment

Level of Use:

- ✓ **Information**
- ❑ **Reference**
- ❑ **Continuous**

Guidance Document References:

- **TD-2908P-01, "Distribution Switching Procedure"**
- **TD-2999B-021, "Hand Protection Requirements While Using Hot Sticks"**
- **ENV-4000P-01-JA03, "Hazardous Waste Management and Storage Procedure"**
- **015225, "Cutouts, Fuses, and Disconnects for Overhead Distribution Lines"**

VISUAL INSPECTION OF CLIP-STYLE, BUSHING-MOUNTED CUTOUTS (LIQUID-FILLED AND CURRENT-LIMITING FUSES)

1. Perform visual inspection from ground, pole or aerial lift looking for the band marking color on the bushing mounted cutout.

- The blue band identifies the high strength cutout.
- A green band indicates the previous generation which are prone to failure.

WARNING: DO NOT OPERATE GREEN BANDED CUTOUTS.
If the color of the band cannot be determined, do not operate!
HIGH STRENGTH CUTOUTS HAVE BLUE LABEL ON PORCELAIN.

Green Band – Do NOT operate

Figure 1 – Green Band – DO NOT OPERATE!

INSPECTION OF CLIP-STYLE, BUSHING-MOUNTED CUTOUTS (CONTINUED)

WARNING: Do not operate damaged or loose cutouts!

2. After the initial visual inspection identifies a blue band, proceed with the following checklist:
   - Verify no cracks or breaks in porcelain
   - Ensure primary jumper is in good condition
   - Verify there are not bent studs
   - Make sure there is sufficient clearances
   - Verify transformer bushing is in good condition
   - Ensure proper fuse type is installed
   - Verify transformers are not in parallel or that there is no other source of back-feed

   WARNING: If hazards are identified – call for assistance!

   Once all the above items are inspected, perform visual and mechanical inspection from operating position on pole or in bucket.
   - Use a hot stick to "wiggle" bottom of cut-out to check for loose or damaged components.

OPENING CLIP-STYLE, BUSING-MOUNTED CUTOUTS (LIQUID-FILLED FUSES)

LIQUID-FILLED FUSES

1. Attach special fuse-holder inserts designed for liquid-filled fuses (Code 205637 or 205833, depending on the fuse length) to the fuse puller (Code 205159) on the end of a switch stick.

   (See Figure 1)

Figure 1. Fuse-Holder Inserts Installed

2. Using the switch hook, move both locking bails to the fully open position.

   (See Figure 2)

Figure 2. Opening Locking Bails

OPENING CLIP-STYLE, BUSHING-MOUNTED CUTOUTS (LIQUID-FILLED FUSES), Continued

3. Grasp the fuse with the special fuse-holder inserts and gently pull the fuse (top first) from the fuse clips.

(See Figure 3)

> **WARNING: The top of the fuse may be blown off, use care to not spill the liquid contents on yourself.**

IF the fuse comes out of the bottom clip first,
THEN gently pull down to dislodge the fuse.

IF the stud bends while attempting to remove the fuse,
THEN STOP. Additional help is needed.

Figure 3 – Removing a Liquid Fuse from a bushing mounted cutout

OPENING CLIP-STYLE, BUSHING-MOUNTED CUTOUTS (CURRENT-LIMITING FUSES)

1. **CURRENT-LIMITING FUSES:**
Using a fuse puller (Code 205859) without special fuse-holder inserts, rotate the jaws to the largest sized opening and grasp the fuse at the bottom and remove bottom first.

Pull down gently to allow the retaining fuse tab to drop down easily through the upper fuse clips.

(See Figure 4)

Figure 4 – Removing a Current Limiting Fuse

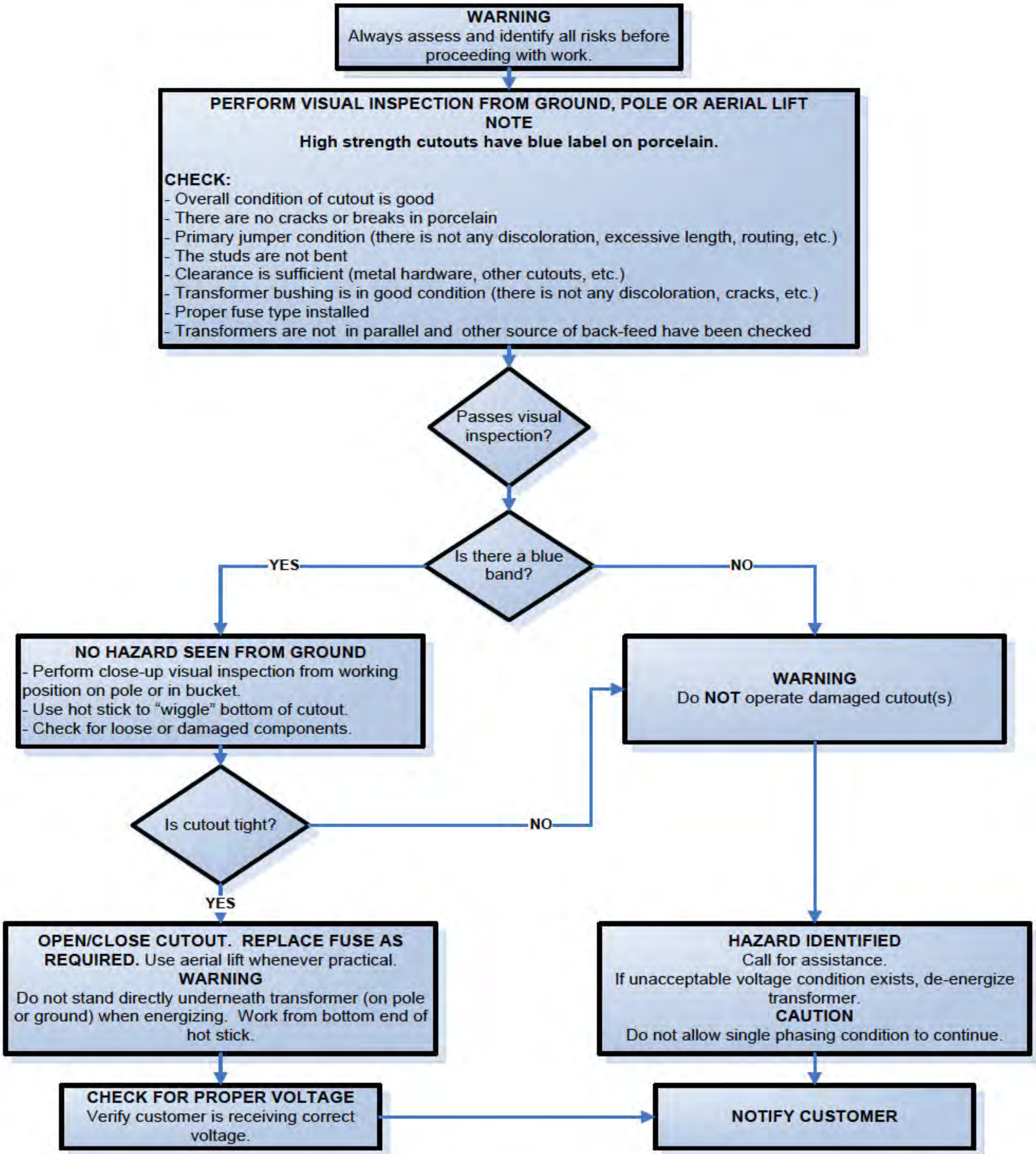
CLOSING A CLIP-STYLE, BUSHING-MOUNTED CUTOUTS (LIQUID-FILLED AND CURRENT-LIMITING FUSES)

1.	Check that the locking bails are in the fully open position.
2.	Using the special fuse-holder inserts, grasp the fuse at a slight angle and place the bottom of the fuse against the bottom clip of the cutout. (See Figure 5) IF the stud bends while attempting to install the fuse, THEN STOP. Additional help is needed.
3.	While applying downward pressure on the fuse stick, push the top of the fuse forward until it makes contact with the upper fuse clip and picks up load.
4.	Push on the fuse gently until it snaps into both clips. Maintain downward pressure on the switch stick or the fuse might slide up and away from the bottom clips, breaking contact and drawing an arc. Push gently to avoid moving the fuse beyond the clips where it might bind.
5.	Then, use the switch hook to close the locking bails.

Figure 5 – Grasping the Fuse

End of Instructions – See Page 5 for flow chart

Part 73B Cutout Decision Making Flowchart




HUSKY


HUSKY
EVOLVE 30M
MIXER


B2407

Apparent Cause Evaluation (ACE) Report

SIF-Potential Incident

Title: Redding Mule Fire Incident

Issue No.: 121959198

Report Rev: 02

Sponsor [redacted] See attached email / Signature — 10/27/2021 / Date

CE Team Lead — See attached email / Signature — 10/27/2021 / Date

Cause Evaluator — See attached email / Signature — 10/27/2021 / Date

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Revisions

Revision 01 – 9/23/2021	
Section / Paragraph	Change Summary
New document	N/A
Revision 02 – 10/27/2021	
Section / Paragraph	
Executive Summary	Revise CA-1 through CA-4 due dates to align with CARB and Executive Review completion dates.

1. Executive Summary

On Wednesday, August 25, 2021 a four-person PG&E Electric Distribution Contract crew from Rokstad Power, Inc. was dispatched to perform work at [redacted] in Redding Ca. The crew consisted of a Journeyman Lineman (JL) Foreman and 3 Journeymen Linemen (JL-1, JL-2, and JL-3). The crew was tasked with replacing a tree connect by installing a new service clearance pole between the transformer pole and the residence and replacing the existing customer secondary conductors (gray wire) between the transformer and the residence. The job site is in Fire Index Area (FIA) 245 with fire index rating of 4 for the day. The work was performed in a small ravine containing grass and brush with a narrow path leading from Placer Road downward to the work locations. A crew from contract vendor Cedar Creek and a CANUS Inspector were on-site to set the new clearance pole.

The crew walked the job site, returned to the truck, and performed a tailboard to discuss what they observed. During the assessment, the crew discovered that the transformer had liquid-filled fuses. Following established guidance in TD-2908P-01-JA243, “Operating Liquid-Filled and Current Limiting Bushing Mounted Cutouts”, it was decided not to disconnect the fuses, but instead to leave the transformer energized, remove the customer’s meter to prevent back feed, and cut the energized secondary conductors at the transformer.

The crew had a 500-gallon “water buffalo” water tank trailer with a 200-foot hose positioned near the entrance of the job site path approximately 292 feet from the transformer pole where the crew was to perform energized work. The hose was not stretched towards the job site or charged with water at this time. The crew also positioned a shovel and chemical fire extinguisher at the base of the transformer pole where the energized work would be performed.

At approximately 1400 hrs while cutting the second energized conductor, the cutting tool made contact with the nearby uninsulated neutral conductor causing an arc flash. The arc melted the metal cutting jaw material and showered molten metal down to the ground around the pole in a 15-foot radius. The crew immediately began utilizing all available nearby firefighting equipment to fight the fire.

The crew from Cedar Creek and the CANUS Inspector who were still on-site saw smoke and yelling in the distance, then assisted the Rokstad crew.

A crew member moved the squirt boom while the Foremen drove the pickup with water buffalo down the access path towards the fire. Once in position, the Foreman, JL-1, and a Cedar Creek crew member helped operate the water buffalo until it was empty. The Foreman then instructed the crews to evacuate.

The narrow path did not provide an area wide enough to turn-around the pickup with the water buffalo trailer attached, so the Foreman attempted to disconnect the water buffalo to get the pickup out. As the flames approached the vehicle the Foreman was not successful in unlocking the safety chains. He then decided to back the truck up and intentionally jack knife the trailer to break the chain loose. In doing so, the water buffalo went off the side of the road, rolled over, and remained connected to the vehicle. As the fire approached the pickup, the Foreman had to abandon it and run for safe ground.

Within a few minutes after the fire started, a CAL-FIRE S2 air tanker was passing overhead, noticed the smoke, and performed 2 fire retardant air drops, which extinguished a majority of the fire. Soon after that, CAL-FIRE firefighting crews with engines arrived and extinguished the remaining fire and hot spots limiting it to approximately 9.2 acres. The fire was fully extinguished by 1621 hrs. The crew was interviewed by CAL-FIRE and released. CAL-FIRE named the fire the “Mule Fire”.

Two Rokstad employees received minor sunburn-type burns to their arms from attempting to control the fire. Both were treated on-site and released. The fire damaged a detached garage and destroyed a contractor pickup truck, water buffalo, and two PG&E poles. Restoration crews responded and service was restored to all impacted customers by the next morning at 09:51 hrs.

The evaluation utilized analysis tools including Comparative Timeline, Human Factors Analysis, Barrier Analysis, and Factor Tree Analysis to deconstruct the incident and identify areas where improvements can be made to mitigate fire risk, effectively extinguish fires that do occur, and ensure future exposure will not result in the same outcome.

To establish the scope of this Apparent Cause Evaluation (ACE), the SIF team determined the inability of the crew to effectively prevent the fire from spreading out of control presented the risk for a SIF-Potential injury or fatality to employees and the public. While the arc flash provided an ignition source, it did not present a risk for a SIF-Potential injury until combined with the inadequate fire response. For this reason the arc flash is not the primary focus of the investigation. To address the arc flash, the Final Communication distributed to impacted PG&E employees and contractors will present expectations regarding the insulation of neutral lines, and adjacent conductors and equipment to protect against secondary contact as described in TD-2360P-01, Rubber Glove Work Methods, 50V to 21kV.

1.1 Causes and Corrective Actions

Causal analysis tools were used to identify a set of potential causes. The causal analysis tools indicated the same findings related to the following:

Cause #	Cause(s)	CA #	CA Description	Action Owner	Due Date
AC-1	The guidance provided in PG&E Utility Standard TD-1464 Rev.5, Preventing and Mitigating Fires While Performing PG&E Work is not specific enough for PG&E and contractor field crews to effectively mitigate fires under the changing environmental conditions. **NERC Cause Code:** A5: Communication B2: Written Communication LTA C05: Ambiguous Instructions / requirements	CA-1	**Action:** Revise PG&E Utility Standard TD-1464S Rev.5, Preventing and Mitigating Fires While Performing PG&E Work: • Define proper placement, preparation, and deployment of water buffalo and water tank-type equipment. The crew must ensure that they have the appropriate water buffalo as close to the worksite as practical and have the required 200 feet of hose to extinguish any possible ignition. The hose on the water buffalo must be extended and ready for use and, reach the work location at a bare minimum. Each day, before beginning work, the water buffalo must be started and tested to ensure it is in good working order. • Require firefighting tools to be positioned at the job site for each employee. • Describe the difference between chemical extinguishers and water sprayers and their appropriate use to suppress different types of fires (i.e. grass, oil, gas, etc.) • Include verbiage allowing the use of 5-gallon backpack and shovel when conditions do not allow water buffalo access. • Add guidance to position vehicles in a manner to provide a safe and efficient route to evacuate. • Add remaining changes mandated in the leadership 5-minute meeting dated 9/1/2021 including: - Fire index R4 and R5 locations will require a dedicated fire watch with the sole responsibility of responding to any possible ignition. - If work must be performed energized in these locations, then site preparation must be performed before beginning work to remove fuels under the facility to bare mineral soil in a 15-foot radius below the facility. - When working in areas on or near grass, brush, and timber covered lands, clear the specific work area down to bare mineral soil and consider wetting the surrounding job site with water. - Include awareness of possible wire contacts between the work location and the next structure and plan how to respond to an ignition if one were to occur mid-span. Note: The above verbiage may be clarified, and items added during implementation. **Deliverables:** Attach a copy of revised Utility Standard TD-1464S Rev.6 to the CAP.	[redacted]	1/14/2022 Justification for due date: It will take 2-months to draft changes to the standard, obtain agreement from stakeholders, obtain approval in EDRS, and publish for use.

Cause #	Cause(s)	CA #	CA Description	Action Owner	Due Date
AC-1 (cont.)		CA-2	**<u>Approach</u>**: Update TD-1464S Attachment 1 Rev.3, Wildfire Mitigation Matrix, to integrate applicable changes in the Standard. **<u>Action</u>**: Revise Utility Standard TD-1464S Attachment 1 Rev.3, Wildfire Mitigation Checklist, including but not limited to: • Specify a Dedicated Fire Watch is required for R4 conditions, • Specify the water delivery system be located within reach of the work location(s). • Specify that the back style water pump must be located in close proximity to where work is being performed to suppress grass and vegetation ignitions. **<u>Deliverables</u>**: Attach a copy of revised Utility Standard TD-1464 Attachment 2 Rev.4 to the CAP.	[redacted]	1/14/2022 <u>Justification for due date</u>: It will take 2-months to draft changes, obtain agreement from stakeholders, obtain approval in EDRS, and publish for use.
AC-1 (cont.)		CA-3	**<u>Action:</u>** Revise Utility Standard TD-1464S Attachment 2 Rev.2, Wildfire Risk Checklist including but not limited to: • Specify a Dedicated Fire Watch is required for R4 and R5 conditions, • Specify the water delivery system be located within reach of the work location(s). • Specify that the back style water pump must be located in close proximity to where work is being performed to suppress grass and vegetation ignitions. • Specify that vehicles are positioned in a way to ensure safe and efficient evacuation if required. **<u>Deliverables</u>**: Attach a copy of revised Utility Standard TD-1464 Attachment 2 Rev.3 to the CAP.	[redacted]	1/14/2022 <u>Justification for due date</u>: It will take 2-months to draft changes, obtain agreement from stakeholders, obtain approval in EDRS, and publish for use.

Cause #	Cause(s)	CA #	CA Description	Action Owner	Due Date
AC-1 (cont.)		CA-4	**Approach**: Update Safety Net Wildfire Mitigation observation checklist for to include latest applicable changes to TD-1464S. **Action**: Revise Safety Net Wildfire Mitigation Checklist with the following items: • Appropriate measures are taken to prevent arcs and sparks working on overhead energized secondary circuits. • Water Buffalo / water source properly pre-tested, positioned, and deployed for immediate use. • Vehicles parked in a cleared area and motors turned off oriented in a direction to aid in evacuation. (modify existing item) • Evaluation performed to determine if work should be done de-energized for R4 and R5 fire index areas. • When required: Working or dedicated fire watch identified • For overhead secondary work that is performed energized in areas with a fire index R4 and R5, site preparation is performed prior to work beginning to remove fuels under the facility to bare mineral soil in a 15-foot radius below the facility. • When working in fire index rating R4 and R5 areas containing forests, brush, and grass, the area is cleared to the bare mineral soil and the crew considered wetting or spraying down the surrounding vegetation and/or trees in the immediate vicinity of the work location. • Crew has awareness of possible wire contacts between the work location and the next structure and a plan for how to respond to an ignition if one were to occur mid span. **Deliverables**: Attach a copy of revised Safety Net Wildfire Mitigation Observation checklist to the CAP.	[redacted]	2/18/2022 Justification for due date: It will take 1-month after implementation of the revised standard to update the Safety Net Observation Checklist.

Cause #	Cause(s)	CA #	CA Description	Action Owner	Due Date
AC-1 (cont.)		CA-5	**Approach**: Provide status on the updates to training curriculum resulting from changes to TD-1464S. **Action**: Provide the status of new procedure content integration into the appropriate training curriculum. • Follow the PG&E Academy and Work Methods Management of Change Process to analyze the impact of procedure updates and adjust curriculum accordingly. - Note: Describe changes to SAFE-1503WBT based on revisions to TD-1464S regarding ground clearing and deployment of water buffalo equipment to suppress fires. Note: Refer to CA-1. **Deliverables**: Academy to report on the status of the training needs assessment pertaining to the integration of new procedure content into existing training curriculum.	[redacted]	3/4/2022 Justification for due date: The Academy curriculum development team is alerted when author is finishing draft and routes the documents for review in EDRS.

1.2 Additional Findings

	Additional Finding Description	Action(s) Requested	CAP Issue Number	Issue Owner
AF-1	The language in the NECA Safety Rules "Redbook" is not specific enough in methods to "avoiding contact" when working on secondary energized conductors below 300V.	Update final communication to include management's expectations surrounding avoiding secondary contacts when work on energized circuits by applying appropriate levels of insulation to exposed neutral conductors or other conductive components as described in T-2360P-01 Rev.3.	122109212	[redacted]
AF-2	SAFE-1503WBT training is not consistently profiled to employees and contractors that are impacted by the rules.	Perform an assessment of the classification of individuals in Electric Operations that are impacted by the requirements in SAFE-1503WBT. - Evaluate each department to determine the impact of TD-1464S and SAFE-1503WBT on their organization. - Use job classifications list to identify individuals who require training. - Profile the groups that are impacted to take SAFE-1503WBT annually through the PG&E Academy.	122109259	[redacted]

1.3 Effectiveness Review Plan

Criteria	Plan: Description	
Methods	Perform and/or review a total of 90 randomly selected contractor and PG&E employee crew observations (combine) utilizing the Safety Net Wildfire Mitigation Checklist	New CAP Issue # 122090227
Attributes	Safety Net Wildfire Mitigation Checklist inspection items from TD-1464S are properly performed for work performed in tier 2 and tier 3 HFTD's.	Issue Owner:
Success	90% of observations show no issues identified on the Safety Net Wildfire Mitigation Observation Checklist.	[redacted]
Timeliness	The effectiveness review data gathering process will begin on 6/18/2022, 4-months after completion of corrective action #4, and end 2 month later on 8/18/2022. An additional month will be provided for the tabulation of data, creation of the EFFR final report, presentation to EO CARB, and completion of the CAP issue by 9/19/2022.	Due Date: 9/19/2022

The following report will provide insight into the conditions leading up to the incident, as well as detail the data gathered to analyze possible causes. Additionally, it will document how the data analysis determined the cause(s) and how the identified corrective actions will prevent or mitigate occurrence as required in GOV-6102S and/or GOV-6102P-06.

End of Executive Summary

2. Problem Statement

2.1 Requirement or Management Expectation:

- Health and safety code 13001, Catch all misdemeanor violation. Take all reasonable and prudent care to prevent spread of a fire.
- TD-1464S requires mitigations that must be taken to prevent ignitions while performing PG&E work.
- Public resource code section 4400, prohibited activities. Address anything that could cause spark, fire or flame.
- The Code of Safe Practices Basic Safety Requirement P-10 (d)(d)(2)(d): Know the precautionary techniques, personal protective equipment, insulating and shielding materials, and insulated tools to be used at all times when working on or near exposed energized parts of electric equipment.

2.2 Deviation or Defect:

- Adequate fire prevention and mitigation measures were not in place and not ready for use when the ignition occurred.
- While cutting an energized secondary conductor, the metal end of the cutting tool made contact with an uninsulated neutral line.

2.3 Consequence of Deviation or Defect:

- There was an arc flash that melted the metal cutting jaws resulting in molten metal sparks to contact the ground at several locations around the pole.
- A fire started that was not able to be extinguished by the crew and spread to 9.2-acres.
- Two crew members received minor burns while attempting to save the equipment.
- A pickup truck (Foreman's rig) and water buffalo tank were destroyed.
- The fire damaged the homeowner's detached garage.
- CAL-FIRE air support resources were required to extinguish the fire.
- Priority work was stopped and subsequently needed to be rescheduled, creating distractions for contractor work crews, inspectors, support groups, and management.
- An EO division crew was called out to replace 2 poles, the transformer, and conductors.

2.4 Significance of Deviation or Defect:

- If not corrected in the future serious injuries, fatalities, and property loss may occur.
- Incidents of this nature can erode the public and regulatory agency confidence in PG&E and its contractors ability to protect the public.
- Fire incidents carry extensive costs from remediation and future lawsuits brought on by regulatory agencies and the affected public.
- Serious safety incidents can jeopardize a contractor's continued working relationship with PG&E.

3. Event Description

On Wednesday, August 25, 2021 a four-person PG&E Electric Distribution Contract crew from Rokstad Power, Inc. was dispatched to perform work at [redacted] in Redding Ca. under PM# 35257460. The crew consisted of a Foreman and 3 Journeymen Linemen (JL-1, JL-2, and JL-3). The crew was tasked with replacing a tree connect by installing a new service clearance pole between the transformer pole and the residence and replacing the existing customer secondary conductors (gray wire) between the transformer and the residence. The job site is in Fire Index Area (FIA) 245 with a fire index rating of 4 for the day. The work was to be performed in a small ravine containing grass and brush with a narrow path leading from Placer Road downward to the work locations.

Image #1: Tree connect

Image #2: Tree connect

Image 3: Vegetation in immediate work area.

Image 4: Location where clearance pole was to be set.

Image #5: Narrow downhill access path leading to tree connect and new pole location.

A pre-fielding inspection was performed 2-weeks earlier on August 11, 2021, by the General Foreman which identified the need for brush clearing. The Foreman also recalls brush piles were to the side of the area directly underneath the existing service and where the new triplex was to be installed.

On August 24, 2021, a vegetation management contractor crew from Skyline cleared brush from the immediate work areas between the residence and the transformer pole to provide access for equipment. After completion, debris piles were left on-site near the work locations.

When the crew arrived, they walked the job site then returned to the truck and performed a tailboard to discuss what they observed. During the assessment, the crew discovered that the transformer had liquid-filled fuses. Following established guidance in TD-2908P-01-JA243, “Operating Liquid-Filled and Current Limiting Bushing Mounted Cutouts”, it was decided not to disconnect the fuses, but instead to leave the transformer energized, remove the customer’s meter to prevent back feed, and cut the energized secondary conductors at the transformer.

A contract crew from Cedar Creek was also on-site with a UTV (Utility Track Vehicle) to set the new clearance pole. The Rokstad crew assisted the Cedar Creek crew in completing the pole-setting work. After they finished, Cedar Creek moved their equipment back to the roadway and began preparing to leave the site. A CANUS inspector was also on-site during the Cedar Creek work and intended to stay and assess the Rokstad crew activities.

The crew was equipped with a 500-gallon “water buffalo” water tank trailer with a 200-foot hose and positioned it near the entrance of the job site path, approximately 292 feet from the transformer pole where the crew was to perform energized work. The hose was not stretched towards the job site or charged with water at this time the work started.

At approximately 1300 hrs, JL-3 removed the meter while at the same time, JL-1 and JL-2 were preparing to begin work on the transformer pole. A shovel and chemical fire extinguisher were staged at the base of the pole then JL-1 climbed the pole and JL-2 performed the role as working fire watch. During this period, JL-3 began working at the new pole location while at the same time the Foreman was working at the residence weather head.

At approximately 1400 hrs, JL-1 ascended the transformer pole to cut the two energized secondary conductors using a tool similar to bolt cutters. The first cut was successfully made without issue and the hot end was taped off. The employee pulled a small loop to access the second cable to provide space between the energized conductor and the neutral conductor. It was difficult pulling the loop since there was tension on the conductor from the tree connect. The employee held the cutting tool using his right hand to hold one handle and resting the second handle on his shoulder, while at the same time holding the energized conductor with his rubber-gloved left hand. When the employee was cutting the conductor, the tool made contact with the uninsulated neutral conductor causing an arc flash. The arc flash melted the metal cutting jaw material around the energized cable and showered molten metal down to the ground in a 15-foot radius around the pole.

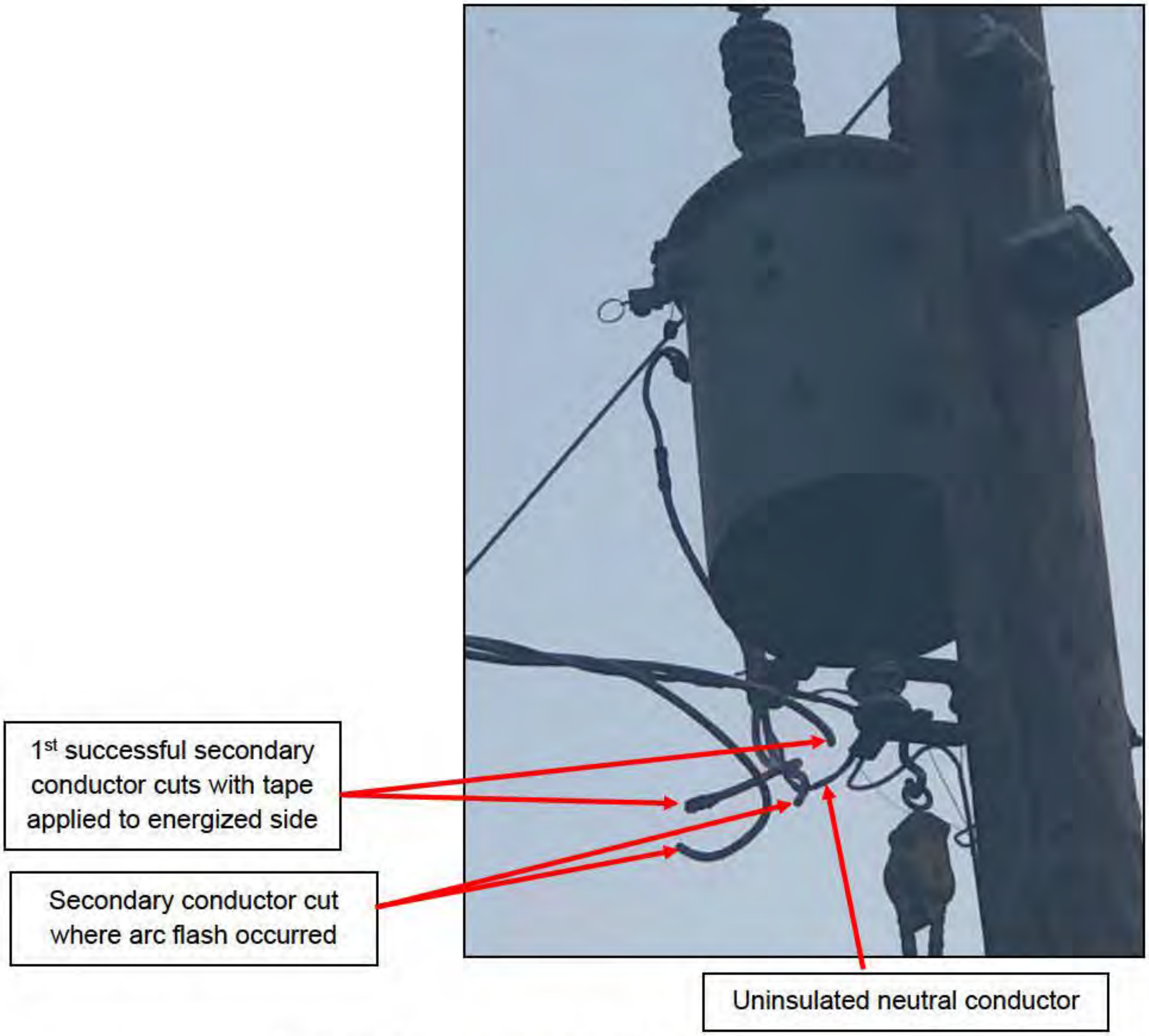

Image #6: Transformer with cut secondary conductors.

Upon seeing the arc flash, JL-2 yelled “You OK?” and JL-1 responded “Fire”. JL-3 located at the squirt boom heard the arc and JL-1 yell “Fire”, then ran to the digger derrick to get fire more extinguishers. The Foreman also heard the arc while working at the weather head and went to investigate.

The crew from Cedar Creek was loaded up and ready to depart the job site when they saw smoke. The crew immediately grabbed their firefighting gear and went to assist the Rokstad crew.

The CANUS Inspector was also still on-site in his vehicle preparing a report when he saw smoke and yelling in the distance. He attempted to call 911 but did not have working cellular service then went to assist the Rokstad crew.

Upon hitting the ground, the molten metal caused several spot fires. JL-1 attempted to call 911 but did not have working cellular service. JL-1 and JL-2 attempted to put out the fires using the chemical fire extinguisher and shovel staged at the pole. JL-1 described that the fire extinguisher as having no effect and that it did nothing. JL-2 then ran to the skid boom parked at the clearance pole to get additional firefighting equipment.

JL-2 proceeded to back the squirt boom down the hill while JL-1 went to the residence and used the homeowner's garden hose to protect the garage and house while at the same time asking the homeowner to call 911. At this same time, the Foreman ran back up to the roadway and began to drive the pickup with the water buffalo attached down the access path towards the fire. Once in position, the Foreman started the water buffalo and charged the hose to fight the fire. The Foreman, JL-1, and a Cedar Creek crew member helped to operate the water buffalo while JL-3 ran to get additional fire extinguishers from the vehicles staged at the roadway. JL-3 encountered another property owner and asked them to call 911. Once the water buffalo was empty, the Foreman instructed the crews to "get out".

The narrow path did not provide an area wide enough to turn-around the pickup with the water buffalo trailer attached, so the Foreman attempted to disconnect the water buffalo to get the pickup out. As the flames approached the vehicle the Foreman was not successful in unlocking the safety chains, so he decided to back the truck up and intentionally jack-knife the trailer to break the chain loose. While doing so, the water buffalo rolled over off the side of the path and remained connected to the vehicle. As the fire got closer to the pickup, the Foreman had to abandon the attempt and run for safe ground.

Within a few minutes after the fire started, a CAL-FIRE S2 air tanker supporting another fire was passing overhead and noticed the smoke. This particular aircraft has the authority to divert from a pre-determined flight plan to address new threats. In this case, the pilot confirmed there was a fire and performed 2 fire retardant air drops which extinguished a majority of the fire.

Image #7: CAL-FIRE S2 water tanker (example) used to extinguish the fire.

During this time CAL-FIRE firefighting crews with engines arrived and extinguished the remaining fire and hot spots limiting damage to approximately 9.2 acres. The fire was contained by 1515 hrs and fully extinguished by 1621 hrs. The crew was interviewed by CAL-FIRE and released to return to their yard to provide statements and begin the Rokstad preliminary incident investigation. CAL-FIRE named the fire the "Mule Fire".

[redacted]

Image #8: Overhead polygon with assets and perimeter.

At 1434 hours, PG&E dispatched a Troubleman who arrived at the Incident Location at 1505 hours. The Troubleman observed CAL-FIRE mopping up the fire, a damaged garage, and two poles that needed replacement due to fire damage. The Troubleman opened Fuse 10779 to de-energized the tap line and had a crew open the jumpers on the span source side of Fuse 10779 due to burned and hazardous trees.

Two Rokstad employees received minor sunburn-type burns to their arms from attempting to control the fire. Both were treated on-site and released.

The fire damaged a detached garage at the Incident Location, and destroyed a contractor pickup truck, water buffalo, and two PG&E poles. PG&E retained a transformer, two poles, three conductor wires, a steel arm, two insulators (attached together), two dead-end insulators, and two moldings as evidence. This evidence is being stored at the Port of Stockton evidence warehouse. The job records including the completed tailboard with Wildfire Mitigation Checklist were lost in the vehicle fire.

Meteorology data was collected from a site 2 miles away from the Incident Location. On August 25, 2021, the high temperature was 90.0°F at 1640 hrs and the low temperature was 58.5F at 0700 hrs. The relative humidity was as high as 52% at 0700 hrs and as low as 14% at 16:40 hrs. The strongest wind gust recorded on this day was 12.4 mph out of the south-southwest at 1350 hrs.

In order to restore service to the 6 impacted customers, an additional 379 customers were temporarily disconnected between 08:55 hrs. and 09:44 hrs to complete repairs. Service to all customers was restored at 09:51 hrs on 8/26/2021.

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Image #9: Fire damaged detached garage and undamaged residence.

Image #10: Path leading to work site post incident.

Image #11: Burned hillside with transformer pole.

Image #12: Burned hillside.

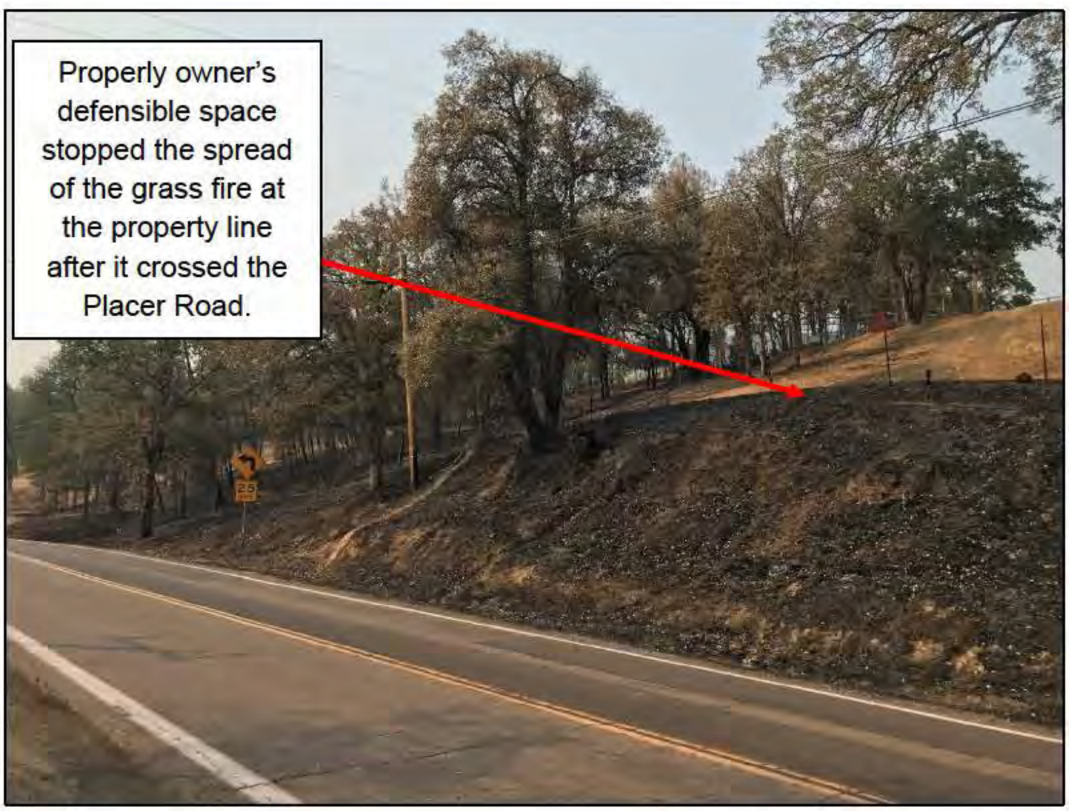


Image #13: Fire line stopped across Placer Road at property line.

Image #14: Burned Foreman's truck & water buffalo.

Image #15: Burned Foreman's truck.

Image #16: Burned Foreman's truck with water buffalo rolled upside down off the side of the path.

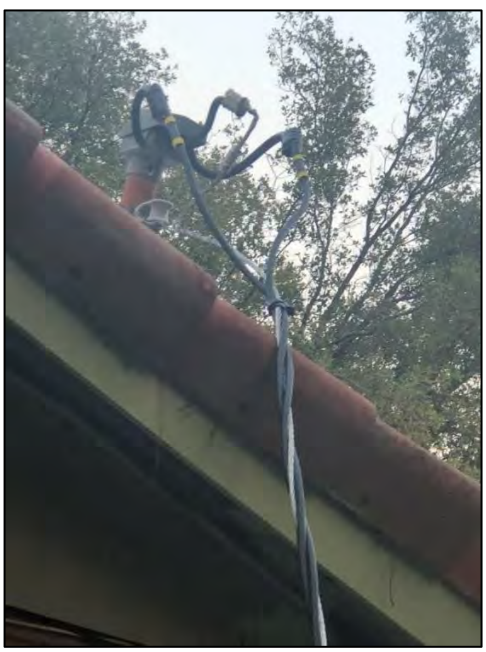
Image #17: Example of 500-gallon water buffalo

Image 18: Cutting tool involved in arc flash post incident

Image #19: Other tools located at the base of the newly installed clearance pole post incident.

Image #20: View from residence showing condition of unburned vegetation in the ravine facing south.

Image 21: View of Placer Road and access path to work location post incident.



. Image #22: Weather head connections.

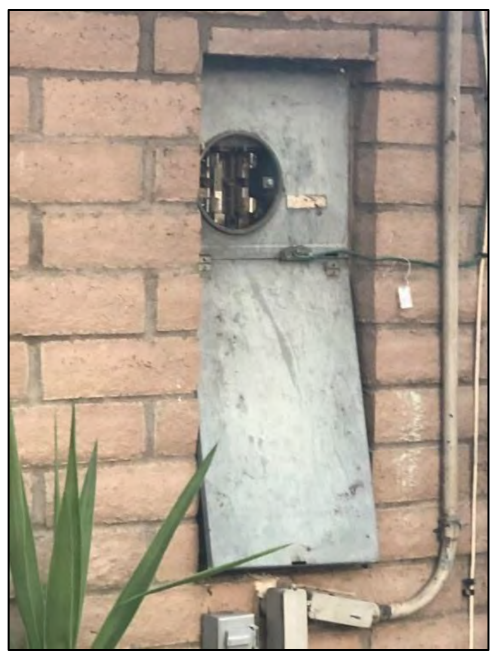


Image 23: Residential meter removed from meter panel.

4. Immediate and Interim Actions

The following actions have been taken for immediate and interim actions:

IA #	Interim Action Description	Action Owner	Complete Date
IA-1	Rokstad company-wide stand down for crews on Thursday 8/26/2021. Consisted of 4-hours on site and in the yards. Off Friday, Sat, and 8-hours of training Monday 8/30/2021. • Discussed General Foreman's pre-fielding review for fire hazards. • Revised Rokstad pre-fielding checklist to include specific fire mitigation measures. • Discussed use of water buffalos and fire suppression equipment. • Covered PG&E 5-Minute Meeting document, Fire Danger Precautions (7/22/2019) • Reviewed Rokstad doc. RPSFY-LL-21-007, Cutting Secondary Causes Fire related to this incident. • Reviewed SAFE-1464EVL Enhanced Wildfire Prevention with crews. • Reviewed TD-1464S Rev.5, Preventing and Mitigating Fires While Performing PG&E Work with crews. • Reviewed TD-1464S Attachment 2, Wildfire Risk Checklist. • Reviewed use of fire extinguishers. • Reviewed Rokstad Fire Prevention and Protection Standard. • Discussed use of secondary cover-up utilizing online continuing education PowerPoint instruction titled "ETD Isolate and Insulate". • Initiated Safe to Start program to provide positive comm between Foreman and General Foreman to discuss terrain, weather, wind conditions, water buffalo water tank location, etc. • Issued crews split fire blankets for added protection around poles. • Verified each crew has adequate conductor covers on trucks. • Ordered new 12"x12" secondary blankets that will be used to protect secondaries from neutrals.	[redacted]	8/30/2021
IA-2	5-Minute Meeting distributed to all Electric Operations and EO contract crews. Note: Tailboard records for each employee are not required.	[redacted]	Completed 9/3/2021 Delivered on 9/7/2021
IA-3	SIF Alert: Initial communication to Electric Operation crews and other employees via Daily Digest. - Bushing Mounted cut-out work procedure Bulletin TD-2908P01-JA243. - PG&E and NECA work procedures for working low voltage conductors. MWD, cover, tools, etc. • PG&E Work Procedure TD-2360P-01 – Rubber Glove Work Methods, 50V to 21 KV • NECA Redbook Rule 2.03 – Energized Low-Voltage Conductors or Apparatus • NECA Redbook Rule 2.05 – Working Distance	[redacted]	Distributed 9/1/2021 Daily Digest 9/9/2021

5. Extent of Condition (EOC)

An extent of condition (EOC) analysis was performed to determine if the company is at risk for the same or similar event occurring. The primary focus for the EOC worksheet was on the potential for phase to ground and phase to phase shorts that cause arc flashes and can result in a fire and also considered each LoBs existing mitigations.

Extent of Condition Worksheet

<table>
<tr><th>Object:</th><td>Electric Operations crews and contractors replacing overhead service.</td><th>Defect:</th><td>Phase to ground short causing arc flash sparks and fire.</td></tr>
<tr><th>Tier</th><th>Object</th><th>Defect</th><th>Risk Exposure and Immediate Mitigating Action</th></tr>
<tr><td>Same Object / Same Defect</td><td>Electric Operations crews and contractors replacing overhead service.</td><td>Phase to ground short causing arc flash and fire.</td><td rowspan="4"><u>Risk Exposure:</u> Yes. Crews preforming electrical work in high risk fire areas may be exposed to the same conditions which contributed to this incident.

<u>Mitigating Actions</u>:
- Rokstad company-wide stand down for crews on Thursday 8/26/2021. Consisted of 4-hours on site and in the yards. Off Friday, Sat, and 8-hours of training Monday 8/30/2021.
- 5-Minute Meeting distributed to all Electric Operations and EO contract crews
- SIF Alert: Initial communication to Electric Operation crews and other employees via Daily Digest.</td></tr>
<tr><td>Same Object / Similar Defect</td><td>Electric Operations crews and contractors replacing overhead service.</td><td>Phase to phase short causing arc flash and fire.</td></tr>
<tr><td>Similar Object / Same Defect</td><td>Electric Restoration crews replacing overhead service.</td><td>Phase to ground short causing arc flash and fire.</td></tr>
<tr><td>Similar Object / Similar Defect</td><td>Electric Restoration crews replacing overhead service.</td><td>Phase to phase short causing arc flash and fire.</td></tr>
</table>

Line of business exposure is based on the potential for arc flashes, and ability to mitigate fires while following TD-1464S Rev.05.

<table>
<tr><th>Line of Business Employees and Contractors</th><th>Risk Exposure Yes / No</th><th>Justification of risk exposure</th><th>CAP #</th></tr>
<tr><td>Electric Operations</td><td>Yes</td><td>Current incident under investigation</td><td>121959198</td></tr>
<tr><td>Gas Operations</td><td>No</td><td rowspan="7">1. These LoBs are not typically exposed to the conditions that would create an arc flash while working on distribution level circuits.

2. The LoB employees and contractors must adhere to applicable sections of TD-1464S when working to mitigate and prevent fires.</td><td rowspan="7">N/A</td></tr>
<tr><td>Power Generation</td><td>No</td></tr>
<tr><td>Enterprise Health & Safety</td><td>No</td></tr>
<tr><td>Shared Services</td><td>No</td></tr>
<tr><td>IT and Supply Chain</td><td>No</td></tr>
<tr><td>Customer Care</td><td>No</td></tr>
<tr><td>DCPP</td><td>No</td></tr>
</table>

6. Methodology

To support a thorough understanding of tasks and work practices, PG&E subject matter experts (SMEs) were included on the investigation team. Data was collected in the form of personnel interviews, review of records, policies, and procedures. Data was analyzed using tools that include Comparative Timeline, Barrier Analysis, Missed Opportunities Matrix, Human Factors Analysis Classification System (HFACS), and Factor Tree Analysis.

The following personnel were interviewed by the investigation team and/or provided written statements.

Job Title (Current Position, Unless Noted)	Organization	Role During Event
Foreman: Journeyman Lineman (JL)	Rokstad	Crew Foreman
JL-1: Journeyman Lineman #1	Rokstad	Located on transformer pole
JL-2: Journey Lineman #2	Rokstad	Working Firewatch located at base of pole
JL-3: Journey Lineman #3	Rokstad	Working at the clearance pole
Field Inspector	CANUS	Performing site inspection

For this evaluation, process related documents and materials were identified for review by the evaluation team.

- Employee Statements and Interviews
- Rules, Standards and Procedures / Crew Work Documents / Equipment and Materials / Specifications
- Employee training records and associated training curriculum

The Apparent Cause Evaluation (ACE) was performed to identify process breakdowns and to formulate additional corrective actions. The tools selected for the cause evaluation analysis are consistent with PG&E Enterprise Health & Safety procedures.

1. A Barrier Analysis was performed to identify the effectiveness of the existing or missing preventive barriers to identify root and contributing causes and to develop corrective actions. (See Appendix A.)
2. A Comparative Timeline was developed to document and analyze the sequence of events that led up to the incident. (See Appendix B)
3. Human Factors Analysis and Classification System (HFACS) was performed as an additional evaluation method to understand the underlying factors that lead to an event. (See Appendix C.)
4. A Missed Opportunities Matrix was developed to capture when there were opportunities to minimize or eliminate the hazards that led to this incident.
5. A Factor Tree was developed to compile the results of the analysis tools above. This tool was used to identify the root and contributing causes of the incident (see Appendix D).

The results of the causal analysis, which are summarized below, led to the definition of corrective actions to prevent recurrence of this incident.

7. Analysis

7.1 Interviews / Personnel Statements

The Rokstad crew members (4) were interviewed and notes provided to the evaluation team. See Appendix H for summaries of the interviews and statement from the CANUS inspector.

7.2 Documents and Materials

The following process related documents and materials were analyzed by the evaluation team. See Appendix H for document and material review results.

Initial incident report:
ILIS Outage Report: 21-0109338
Electric Incident Report EI210825A
CAP 121960669 (Compliance tracking)
EC Tags: 119117143, 121957559 and 121958005
Job Order Package 35257460
Control and inspection records
5-minute meeting, Update to TD-1464S, Preventing and Mitigating Fires While Performing PG&E Work document (7/2021)
5-Minute Meeting, Changes to work requirements during R4 and R5 conditions (9/3/2021)
Contractor Incident Investigation Report
CAL-FIRE report #21-CASHU009196
Rokstad Crew Tailboard / JSA records (historical)
Utility Standard TD-1464S Rev.5 (8/20/2021), Preventing and Mitigating Fires While Performing PG&E Work
TD-1464S attachment 1 Rev.3 (8-20-2021), Wildfire Mitigation Matrix
TD-1464S Attachment 2, Rev.2 (8/20/2021): Relationship Between Fire Index Areas, High Fire Threat District, and High Fire Risk Area
TD-2908P-01-JA243, Rev.0 (4/16/2015), Operating Liquid-Filled and Current Limiting Bushing Mounted Cutouts
SAFE-1015S, Rev.1 (11/04/2015), Low Voltage Electrical Safety
SAFE-1503WBT, Fire Dangers Precautions Web Based Training (45-min)
SAFE-3001S, Rev.6 (7/2/2021), Enterprise Contractor Safety Management Standard
H&S-13001, Health and Safety Code, Fires and Fire Protection
Public Resource Code PRC 4421
Public Resource Code PRC 4427
Public Resource Code PRC 4428
Public Resource Code PRC 4430
Public Resource Code PRC 4431
PG&E Code of safe practices, 2018
Rokstad crew training records
Rokstad training program
ISNetworld Contractor Training Portal

7.3 Hazard Controls in Place at Time of Event (Barrier Analysis)

The CE Team evaluated what hazard controls worked, failed, or were missing at the time of the incident to understand what drove the outcome of the event. (See Appendix A for the complete Barrier Analysis Worksheet.)

Controls that were present and performed as designed:

- The crew member cutting the wire was protected from the arc flash and sparking molten metal by wearing FR rated shirt and pants, safety glasses, hard hat, and gloves.

Failed, Missing, or Disabled Controls:

- Water Buffalo – Failed:
    - The water buffalo water tank with a 200-foot hose was parked on the roadway at the entrance to the access path approximately 292 feet from the transformer pole and could not be used without repositioning, causing this control to fail.
- One Chemical fire extinguisher and one shovel – Failed:
    - These controls were staged at the base of the pole when the ignition occurred.
    - Fire-fighting tools were not available for all crew members to utilize if needed
- Separation and insulation between conductors – Missing:
    - For secondary energized work in high fire risk areas, the established requirement is to maintain an adequate distance between conductors. There is no specific requirement to insulate conductors. The employee did not apply any insulation to protect from unintended contact even though there was difficulty pulling a large enough loop to use the cutting tool.

7.4 Comparative Timeline Analysis

A comparative timeline was constructed which captured the incident in a chronological format based on incident reports, interviews, outage reports, and job records. The analysis identified several areas where decisions and activities should have been made and executed differently. See Appendix B for the complete Comparative Timeline Analysis

- A 5-gallon water backpack should have been available at the work location to address the grass fire once it started. Also, firefighting tools for each person at the job location should have been deployed.
- The energized secondary conductor should have been separated more to prevent contact by the cutting tool on the neutral line.
- The employee was holding the cutter with his right hand and resting the other handle on his shoulder while holding the energized conductor in his left hand. The metal cutting tool should not have been able to contact the neutral line.
- Crew should have had working communication method(s) before starting work.
- The fire watch was equipped with a shovel and chemical fire extinguisher, and not a water backpack.
- The water buffalo should have been positioned within 200-feet of the work location to be sure it could be effectively used.
- The crew should have positioned the pickup and water buffalo for easy evacuation in case a fire started and got out of control.

7.5 Human Factors Analysis & Classification System (HFACS)

HFACS tool was primarily designed to examine unsafe acts, identify the pre-conditions for the act to occur, and determine if supervisory or organizational level influences present that allowed the event to occur. The HFACS analysis is summarized below. See Appendix C for the complete HFACS worksheet listing all HFACS categories. Based on the HFACS analysis, several key factors were identified that influenced this event.

Unsafe Acts:

- Skill-Based Errors / Incorrect Action: The cutting jaw contacted the neutral when the Lineman was cutting the secondary conductor
- Skill Based Errors / Omitted Action: The Lineman on the pole did not apply approved protective cover to the exposed neutral.
- Skill Based Errors / Improper Technique: The crew did not position and deploy all necessary fire-fighting equipment including water backpacks, shovels, and the water buffalo that was located 292 feet from the work location.
- Decision Errors / Inadequate Situation Assessment: A chemical A/BC rated fire extinguisher was taken to the transformer pole work site. A water backpack was not taken to the work site.

Preconditions for Unsafe Acts:

- Physical Environment / Suboptimal ambient environment: It was a hot sunny 91° summer day with 7 mph wind and fire index rating of 4
- Physical Environment / Suboptimal Workplace Design: All necessary equipment and vehicles were not able to be staged at the work location. The narrow road did not allow 2 vehicles to park next to each other or turn around. Difficulty creating adequate gap in the “loop” used to separate the conductor from the support cable because of the tension being applied by the tree connect. The JL-1 was only able to use his right hand and his shoulder to actuate the cutting tool, while the left hand was used to hold the conductor. A bucket truck was not able to be utilized to access the work location.
- Physical Environment / Suboptimal Housekeeping: Debris piles present at the work location provided fuel for the fire once it started. Homeowner debris piles were also present. Large pieces of debris between the access road and the customer’s residence.
- Communication, Coordination & Planning / Inadequate Planning: The water buffalo with 200-foot hose was parked 292-feet from the transformer pole when the fire started. The WB required re-positioning in order to be utilized to fight the fire. When the crew couldn’t get the WB down to the job location via the narrow path, accommodations were not made to provide enough hose to reach it. Water buffalo was up top. The crew took a chemical 1/2/3 fire extinguisher to the site vs. a water backpack with is more appropriate for fighting a grass or vegetation fire.

Supervisory Factors:

- Inadequate Supervision / Failed to provide adequate training: The crew was not adequately trained to plan, position, and utilize fire mitigation tools and equipment in the event of a fire.

Organizational Factors:

- Operational Process – Policies / Procedures: The guidance provided in PG&E Utility Standard TD-1464 Rev.5, Preventing and Mitigating Fires While Performing PG&E Work is not specific enough for PG&E and contractor field crews to effectively mitigate fires under the changing environmental conditions.

7.6 Missed Opportunities Summary

During the analysis of data, several missed opportunities were identified that could have allowed the crew to contain the ignition. The absence of a water backpack fire extinguisher at the transformer pole prevented the crew members from containing the flames at the moment of ignition. In addition, the failure to place and prepare the water buffalo for immediate use removed any chance the crew had to extinguish the fire. Additionally, the placement and availability of firefighting tools at the work site required extra time to retrieve them after the fire started. See Appendix D for the complete Missed Opportunities Matrix.

7.7 Factor Tree Analysis

Utilizing the available data and analysis from the Comparative Timeline, Hazard Barrier, HFACS, and Missed opportunities Matrix, a Factor Tree Analysis diagram was developed. The diagram begins with the terminal event at the top and asks “what could have contributed to this” over and over until a cause or causes are identified. See Appendix E for the complete Factor Tree Analysis Diagram.

Analysis Summary:

Based on the data collected and reviewed, it can be concluded that several gaps allowed the opportunity for this incident to occur. PG&E is not able to prevent all accidents, however regardless of what starts the fire, the crew needs to have controls in place to mitigate an ignition. All PG&E employees and contractors performing related work are required to follow TD-1464S, Preventing and Mitigating Fires While Performing PGE Work, with the intention of preventing or recovering safely from an ignition incident. The specific content within the standard does not provide enough clarity and specificity regarding the preparation of ground conditions, and setup, placement, and utilization of firefighting tools and equipment including Water Buffalo trailers for immediate use.

8. Operating Experience

A search for relevant internal events was conducted to determine whether the condition(s) resulting in this incident occurred previously inside PG&E. This historic data review provides the opportunity to review previous corrective actions (CAs) for effectiveness, and whether the proposed CAs are similar to previous CAs.

The PG&E Corrective Action Program (CAP) database in SAP was searched to see if the same or similar incidents have occurred in the past. A data search of key words in CAP issues yielded the following results:

Key Word(s)	Total Results	Filtered Results	Same/Similar CAPs
Energized AND Fire	115	31	1 Related
Secondary AND fire	15	3	0
Spark AND fire	47	16	1 Concern
Grass fire OR brush fire OR water buffalo OR fire prevention	152	105	1 Related 1 Concern 1 Repeat
Total	329	155	2

RIN (Rapid Incident Notification) database search- The legacy database was searched to see if same or similar incidents have occurred in the past. The results yielded 15 fire related items, however none of the circumstances were similar to the incident being investigated.

Operating Experience Summary

There were several CAP issues related to fires, however only 2 directly related to an incident involving crews that in the course of work with energized conductors contacted neutrals resulting in sparks that resulted in a fire. The majority of CAPs reviewed were Work Group Evaluations which did not have a formal cause evaluation performed that captures all of the incident details, identifies and documents causes, and implements corrective actions in CAP. Based on the available information reviewed from CAP, it can be concluded that there has not been a significant history of ignitions caused by energized overhead secondary work or a history of crews being unprepared to address an ignition during the course of performing work.

9. Serious Injury and Fatality (SIF) Exposure Factor (SEF) & Prevention Measure (PM)

	SIF Exposure Factor	*Missing Prevention Measure(s)*
SEF-1	Live Electrical Work	Pre-job briefing (JSSA/Tailboard) conducted and documented that identifies all dangerous conditions or potential hazards and how to control them.
SEF-2	Live Electrical Work	Arc-Flash hazards understood, and boundaries established.
SEF-3	Live Electrical Work	Second points of contact have been identified and are covered with approved protective equipment.

10. Appendices

Appendix A: Barrier Analysis Worksheet

Appendix B: Comparative Timeline Analysis Table

Appendix C: Human Factors Analysis Classification System (HFACS) Worksheet

Appendix D: Missed Opportunities Matrix

Appendix E: Factor Tree Analysis Diagram

Appendix F: Acronyms & Definitions

Appendix G: 5 Minute Meeting, 9/3/2021, Changes to work requirements during R4 and R5 conditions.

Appendix H: Interview, Document, and Material Review Results

11. Attachments in Event CAP Issue

N/A

Appendix A: Barrier Analysis Worksheet

Barrier Analysis Worksheet				
Target:	Electric Distribution field crew performing work (PG&E employee or contractor)			
Hazard:	Grass fire ignites and cannot be controlled.			
What Were the Barriers / Controls?	**How did Each Barrier Perform?**	**Why did the Barrier Fail?**	**How did the Barrier Affect the Occurrence?**	**Context**
PPE	Barrier performed as intended during the arc flash.	N/A	The crew member was protected from the arc flash and sparking molten metal by wearing FR shirt and pants, safety glasses, hard hat, and gloves.	The crew member cutting the wire was wearing the Fire Resistant (FR) PPE to protect them from arc flash and no injuries occurred.
Firefighting hand tools	Barrier did not perform as intended.	Only one chemical fire extinguisher and one shovel was staged at the base of the pole when the ignition occurred. Firefighting tools were not available for all crew members to utilize if needed.	There weren't enough firefighting tools, including water backpack(s) for JL-1 and JL-2 to use when the fire first started. The placement and availability of firefighting tools at the work site required extra time to retrieve them after the fire started	Only JL-2, the fire watch, was able to initially respond to the ignition with a shovel and chemical fire extinguisher to put out multiple spot fires in dry grass. If additional water backpacks and a shovel were in-place at the transformer pole they may have been able to extinguish the fire. The chemical fire extinguisher selected was not appropriate for fighting a grass or vegetation fire.
Water Buffalo water tank on-site	Barrier did not perform as intended.	The water buffalo was parked at the roadway at the entrance to the access path approximately 292 feet from the transformer pole.	The water buffalo had to be moved down the narrow access path after the fire started since it the hose couldn't reach the work location. The time to move the vehicle with water buffalo attached cost valuable time and allowed the fire to get out of control.	If the water buffalo had been properly positioned, tested, primed, and made ready for immediate use prior to beginning work, it is likely that the fire resulting from the arc flash could have been extinguished before becoming uncontrollable.

Barrier Analysis Worksheet				
Target:	Electric Distribution field crew performing work (PG&E employee or contractor)			
Hazard:	Grass fire ignites and cannot be controlled.			
What Were the Barriers / Controls?	**How did Each Barrier Perform?**	**Why did the Barrier Fail?**	**How did the Barrier Affect the Occurrence?**	**Context**
Crew Training	Barrier did not perform as intended	The crew was not prepared to utilize the water buffalo or other firefighting equipment effectively.	The water buffalo was not properly staged, an inappropriate fire extinguisher was at the work location.	If the crew had fully understood what it takes to deploy a water buffalo to fight a fire and was more knowledgeable about fire extinguishers and firefighting tools, they could have been more prepared to react when the ignition occurred.

Appendix B: Comparative Timeline Analysis Table

Date/ Time/ Source	What Happened (or Didn't Happen)	What Should/Should Not have Happened	Immediate Result of the Difference	Significance of the Difference
6/6/2020	Original tag created by Field Inspector Notification #: 119117143 PM#: 35257460	N/A	N/A	N/A
4/19/2021	Field safety assessment. Identified new congested due date. Needs to be addressed in the next 12 months.	N/A	N/A	N/A
6/16/2021	Design work order package created. Final construction sketch provided.	N/A	N/A	N/A
6/24/2021	Changes were made to the work order package.	N/A	N/A	N/A
8/11/2021 09:20 hrs	Pre-Fielding job planning- General Foreman initial site visit. Uses the pre-fielding check sheet. Looks at access, outage requirements, traffic control, and other additional requirements. Recalls brush piles were to the side of the area directly underneath the existing and where the new triplex was to be installed.	N/A	N/A	N/A
8/12/2021	Request submitted to have tree limbs and brush cleared between the residence and the transformer pole.	N/A	N/A	N/A
8/23/2021	Discussed job and access limitations, vegetation management work, and scheduled a UTV.	N/A	N/A	N/A
8/24/2021	Vegetation crew cleared path on the access path to reach the service and between the house and transformer pole. Debris piles were left on the job site. (Fire index level 4)	Vegetation crew should have removed the debris piles.	The debris piles burned in the fire.	The debris piles provided more fuel to the grass fire that started straining resources on hand to fight the fire.
8/25/2021	Cedar Creek (contractor) crew of 2 arrived at the job site to set the clearance pole.	N/A	N/A	N/A
8/25/2021	A CANUS inspector arrived at the job site to perform a site inspection.	N/A	N/A	N/A

Date/ Time/ Source	What Happened (or Didn't Happen)	What Should/Should Not have Happened	Immediate Result of the Difference	Significance of the Difference
8/25/2021	UTV (Utility Track Vehicle) was moved down the narrow path to the job site to install the new clearance pole.	N/A	N/A	N/A
8/25/2021 11:45	Rokstad crew arrived at job site for 2nd job of the day. Crew included Foreman, JL-1 and JL-2.	N/A	N/A	N/A
8/25/2021	Rokstad crew on-site staged the equipment for the job and gathering materials.	N/A	N/A	N/A
8/25/2021	Rokstad employee JL-3 arrived at the job site after hauling the pole to the job site.	N/A	N/A	N/A
8/25/2021	Rokstad crew performed tailboard (Fire index level 4) During site walk, the crew discovered the transformer has liquid-filled fuses. - Following guidance in Bulletin TD-2908P-01-JA243 the work plan changed from removing the liquid fuses to cutting the energized secondary conductors near the transformer leaving the transformer energized.	N/A	N/A	N/A
8/25/2021	Cedar Creek crew finished setting the clearance pole.	N/A	N/A	N/A
8/25/2021	Cedar Creek moved the UTV back to the roadway to load up and prepare to leave the job site.	N/A	N/A	N/A
8/25/2021 13:00 hrs	Customer electrical meter was removed by JL-3 to prevent the risk of back feed.	N/A	N/A	N/A
8/25/2021	The crew positioned a chemical fire extinguisher and shovel at the base of the transformer pole.	A 5-gallon water backpack should have been available at the work location to address the grass fire once it started. Also, firefighting tools for each person at the job location should have been deployed.	The chemical fire extinguisher was not as effective as a 5-gallon water backpack is.	The ineffectiveness of the chemical fire extinguisher combined with the need to retrieve water backpacks cost the crew valuable time as the fire grew rapidly. Additionally, firefighting tools should have been positioned at each of the 3 job locations as work was being performed.

Date/ Time/ Source	What Happened (or Didn't Happen)	What Should/Should Not have Happened	Immediate Result of the Difference	Significance of the Difference
8/25/2021	The Foreman was working at the residence weather head.	N/A	N/A	N/A
8/25/2021	JL-2 was positioned at the base of the transformer pole as a working fire watch.	N/A	N/A	N/A
8/25/2021 14:00 hrs	JL-1 ascended pole, bubbled-up the energized secondary conductors prior to cutting the secondary to provide a gap between it and the neutral line. The secondary was tight between the transformer and the pole.	The energized secondary conductor should have been separated more to prevent contact by the cutting tool on the neutral line. Bubble air gap needs to provide enough space to prevent cutting tool contact with conductors nearby.	The cutting surface of the tool was able to contact the neutral conductor causing a short / arc flash resulting in molten metal splattering down to the ground at several spots around the pole.	Since the employee was not able to pull a very large "bubble" due to the tension of the cable, he should have applied insulation to the neutral line to ensure it could not be contacted or should have selected a smaller more appropriate tool for the task.
8/25/2021	While cutting the second hot leg the JL #1 inadvertently positioned the head of the bolt bites in such a way that it contacted the neutral while completing the cut. This caused a phase to ground short resulting in molten metal "splattering" in multiple directions.	The employee was holding the cutter with his right hand and resting the other handle on his shoulder while holding the energized conductor in his left hand. The metal cutting tool should not have been able to contact the neutral line.	The employee lost control over the end of the cutting tool and made contact with an uninsulated neutral line. The cutting tool with secondary conductor in its jaws shorted with the neutral line causing an arc flash.	Attempting to use a bolt cutter type tool with one hand and a shoulder to engage the clamping mechanism does not provide enough control to prevent inadvertent movement while it is being used.
8/25/2021	JL-2 yelled "are you OK?" to JL-1 on the transformer pole and JL-1 responded "fire".	N/A	N/A	N/A
8/25/2021	JL-3 heard an arc while positioned at the clearance pole, looked over, yelled "you OK?", heard "fire", then ran to the digger derrick to get fire extinguishers.	N/A	N/A	N/A
8/25/2021	While working at the residence weather head, the Foreman heard an arc flash and went to investigate.	N/A	N/A	N/A
8/25/2021	JL-1 and JL-2 saw two 12-16 inch spot fires ignited approximately 15-feet from the pole.	N/A	N/A	N/A

Date/ Time/ Source	What Happened (or Didn't Happen)	What Should/Should Not have Happened	Immediate Result of the Difference	Significance of the Difference
8/25/2021	JL-1 attempted to call 911 but did not have working cellular service.	Crew should have had working communication method(s) before starting work.	The crew could not reach 911 emergency services by cell phone and needed to ask the homeowner to call 911.	The delay in time to reach 911 cost the crew precious time necessary to bring the fire under control as soon as possible.
8/25/2021	JL#2 attempted to extinguish 2 spot fires, but the fire continued to start and spread quickly at other locations around the pole.	A 5-gallon water backpack should have been available at the work location to address the grass fire once it started.	The chemical fire extinguisher was not as effective as a 5-gallon water backpack is.	The ineffectiveness of the chemical fire extinguisher combined with the need to retrieve water backpacks cost the crew valuable time as the fire grew rapidly.
8/25/2021	JL-1 descended the pole assisted fighting the fire.	N/A	N/A	N/A
8/25/2021	JL-1 ran to the skid boom to retrieve another extinguisher and tossed it to JL-2.	N/A	N/A	N/A
8/25/2021	JL-1 yelled to the homeowner 30-feet away to call 911.	N/A	N/A	N/A
8/25/2021	Nearby debris piles left by vegetation management caught fire.	Debris should have been removed or placed at a safe distance from the work locations.	The debris piles caught fire when the grass fire reached them.	Having to extinguish burning debris piles in addition to the original grass fire with limited resources affected the crew's ability to extinguish the fire.
8/25/2021	The CANUS inspector positioned in a work vehicle near the roadway saw smoke and yelling and when to assist with the fire.	N/A	N/A	N/A
8/25/201	CANUS inspector tried to call 911 but attempted to call 911 but did not have working cellular service.	N/A	N/A	N/A
8/25/2021	The crew from Cedar Creek was preparing to depart from the job site saw smoke. The crew grabbed their firefighting gear and went to assist the Rokstad crew.	N/A	N/A	N/A

Date/ Time/ Source	What Happened (or Didn't Happen)	What Should/Should Not have Happened	Immediate Result of the Difference	Significance of the Difference
8/25/2021	JL-1 and JL-2 attempted to put out several spot fires using the chemical fire extinguisher and shovel. JL-1 describes the fire extinguisher had no effect and did nothing.	The fire watch was equipped with a shovel and chemical fire extinguisher, and not a water backpack.	The chemical fire extinguisher could not extinguish the grass fire.	A 5-gallon water backpack would be the most appropriate extinguisher to use for a grass or vegetation fire. Chemical fire extinguishers have compressed propellent which can actually spread a grass fire by blowing the burning grass and embers around the area. Water coats the vegetation and extinguishes fires more effectively.
8/25/2021	JL-2 backed the squirt boom down the hill.	N/A	N/A	N/A
8/25/2021	JL-1 used the homeowner's garden hose to protect garage and residence, and homeowner turned on sprinklers.	N/A	N/A	N/A
8/25/2021	The Foreman drove pickup with water buffalo down the access path closer to the work location to be able to reach the fire taking approximately 40-seconds.	The water buffalo should have been positioned within 200-feet of the work location to be sure it could be effectively used.	The water buffalo was not ready to use and needed to be moved closer to the fire.	The time lost moving the water buffalo closer to the fire took valuable time that could have been used to extinguish the fire quickly if it was immediately available for use once the fire started.
8/25/2021	Foreman started and charged the water buffalo. It tool approximately 45-seconds to engage the water buffalo.	N/A	N/A	N/A
8/25/2021	The Foreman, JL-1, JL-3, and a Cedar Creek crew member helped to operate the water buffalo.	N/A	N/A	N/A
8/25/2021	JL-3 ran to get additional fire extinguishers from vehicles at the roadway.	N/A	N/A	N/A
8/25/2021	JL-3 pointed to helicopter and asked the property owner to call 911.	N/A	N/A	N/A
8/25/2021	When water buffalo was empty, the Foreman started yelling "get out".	N/A	N/A	N/A

Date/ Time/ Source	What Happened (or Didn't Happen)	What Should/Should Not have Happened	Immediate Result of the Difference	Significance of the Difference
8/25/2021	Foreman attempted to pull truck and water buffalo out of the area when the fire got out of control but couldn't turn the truck around on the narrow path. The truck had to be abandoned when the fire approached.	The crew should have positioned the pickup and water buffalo for easy evacuation in case a fire started and got out of control.	In this case the truck and water buffalo tank needed to be backed out or turned around to get out which was not possible under the chaotic fire conditions.	The inability to back out of the ravine or turn the pickup around with water buffalo attached caused the crew to have to abandon them causing them to be destroyed in the fire.
8/25/2021	All crew members evacuated the area to reach safe ground.	N/A	N/A	N/A
8/25/2021	A CAL-FIRE S2 air tanker responding to another fire observed the smoke and diverted to see if they could assist.	N/A	N/A	N/A
8/25/2021	The CAL-FIRE air tanker made 2 passes dropping fire retardant which helped extinguish the majority of the fire.	N/A	N/A	N/A
8/25/2021	CAL-FIRE firefighters and engines arrived at the site and extinguished the remaining fire and hot spots.	N/A	N/A	N/A
8/25/2021 15:06 hrs	Troubleman given ok to remove the cutouts and open the circuit in response to the fire.	N/A	N/A	N/A
8/25/2021 15:15 hrs	The fire was 100% contained at approximately 3:15 pm.	N/A	N/A	N/A
8/25/2021 16:21 hrs	The fire was fully extinguished by CAL-FIRE	N/A	N/A	N/A
8/25/2021 16:45 hrs	The crew was interviewed by CAL-FIRE and then released at approximately 4:45 pm.	N/A	N/A	N/A
8/25/2021 19:05 hrs	The crew mobilized back to the yard for the preliminary incident investigation and provided statements.	N/A	N/A	N/A
8/26/2021 08:55 hrs	Line reclosure 1330 OPEN (DMS# 1453774) Removed service from 379 customers	N/A	N/A	N/A
8/26/2021 09:44 hrs	Line reclosure 1330 CLOSE (DMS# 1453774) Restored service to 379 customers	N/A	N/A	N/A
8/26/2021 09:51 hrs	Troubleman reports service restored to remaining 6 customers.	N/A	N/A	N/A

Appendix C: Human Factors Analysis Classification System (HFACS) Worksheet

UNSAFE ACTS	
ERRORS	**VIOLATIONS**
Skill-Based Errors:	**Routine Violations:**
☒ Incorrect action: The cutting jaw contacted the neutral when the JL was cutting the secondary conductor.	☐ Short-cuts:
☐ Omitted action:	☐ Inappropriate use of tools/technology
☒ Improper technique: The crew did not position and deploy all necessary firefighting equipment including water backpacks, shovels, and the water buffalo that was located 292 feet from the work location.	☐ Disregarding orders/direction
Decision Errors:	**Exceptional Violations:**
☐ Inadequate information gathering	☐ Unqualified actions
☒ Inadequate situation assessment A chemical A/BC rated fire extinguisher was taken to the transformer pole work site. A water backpack was not taken to the work site.	☐ Disruptive Behavior
☐ Inadequate action/response	☐ Excessive risk taking
Perceptual Errors:	
☐ Inadequate visual processing	
☐ Inadequate auditory processing:	
☐ Inadequate tactile/haptic processing	

PRECONDITIONS FOR UNSAFE ACTS	
SITUATIONAL FACTORS	
Physical Environment:	**Tools/Technology:**
☒ Suboptimal ambient environment: It was a hot sunny 91° summer day. 7 mph wind.	☒ Inadequate design: The employee used bolt cutter style cutting tool which required use of only 1 hand on the tool while holding the energized conductor with the other.
☒ Suboptimal workplace design- All necessary equipment and vehicles were not able to be staged at the work location. The narrow road did not allow 2 vehicles to park next to each other or turn around. A bucket truck was not able to be utilized to access the work location. Difficulty creating adequate gap in the "loop" used to separate the conductor from the support cable because of the tension being applied by the tree connect.	☐ Inadequate condition
☒ Suboptimal housekeeping- Debris piles present at the work location provided fuel for the fire once it started. Homeowner debris piles were also present. Large pieces of debris between the access road and the customer's residence.	
CONDITION OF OPERATORS	**PERSONNEL FACTORS**
Mental States:	**Communication, Coordination & Planning:**
☐ Cognitive Factors:	☐ Failure to provide/request information:
☐ Motivation/Arousal:	☐ Failure to confirm information:

Physiological States:	☒ Inadequate planning- The water buffalo with 200-foot hose was parked 292-feet from the transformer pole when the fire started. The WB required re-positioning in order to be utilized to fight the fire. When the crew couldn’t get the WB down to the job location via the narrow path, accommodations were not made to provide enough hose to reach it. Water buffalo was up top. The crew took a chemical 1/2/3 fire extinguisher to the site vs. a water backpack with is more appropriate for fighting a grass or vegetation fire.
☐ Physiological Factors	☐ Inadequate monitoring/backup
☐ Physical Factors	
Physical/Mental Limitations:	**Fitness for Duty:**
☐ Physical Limitations	☐ Poor dietary/health practices
☐ Mental Limitations	☐ Failure to get adequate rest

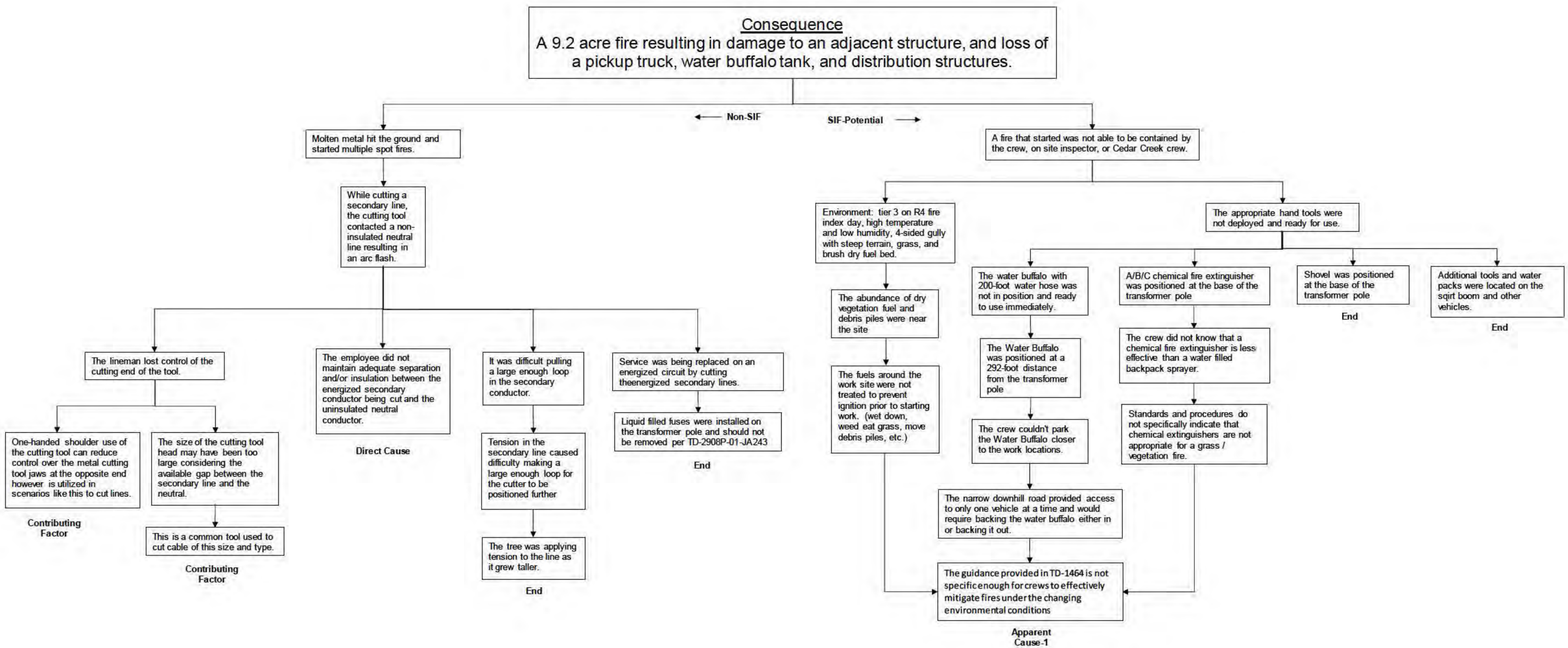
SUPERVISORY FACTORS	
Inadequate Supervision:	**Failure to Correct Known Problem:**
☐ Failure to provide adequate guidance	☐ Failed to correct inappropriate behavior
☐ Failed to provide adequate oversight	☐ Failed to correct workplace problems
☒ Failed to provide adequate training: The crew was not adequately trained to plan, position, and utilize fire mitigation tools and equipment in the event of a fire.	
Planned Inappropriate Operations:	**Supervisory Violations:**
☐ Inadequate staffing/scheduling	☐ Authorizing noncompliance
☐ Inadequate workload assignment	☐ Supervisor noncompliance
ORGANIZATIONAL INFLUENCES	
Organizational Culture:	**Operational Process:**
☐ Values	☐ Strategic planning
☐ Commitment	☒ Policies/Procedures: PG&E Utility Standard TD-1464S and associated training do not include measures necessary for crews to effectively protect fire-prone areas where overhead energized work is being performed.
☐ Transparency	☐ Corporate oversight
Resources Management:	
☐ Human resources	
☐ Equipment/Facility resources	
☐ Monetary resources	

Appendix D: Missed Opportunities Matrix

Who Had the Opportunity?	What was the Situation?	What was the Opportunity?	What would have been the effect of the Opportunity	How would that have affected the consequences?
JL-1 (at TX Pole)	Neutral was not insulated to protect from contact.	Prevent the arc flash	Prevent arc flash	The incident would have been prevented if the neutral conductor was insulated.
JL-1 (at TX Pole)	Bolt cutters were not easily controlled using one hand by the Lineman.	Use more ergonomic cutting device, single handed ratchet or battery operated cutter.	The troublemen could maintain better control over the cutting device preventing an arc flash.	Use of a single handed ratcheting or electric cutting tool to perform the operation would have given more control to the Lineman and likely prevented the incident.
JL-2 (Working Fire watch)	A/B/C Chemical fire extinguisher selected. Could spread the fire around due to compressed propellent.	Have a water based backpack pump fire extinguisher intended for dry vegetation type fire.	Water is a more effective extinguishing agent than chemical power in a grass or vegetation fire.	If water filled backpack pumps were available at the point of ignition, they could have extinguished the fires immediately after starting.
Incident Crew	Water buffalo was parked at a distance of 292-feet from the job site, beyond the length of the 200-foot hose and not tested for function prior to starting work.	Water buffalo is parked within 200 feet of the 3 work areas.	The crew could respond immediately by using the water buffalo vs. having to pull the truck down the path to be in range then get the machine operating which takes time.	It is likely that if the water buffalo had been positioned within reach of the ignition and was staged for immediate use, the fire could have been extinguished by the crew.
Incident Crew	Working fire tools and equipment were not fully deployed and ready for use. Tools were in the vehicles other than 1 shovel and 1 chemical fire extinguisher at the transformer pole.	Deploy firefighting tools for each crew member before starting work.	Immediate response by the entire crew if a fire is ignited.	If the crew had firefighting tools nearby and ready to use, the fire may have been able to be extinguished in its early stage.
Incident Crew	Employee used bolt cutter type device to cut the secondary conductors.	There could have been smaller, easier to manipulate, single handed use tools for the employee to use.	The employee may have been able to maintain control over the conductive metal end of the tool and avoided contact with the neutral.	The event could have been avoided.

Who Had the Opportunity?	What was the Situation?	What was the Opportunity?	What would have been the effect of the Opportunity	How would that have affected the consequences?
CANUS Inspector	The inspector didn't realize the water buffalo was parked too far away to be effectively used.	Have the crew position the water buffalo closer to the work areas (3)	The water buffalo could have been in-place when the ignition occurred.	If the water buffalo had been in position, deployed, and ready for use, it may have been able to extinguish the fire before it got out of control.
Vegetation Removal Crew	Debris piles were left on site.	Debris piles had been removed from the work area vicinity.	The job site would have only had grass which may be easier to extinguish than a brush pile using the tools on hand.	If the debris piles were removed, the fire may have been easier to get under control.
Homeowner	Debris piles were in the area along the fence line.	Remove debris piles to provide protective fire perimeter.	Could have slowed the progression of the fire.	A clear defensible space provides the best protection against a wildfire.
Rokstad Leadership	Crews did not realize an inappropriate fire extinguisher was selected to be staged at the work location.	Provide clarity around selection of fire extinguishers in training.	Crew could have selected and positioned appropriate fire extinguishers.	Having the proper fire extinguishers could have helped the crew extinguish the fire before it got out of control.
Work Scheduling	Time of work was afternoon. Higher risk than in morning	Perform earlier in the day when dry fuel moisture level is higher. Field moisture 20% or more.	Fire may have smoldered and not spread as rapidly.	Fire would not likely have been able to spread as quickly as it did.

Appendix E: Factor Tree Analysis Diagram



Appendix F: Acronyms and Definitions

Acronym	Definition
ACE	Apparent Cause Evaluation
CAP	Corrective Action Program
CSP	Code of Safe Practices
DO	Distribution Operator
EC Tag	Electric Corrective Tag
EO	Electric Operations
FIA	Fire Index Area
HFACS	Human Factors Analysis Classification System
HFTD	High Fire Threat District
JL	Journeyman Lineman
MAD	Minimum approach distance
MWD	Minimum working distance
RIN	Rapid Incident Notification
SIF	Serious Injury or Fatality
T&D	Transmission & Distribution
TX	Transformer
UTV	Utility Track Vehicle
WB	Water Buffalo

Appendix G: 5 Minute Meeting, 9/3/2021, Changes to work requirements during R4 and R5 conditions

5 Minute Meeting

Effective Date:

September 3, 2021

Topic:

Changes to work requirements during R4 and R5 conditions

Audience:

Electric Operations & E.O. Contract Crews

Effective immediately there is a change in the planning and execution of work where R4 & R5 fire index ratings are present when working in any forest, brush, or grass-covered land.

As a result of several recent ignitions that have occurred while PG&E crews or its Electric contractors were performing work on facilities, we are implementing the following changes immediately.

Before PG&E employees or contractors start work on or near any forest, brush, or grass-covered lands, they must review the requirements contained in Utility Standard TD-1464S, "Preventing and Mitigating Fires While Performing PG&E Work," for more information on the general requirements and other mitigations for traveling to, performing work on, or operating in any forest, brush, or grass-covered land.

Target Audience

This information targets all PG&E Electric employees and contractors working on or near PG&E facilities located near any forest, brush, or grass-covered lands using equipment, tools, and/or vehicles whose use could result in the ignition of a fire. This includes areas that may seem urban or suburban but contain vegetation.

General Requirements

Ensure all the requirements laid out in TD-1464S are always followed. Performing work in areas near Grass, Forest, or brush during an R4 or R5 rating will require evaluation of if the work should be performed de-energized as a risk reduction strategy. In addition, the crew must ensure that they have the appropriate water buffalo as close to the worksite as practical and have the required 200 feet of hose to extinguish any possible ignition. The hose on the water buffalo must be extended and ready for use and, at a bare minimum, reach the work location. Each day, before beginning work, the water buffalo must be started and tested to ensure it is in good working order. Additionally, these locations will require a dedicated fire watch with the sole responsibility of responding to any possible ignition. If work must be performed energized in these locations, then site preparation must be performed prior to work beginning to remove fuels under the facility to bare mineral soil in a 15-foot radius below the facility. When working in areas of forests, clear the area to bare mineral soil and consider wetting the trees in the immediate vicinity of the work location. You will also need to be aware of possible wire contacts between the work location and the next structure and have a plan for how to respond to an ignition if one were to occur mid span.

Requirements Before Scheduling New Work

Before scheduling work, Field Engineers, Work Coordinators, and General Foremen must perform an environmental assessment of

5 Minute Meeting

the worksite to establish if it is on forest, brush, or grass-covered lands. This assessment determines if equipment and conductors, both primary and secondary, should be de-energized before performing the work, or if site preparation for fuel elimination is required prior to performing the work energized. Document the results of this assessment on the job package. Site preparation to eliminate/minimize fuels in the immediate vicinity of the work site is a good practice regardless of if the work is done energized or de-energized but is a requirement for all areas being worked energized, no matter the voltage being worked.

PROJECTS CURRENTLY SCHEDULED

Field Engineers, Work Coordinators, and General Foremen must perform a desktop review of all currently scheduled work to determine if the worksite is on forest, brush, or grass-covered lands. If it is determined that the work location is on forest, brush, or grass-covered lands then the site safety assessment listed above for new work must be performed. This assessment determines if equipment and conductors, both primary and secondary, should be de-energized before performing the work, or if site preparation for fuel elimination is required prior to performing the work energized. Document the results of this assessment on the job package. Site preparation to eliminate/minimize fuels in the immediate vicinity of the work site is a good practice regardless of if the work is done energized or de-energized but is a requirement for all areas being worked energized no matter the voltage being worked. For any of the existing scheduled work that needs an outage, please submit for the appropriate AFW. For work that does not have the appropriate lead time for the Control Center or customer notification, please evaluate if site preparation is an appropriate mitigation for the risk, or if the work should be rescheduled to allow for the proper protocol to be followed.

Inclusion Plan

5 Minute Meetings serve as an interim tool for documenting and communicating changes to our standards and procedures quickly, Furthermore the requirements in this communication will be incorporated into the appropriate guidance documents and will be formally sent through the Management of Change (MOC) process and rolled out at our earliest opportunity.

5 Minute Meeting

Frequently Asked Questions

Question: If the equipment I need to operate is in a forest, brush, or grass-covered land can I still operate it?

Answer: Yes, switching activities can still be performed as outlined in TD-1464S

Question: If the pole I am replacing is on the street and has adjacent spans that are in a forest, brush, or grass-covered land, do I need to clear these lines?

Answer: No, but you will need to evaluate if the work is better performed de-energized. If the work is to be performed energized then the crew will need to have a plan of how to respond if a mid-span ignition were to occur and have a dedicated fire watch to ensure that wires do not contact each other and be prepared to react if they do.

Question: If I am replacing a secondary crossarm in a forest, brush, or grass-covered land do I need to deenergize the conductors?

Answer: No, but you will need to either De-energize the conductors or clear a 15-foot radius below the pole before work can be performed energized.

Question: If I am working on a Transmission line that has a Distribution crossing mid span. Do I need to De-energize the Distribution as well?

Answer: No, but if you are moving the Transmission wire you will need to appropriately guard, barricade, or protect the Distribution line to eliminate the potential of the two lines making contact.

Question: If I am replacing a primary crossarm that has a Transmission overbuild and I have decided to do the work de-energized. Do I need to de-energize the Transmission as well?

Answer: No, you are not required to de-energize the Transmission as well, but you will need to have safeguards in place to ensure that you nor any conductive objects infringe on the Minimum Approach Distance (MAD) for the Transmission voltage at any point in time.

Question: If I have a job to transfer open wire secondary from an old pole to a new pole. does that need to be done de-energized?

Answer: No, it doesn't require it to be done de-energized as every location needs to be evaluated separately. As a suggestion though any transfers of vertical open wire should be done de-energized simply due to the spacing and the margin for error being extremely low in this style of construction.

For more information or to provide feedback, please contact [redacted]

5 Minute Meeting

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This information targets all PG&E Electric employees and contractors working on or near PG&E facilities located near any forest, brush, or grass-covered lands using equipment, tools, and/or vehicles whose use could result in the ignition of a fire. This includes areas that may seem urban or suburban but contain vegetation.

General Requirements

Ensure all the requirements laid out in TD-1464S are always followed. Performing work in areas near Grass, Forest, or brush during an R4 or R5 rating will require evaluation of if the work should be performed de-energized as a risk reduction strategy. In addition, the crew must ensure that they have the appropriate water buffalo as close to the worksite as practical and have the required 200 feet of hose to extinguish any possible ignition. The hose on the water buffalo must be extended and ready for use and, at a bare minimum, reach the work location. Each day, before beginning work, the water buffalo must be started and tested to ensure it is in good working order. Additionally, these locations will require a dedicated fire watch with the sole responsibility of responding to any possible ignition. If work must be performed energized in these locations, then site preparation must be performed prior to work beginning to remove fuels under the facility to bare mineral soil in a 15-foot radius below the facility. When working in areas of forests, clear the area to bare mineral soil and consider wetting the trees in the immediate vicinity of the work location. You will also need to be aware of possible wire contacts between the work location and the next structure and have a plan for how to respond to an ignition if one were to occur mid span.

Requirements Before Scheduling New Work

Before scheduling work, Field Engineers, Work Coordinators, and General Foremen must perform an environmental assessment of the worksite to establish if it is on forest, brush, or grass-covered lands. This assessment determines if equipment and conductors, both primary and secondary, should be de-energized before performing the work, or if site preparation for fuel elimination is required prior to performing the work energized. Document the results of this assessment on the job package. Site preparation to eliminate/minimize fuels in the immediate vicinity of the work site is a good practice regardless of if the work is done energized or de-energized but is a requirement for all areas being worked energized, no matter the voltage being worked.

Projects Currently Scheduled

Field Engineers, Work Coordinators, and General Foremen must perform a desktop review of all currently scheduled work to determine if the worksite is on forest, brush, or grass-covered lands. If it is determined that the work location is on forest, brush, or grass-covered lands then the site safety assessment listed above for new work must be performed. This assessment determines if equipment and conductors, both primary and secondary, should be de-energized before performing the work, or if site preparation for fuel elimination is required prior to performing the work energized. Document the results of this assessment on the job package. Site preparation to eliminate/minimize fuels in the immediate vicinity of the work site is a good practice regardless of if the work is done energized or de-energized but is a requirement for all areas being worked energized no matter the voltage being worked. For any of the existing scheduled work that needs an outage, please submit for the appropriate AFW. For work that does not have the appropriate lead time for the Control Center or customer notification, please evaluate if site preparation is an appropriate mitigation for the risk, or if the work should be rescheduled to allow for the proper protocol to be followed.

Inclusion Plan

5 Minute Meetings serve as an interim tool for documenting and communicating changes to our standards and procedures quickly, Furthermore the requirements in this communication will be incorporated into the appropriate guidance documents and will be formally sent through the Management of Change (MOC) process and rolled out at our earliest opportunity.

PG&E

5 Minute Meeting

Frequently Asked Questions

Question: If the equipment I need to operate is in a forest, brush, or grass-covered land can I still operate it?

Answer: Yes, switching activities can still be performed as outlined in TD-1464S

Question: If the pole I am replacing is on the street and has adjacent spans that are in a forest, brush, or grass-covered land, do I need to clear these lines?

Answer: No, but you will need to evaluate if the work is better performed de-energized. If the work is to be performed energized then the crew will need to have a plan of how to respond if a mid-span ignition were to occur and have a dedicated fire watch to ensure that wires do not contact each other and be prepared to react if they do.

Question: If I am replacing a secondary crossarm in a forest, brush, or grass-covered land do I need to deenergize the conductors?

Answer: No, but you will need to either De-energize the conductors or clear a 15-foot radius below the pole before work can be performed energized.

Question: If I am working on a Transmission line that has a Distribution crossing mid span. Do I need to De-energize the Distribution as well?

Answer: No, but if you are moving the Transmission wire you will need to appropriately guard, barricade, or protect the Distribution line to eliminate the potential of the two lines making contact.

Question: If I am replacing a primary crossarm that has a Transmission overbuild and I have decided to do the work de-energized. Do I need to de-energize the Transmission as well?

Answer: No, you are not required to de-energize the Transmission as well, but you will need to have safeguards in place to ensure that you nor any conductive objects infringe on the Minimum Approach Distance (MAD) for the Transmission voltage at any point in time.

Question: If I have a job to transfer open wire secondary from an old pole to a new pole. does that need to be done de-energized?

Answer: No, it doesn't require it to be done de-energized as every location needs to be evaluated separately. As a suggestion though any transfers of vertical open wire should be done de-energized simply due to the spacing and the margin for error being extremely low in this style of construction.

For more information or to provide feedback, please contact [redacted]

Appendix H: Interview, Document, and Material Review Results

- Interviews / Statements:
  - Foreman: The foreman described while working on the weather head, upon hearing the arc he went to get the water buffalo and drove it down towards the job site, jumped out, and charged it. When the water buffalo ran out of water, he tried to evacuate it and the truck, but missed the safety chains. He abandoned the truck when the fire approached.
  - JL-1, Journeyman Lineman on transformer pole: The employee described piles left from vegetation management trimming left under the wire. While he knows he was using the cutting device with one hand, he doesn’t recollect exactly how or why he came into contact with the neutral.
  - JL-2, Journeyman Lineman, Groundman acting as Fire Watch at transformer pole: The employee watched JL-1 climb and make his first cut and bend back the wire. Then on the second cut, there was a flash. He yelled “Are you OK?” and JL-1 yelled back “Fire”. He saw 2 fires 15-feet from the pole. He started fighting the fire, and remembered seeing many others around him, spreading fast, so he ran back up.
  - JL-3: Journeyman Lineman disconnecting house service: The employee described that he arrived after the other 3 crew members since he was hauling the pole. Once arriving, the team held the tailboard. Everything on the JSA was discussed. He was moving materials when he heard an arc. He looked over and yelled “You OK?”. He heard someone say “Fire”, so he ran to the digger derrick to get fire extinguishers. He went back to help with the water buffalo, then went to get more fire extinguishers from the trucks while trying to call 911 and then asked a property owner to call 911. He described the fire got out of control and how the Foreman was not able to get the truck and water buffalo out.
  - CANUS Inspector: Arrived at the job just before noon with the outage was scheduled for 1300 hrs. A very in-depth tailboard was given. The crew walked the job and determined a service outage would be a lot better for the situation that was at hand. (i.e. Leaking TX, Liquid fused bushing, unbolt on jumpers.) The crew were in agreement on how to do the job. Once the fire started, he went into fire mitigation mode. As he watched, the crew charged the water buffalo water tank and started spraying but was not enough for the fast flames. Everyone cleared the area and got a head count.
- Initial incident report: An initial incident was submitted on 8/25/2021. The document was reviewed as part of the initial data gathering and content used in this report.
- ILIS Outage Report(s):
  - 21-0107004: Window period between taking the customer down and then connecting.
  - 21-0109338: Represents switching after the fire and continued through rebuild.
- Electric Incident Report EI210825A: The report submitted to the CPUC under the property damage criteria.
- CAP 121960669: The CPUC compliance report corrective action number. (For reference only.)
- EC Tags:
  - 119117143: Original repair tag under PM# 35257460
  - 121957559 and 121958005: Repair tags to replace the fire damaged assets.
  - Job Order Package: The complete job package was reviewed and appears to be in order without any discrepancies.

- <u>Control and inspection records</u>: A review of the past 2 inspections from April 2020 and April 2021 using the Inspect App indicated no issues or abnormalities were identified. Recent patrols were also completed in 2018 and 2019.
- <u>5-Minute Meeting, Update to TD-1464S, Preventing and Mitigating Fires While Performing PG&E Work document (7/2021)</u>: The document targeted all PG&E and contractor field personnel. It discusses the changes to individual sections of the standard when it was revised from Rev.4 to Rev.5. and does the following:
    - Outlines the required tools and equipment needed while working in forest, brush or grass-covered lands. These tools include fire extinguishers, shovels, and 5-gallon backpack pumps. Additional tools and equipment are noted in the standard.
    - Details the required mitigations that must be taken based on the Utility Fire Potential Index Rating (FPI). All personnel working or operating on any forest, brush or grass covered lands must review the Wildfire Mitigation Matrix (Attachment 1, Wildfire Mitigation Matrix).
    - The tool, equipment, and mitigation requirements are based on the Fire Potential Index Rating sent out at 0600 daily by PG&E’s Meteorology team.

  Page 2 of the document shows and describes the Wildfire Mitigation Matrix color coding process.

  Page 3 shows the Wildfire Risk Checklist which crews are required to use prior to starting work.
- <u>5-Minute Meeting, Changes to work requirements during R4 and R5 conditions (9/3/2021)</u>

  As a result of this incident, leadership issued this 5-minute meeting to immediately implement enhanced measures to mitigate exposure to ignitions. Requirements listed in this document will be incorporated into TD-1464S as part of the corrective actions along with any other gaps the team identifies. New requirements for field crews include:

  1. Performing work in areas near Grass, Forest, or brush during an R4 or R5 rating will require evaluation of if the work should be performed de-energized as a risk reduction strategy.
  2. The crew must ensure that they have the appropriate water buffalo as close to the worksite as practical and have the required 200 feet of hose to extinguish any possible ignition. The hose on the water buffalo must be extended and ready for use and, at a bare minimum, reach the work location. Each day, before beginning work, the water buffalo must be started and tested to ensure it is in good working order.
  3. Fire risk index R4 and R5 locations will require a dedicated fire watch with the sole responsibility of responding to any possible ignition.
  4. If work must be performed energized (overhead) in these locations, site preparation must be performed prior to work beginning to remove fuels under the facility to bare mineral soil in a 15-foot radius below the facility.
  5. When working in areas of forests, clear the area to bare mineral soil and consider wetting the trees in the immediate vicinity of the work location.
  6. Need to be aware of possible wire contacts between the work location and the next structure and have a plan for how to respond to an ignition if one were to occur mid span.
  7. Before scheduling work, Field Engineers, Work Coordinators, and General Foremen must perform an environmental assessment of the worksite to establish if it is on forest, brush, or grass-covered lands. This assessment determines if equipment and conductors, both primary and secondary, should be de-energized before performing the work, or if site

preparation for fuel elimination is required prior to performing the work energized. Document the results of this assessment on the job package.

8. Field Engineers, Work Coordinators, and General Foremen must perform a desktop review of all currently scheduled work to determine if the worksite is on forest, brush, or grass covered lands. If it is determined that the work location is on forest, brush, or grass-covered lands then the site safety assessment listed above for new work must be performed. This assessment determines if equipment and conductors, both primary and secondary, should be de-energized before performing the work, or if site preparation for fuel elimination is required prior to performing the work energized. Document the results of this assessment on the job package.
9. For any of the existing scheduled work that needs an outage, submit for the appropriate AFW. For work that does not have the appropriate lead time for the Control Center or customer notification, evaluate if site preparation is an appropriate mitigation for the risk, or if the work should be rescheduled to allow for the proper protocol to be followed.

- Contractor Incident Investigation Report:

  The Rokstad report was reviewed to gain insight into the contractor's process and to see what determinations they made and to see if the PG&E team also came to similar conclusions regarding the causes of the incident. See Appendix G for the complete Rokstad Incident Investigation Report. Rokstad identified the root causes as:

  - Improper application of tool – Insulated bolt cutters are commonly used when cutting larger gauge secondaries but only after sufficient cover is applied to potential second points of contact.
  - Second Point of Contact – The neutral was not covered to eliminate the second point of contact.

  Long Term Actions:

  - Publish safety bulletin to heighten awareness and reinforce expectations (wildfire awareness campaign to continue throughout fire season). Completed - Lessons Learned published
  - Provide crew training on the use of firefighting equipment and techniques (resume upon returning to work).
  - Management (CM, Dir or VP) to conduct wildfire risk focused crew visit with all crews in PG&E territory (to resume upon returning to work but currently being done on other customer programs).
  - Add secondary blankets to standard tool list for all trucks (pending upon returning to work).
  - Conduct wildfire prevention themed training at next all hands meeting including:
    - Secondary Point of Contact.
    - Primary / Secondary Cover Strategy.
    - Fire prevention procedures (TD1464S Preventing and Mitigating Fires While Performing PG&E Work).
    - Wildfire hazard identification and mitigation.

- CAL-FIRE Report # 21-CASHU009196: This report is being developed by CAL-FIRE and will be attached to the incident CAP for reference when received.

- Crew Tailboard / JSA records:

  During the incident, the tailboard records from 8/25/2021 were lost in the vehicle fire, a sampling of tailboards from 8/19/2021, 8/20/20, 8/21/21, 8/23/21 was obtained and reviewed. The areas are clearly, completely, and consistently being filled out.

- Tailboard Wildfire Risk Check Sheet (PG&E):

  During the incident, the Wildfire Risk Check Sheet was lost in the vehicle fire. To see if the same crew had been performing adequate and well documented tailboards prior to the incident, 1-week worth of records were retrieved. A review of the completed records showed that the crews were diligently filling out the necessary fields and providing pertinent information. There were no abnormalities noticed in the documentation leaving no reason to believe that the crew on the day of the incident did not perform a thorough tailboard and wildfire risk assessment using the check sheet.

- Utility Standard TD-1464S Rev.5 (8/20/2021), Preventing and Mitigating Fires While Performing PG&E Work:

  This utility standard is a company-wide fire mitigation plan that establishes precautions for PG&E employees and contractors to follow when traveling to, performing work, or operating outdoors on any forest, brush, or grass covered land. The document lists General Requirements including the tools required to be on vehicles and equipment, review of daily PG&E Fire Index Application, performance of job site tailboards.

  The document states "The specific firefighting tools are meant to be kept at the jobsite". It is not clear if the intention was to have the firefighting tools positioned at the location(s) where work is being performed. The team is recommending that the terms Job Site and Work Location be defined, and the term work location be used to describe where the placement of firefighting tools are to be positioned before work begins.

  In this case, a chemical fire extinguisher and shovel were positioned at the base of the transformer pole prior to starting work. The chemical fire extinguisher was not appropriate for extinguishing a grass or vegetation fire. The team is recommending the standard be revised to include guidance regarding selection of the proper type of extinguisher for grass and vegetation fires vs. gas, chemical, or electrical fire (i.e. Water backpack vs. A/B/C chemical fire extinguisher).

  When the fire index rating is R4, the standard states personnel must ensure there is at least 120 gallons of water at the jobsite with at least 200 feet of hose with 40 psi at the nozzle. In this incident, a water buffalo was located at the roadway approximately 292 feet from the work. The water buffalo was not deployed and ready for use at the work locations. The team recommends the standard be revised to specify that the water buffalo with 200-foot hose must be positioned within 200-feet of the work location, pre-tested, primed, and started with 40 psi at the nozzle to ensure it is ready for immediate use if a fire were to ignite.

  The standard also describes that use of the Wildfire Mitigation observation card for Safety Net observations. The Regional Safety Organization performs regular, documented safety observations to identify safe and at-risk behaviors while providing immediate guidance and recommendations on how to control/mitigate potential risks and the sharing of best practices observed during the observations with our employees and sub-contractors. The team recommends the Safety Net Wildfire Mitigation observation card be revised to include any applicable new requirements to ensure prevention and mitigation measures are being diligently followed by field crews.

- TD-1464S Attachment 1 Rev.3 (8-20-2021), Wildfire Mitigation Matrix:

  The matrix identifies 3 categories of general requirements:

  - Category 1: R1, R2, and R3 have the most comprehensive list of requirements covering preparation, tools, vehicles, travel, ignition while working, and smoking.
  - Category 2: R4 meets R1, R2, and R3 requirements and lists additional requirements for 120 gallons of water at the job site w/200 feet of hose, evaluation of weather conditions, and a working fire watch. A leadership mandated change to the standard from this evaluation will require a dedicated fire watch for R4 and R5 overhead energized secondary work.
  - Category 3: R5 meets R1 – R4 requirements and lists additional requirements for a dedicated fire watch, trailer mounted water tank or equivalent at job site, consider additional modifications to fuel sources that surround the job site. Suspend all planned work during an R5+ fire rating. Personnel must have SIP-t on standby or a 300-gallon water tender available.

  Based on changes recommended for TD-1464S, the tables in this document will require updating to show that a dedicated fire watch is required for areas with fire index level R4 as well as changes to the description of how firefighting equipment is prepared, positioned, and deployed for immediate use.

- TD-1464S Attachment 2, Rev.2 (8/20/2021): Relationship Between Fire Index Areas, High Fire Threat District, and High Fire Risk Area:

  The checklist captures environmental conditions, fire risk mitigations, and fire suppression tool inventory.

  In the fire risk mitigations category, it lists Vegetation Clearance of 10-feet surrounding the work area which is based on ground level work that may create an arc, spark, or flame and ignite a fire. The checklist does not identify mitigations associated with energized overhead secondary work where an arc or spark can occur. The checklist also contains places to identify if a working or dedicated fire watch are on the job site and includes a place to identify if the water delivery system is on the jobsite with 40 lbs of pressure at the nozzle & 200 feet of hose. The team identified that this document does not specify that the hose be capable of reaching the area(s) where work is being performed. The time required to move the water buffalo closer to the job site affected the team's ability to fight the fire immediately after ignition.

  The fire suppression tool inventory section lists back style water pump, but the document does not provide any indication that that they are located where work will be performed. In order for fire suppression to work, it must be available immediately when an ignition occurs. The fire risk mitigation items have extended descriptions including appropriate location while the fire suppression tool inventory lists the tools. The team recommends that the checklist be revised to specify a Dedicated Fire Watch is required for R4 and R5 conditions, the water delivery system be located within reach of the work location(s), and clarify that the back style water pump must be located in close proximity to where work is being performed to suppress grass and vegetation ignitions. The team also recommends a place to indicate that vehicles are positioned in a way to ensure safe and efficient evacuation if required.

- TD-2908P-01-JA243, Rev.0 (4/16/2015), Operating Liquid-Filled and Current Limiting Bushing Mounted Cutouts:

  This Job Aid instructs employees not to operate green banded cutouts stating a green band indicates the previous generation which are prone to failure. The document does not provide any other guidance regarding what to do, other than not to operate the cutout. This is the document that influenced the crews decision to cut the energized secondary conductors instead of operating the cutouts.

- SAFE-1015S, Rev.1 (11/04/2015), Low Voltage Electrical Safety
  - This document was reviewed an no issues were identified, or changes recommended from the review.
- SAFE-3001S, Rev.6 (7/2/2021), Enterprise Contractor Safety Management Standard.
  - This document was reviewed an no issues were identified, or changes recommended from the review.
- <u>H&S-13001, Health and Safety Code, Fires and Fire Protection</u>- The code states; Every person is guilty of a misdemeanor who, through careless or negligent action, throws or places any lighted cigarette, cigar, ashes, or other flaming or glowing substance, or any substance or thing which may cause a fire, in any place where it may directly or indirectly start a fire, or who uses or operates a welding torch, tar pot or any other device which may cause a fire, who does not clear the inflammable material surrounding the operation or take such other reasonable precautions necessary to insure against the starting and spreading of fire. This code is used in legal cases where a fire is started to establish culpability.
- <u>Public Resource Code PRC 4421</u>- The code states; A person shall not set fire or cause fire to be set to any forest, brush, or other flammable material which is on any land that is not his own, or under his legal control, without the permission of the owner, lessee, or agent of the owner or lessee of the land. This code is used in legal cases where a fire is started to establish culpability.
- <u>Public Resource Code PRC 4427</u>- The code states; During any time of the year when burning permits are required in an area pursuant to this article, no person shall use or operate any motor, engine, boiler, stationary equipment, welding equipment, cutting torches, tarpots, or grinding devices from which a spark, fire, or flame may originate, which is located on or near any forest-covered land, brush-covered land, or grass-covered land, without doing both of the following: (a) First clearing away all flammable material, including snags, from the area around such operation for a distance of 10 feet. (b) Maintain one serviceable round point shovel with an overall length of not less than forty-six (46) inches and one backpack pump water-type fire extinguisher fully equipped and ready for use at the immediate area during the operation.
- <u>Public Resource Code PRC 4428</u>- The code states; No person, except any member of an emergency crew or except the driver or owner of any service vehicle owned or operated by or for, or operated under contract with, a publicly or privately owned utility, which is used in the construction, operation, removal, or repair of the property or facilities of such utility when engaged in emergency operations, shall use or operate any vehicle, machine, tool or equipment powered by an internal combustion engine operated on hydrocarbon fuels, in any industrial operation located on or near any forest, brush, or grass-covered land between April 1 and December 1 of any year, or at any other time when ground litter and vegetation will sustain combustion permitting the spread of fire, without providing and maintaining, for firefighting purposes only, suitable and serviceable tools in the amounts, manner and location prescribed in this section. The code goes on to describe the contents of the sealed box of tools including water filled backpack pump, two axes, two McLeod fire tools and sufficient shovels so each employee at the job site can be equipped.

- Public Resource Code PRC 4430- The code states; During any time of the year when burning permits are required in an area pursuant to this article, a person, co-partnership, firm, corporation or company, shall not use or operate in such area any steam-operated engine, machine equipment, mill or industrial plant, located on or near forest-covered land or brush-covered land, without providing one adequate force pump or water under pressure equivalent to a pump, and not less than 200 feet of hose not less than one inch in diameter for each steam-operated engine or equipment. The pump or water pressure required in this section shall be capable of applying a minimum of 40 pounds pressure at the nozzle on 200 feet of hose, such nozzle to be one-fourth inch or larger in diameter. If two steam-operated engines or steam equipment are customarily operated within 100 feet of each other, only one engine or piece of equipment need be equipped with pump and hose.
- Public Resource Code PRC 4431- During any time of the year when burning permits are required in an area pursuant to this article, no person shall use or operate or cause to be operated in the area any portable saw, auger, drill, tamper, or other portable tool powered by a gasoline-fueled internal combustion engine on or near any forest-covered land, brush-covered land, or grass-covered land, within 25 feet of any flammable material, without providing and maintaining at the immediate locations of use or operation of the saw or tool, for firefighting purposes one serviceable round point shovel, with an overall length of not less than 46 inches, or one serviceable fire extinguisher. The Director of Forestry and Fire Protection shall by administrative regulation specify the type and size of fire extinguisher necessary to provide at least minimum assurance of controlling fire caused by use of portable power tools under various climatic and fuel conditions.
- PG&E Code of Safe Practices (CSP), 2018: This document was reviewed to determine if rules applicable to this incident are in-place to ensure employee safety. The document does not include any information related to fire prevention working outdoors in high fire risk areas. Items it did include relating to this incident are:
  - P-10 (d)(d)(2)(d): Know the precautionary techniques, personal protective equipment, **insulating and shielding materials**, and insulated tools to be used at all times when working on or near exposed energized parts of electric equipment.
  - P-11(b): Each employee shall be thoroughly familiar with the equipment they have been assigned to operate and with applicable approved operating procedures and practices, which shall be strictly followed.
  - General Rule 14: Fire Protection, (a) Employees shall be familiar with the local emergency plan and the instructions relating to fire prevention and suppression, and with the location and use of fire-fighting equipment in the location where they are regularly employed. (b) Fire-fighting apparatus shall be maintained in serviceable condition and accessible at all times. (c) Employees expected to use fire extinguishers or other firefighting equipment shall receive training prior to their use.

Training

- Rokstad training records for crew- The crew's training records were reviewed by Rokstad management and no issues were observed.
- Rokstad training program overview:
- Rokstad Power has developed a deep catalogue of training topics for employees. Over the years Rokstad has added formal training courses, refresher trainings, and program/policy update trainings to it. These additions happen frequently. Our onboarding training curriculum is developed in partnership with Rokstad subject matter experts, clients, local regulatory jurisdictions, and from industry and company identified best practices.

This crew attended various trainings while employed at Rokstad. Even though hire dates varied all were present during a new hire orientation including safety training. As topics were added after an individual's hire date the added topics were shared with all crew members in our various show-ups. The crew was up to date on all PG&E Program Specific ISN training requirements as well as required Rokstad Courses that were taught during their new hire orientation. Rokstad employees performing this type of work for PG&E are required to complete internal onboarding and annual training, and the PG&E required training in the ISNetworld.

Onboarding Training for New Employees	Annual Training
NECA/IBEW California Safety Manual (Red Book)	PPE
PPE	Driving & driving on mountainous roads
Driving & driving on mountainous roads	No Cell Phones while driving
No Cell Phones while driving	Excavation – Gold Shovel Standard
Excavation – Gold Shovel Standard	Tailboard Refresher
Tailboard Refresher	AQI/Respiratory Protection
AQI/Respiratory Protection	Fire Prevention & Control including Water Buffalo
Fire Prevention & Control including Water Buffalo	PG&E Fire Rating & Work Planning
PG&E Fire Rating & Work Planning	Substance Abuse
Substance Abuse	Stop Work Authority
Stop Work Authority	Rokstad HSE Policy
Rokstad HSE Policy	Equipment Inspections
Equipment Inspections	Heat Illness
Heat Illness	Fall Prevention and Protection
Fall Prevention and Protection	Incident Reporting
Incident Reporting	Working on Slopes
Working on Slopes	Load Securement
Load Securement	Tick Management
First Aid/AED	
Tick Management	

- SAFE-1503WBT, Fire Danger Precautions Web Based Training (45-min.)

  This web based training covers the Utility Fire Potential Index and shows fire index ratings from Red Flag to R5+ and fire index area link. The training clearly references Utility Standard TD-1464S and includes guidance on performing a tailboard and use of Fire Risk Matrix and Fire Mitigation Checklist. The training discusses evacuation routes, PPE, and the 5S review for safety. It also describes and shows the use of hand tools, 5-gallon backpacks and also discusses vehicle related rules. The training does not include any guidance regarding the preparation and deployment of the water buffalo.

- ISN training: PG&E requires contractor performing work to be listed in the ISNetworld training system. Employees are required to carry a ISNet ID. Training required in ISN for the crew that was involved in this incident includes:

Training Location	Distribution
ISNetworld	• Corporate Contractor Safety Orientation (SAFE-0101) • SAFE-1503WBT, Fire Danger Precautions • SAFE-4513WBT, Electric Operations Safety Foundations for Contractors • Electric Contractor Intake Form • EQIP-0200: Rural Driving Safety
Administered by the Vendor	N/A
PG&E My Learning	• CORP-9045: Records & Info Management • ISEC-9021: Security & Privacy Awareness • CORP-9124: Customer Privacy Deep Dive • ELEC-0708: Oil Spill Response
PG&E Training	• ELEC-0340: System Inspection Elec Dis - Day 1 • ELEC-0341: System Inspection Elec Dis - Day 2 • ELEC-0342: System Inspection Elec Dis - Day 3

Table #1: ISNetworld training requirements

- <u>PG&E Academy Training for Apprentices and Journeymen Linemen</u>: As part of the internal PG&E Utility Standard and Procedure update process, the PG&E Academy will be notified of the pending changes, review the document that is routed for approval, and assess the impact of the individual changes to the overall training curriculum for groups that are affected. The PG&E Academy shall be issued an Action to provide a status update at a defined period of time after documents are revised reporting changes to the training curriculum that are in-process.

- Discussion Item: Use of the appropriate cutting tool for the task at hand: In this incident, the Lineman used a pair of “bolt bites” as shown in Image #24. The fact that the conductor was energized required him to hold the conductor with his left hand while using his right hand to hold one handle of the cutter as the other rested on his shoulder. The inability to use 2 hands provided the opportunity to lose of control over the metal cutting end.

  For this type of cutting task, there are also other tools available. PG&E includes ratcheting style cutters as shown in Image #25, and electric rechargeable cutters as shown in Image #26 in field crew tool kits. The team recommends that contract field crews be equipped with and carry a smaller single hand cutting tool option(s) for use in situations where space is limited, and tool control is crucial to prevent arc flashes.

Image 24: Bolt cutter style cable cutter with fiberglass insulated handles.

Image 25: Klein Ratcheting Cutter

Image 26: Greenlee Rechargeable Cutter

CAL FIRE

CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION
Shasta Trinity Unit
875 Cypress Ave, Redding Ca, 96001

INVESTIGATION REPORT

CASE NUMBER:	**21CASHU009196**
CASE NAME:	**MULE Incident**
DATE:	**August 25th, 2021**
INCIDENT TYPE:	Wildland Fire
INCIDENT INVESTIGATOR:	Ernest Curran Fire Captain/Peace Officer Shasta Trinity Unit Brice Bennett Deputy State Fire Marshall Office of State Fire Marshall JT Zulliger Battalion Chief/Peace Officer Shasta Trinity Unit Darren Stewart Fire Captain/Peace Officer Shasta Trinity Unit

1 – VIOLATION:

4 Counts

Violation of Public Resources Code 4421- *A person shall not set fire or cause fire to be set to any forest, brush, or other flammable material which is on any land that is not his own, or under legal control, without the permission of the owner, lessee or agent of the owner or lessee of the land.*

1 Count

Violation of Health and Safety Code 13001- *Every person is guilty of a misdemeanor who, through careless or negligent action, throws or places any lighted cigarette, cigar, ashes, or other flaming or glowing substance, or any substance or thing which may cause a fire, in any place where it may directly or indirectly start a fire, or who uses or operates a welding torch, tar pot or any other device which may cause a fire, who does not clear the inflammable material surrounding the operation or take such other reasonable precautions necessary to insure against the starting and spreading of fire*

4 Counts

Violation of Penal Code 452(d)-*A person is guilty of unlawfully causing a fire when he recklessly sets fire to or burns or causes to be burned, any structure, forest land or property.*

(a) Unlawfully causing a fire that causes great bodily injury is a felony punishable by imprisonment in the state prison for two, four or six years, or by imprisonment in the county jail for not more than one year, or by a fine, or by both such imprisonment and fine.

(b) Unlawfully causing a fire that causes an inhabited structure or inhabited property to burn is a felony punishable by imprisonment in the state prison for two, three or four years, or by imprisonment in the county jail for not more than one year, or by a fine, or

by both such imprisonment and fine.

(c) Unlawfully causing a fire of a structure or forest land is a felony punishable by imprisonment in the state prison for 16 months, two or three years, or by imprisonment in the county jail for not more than six months, or by a fine, or by both such imprisonment and fine.

(d) Unlawfully causing a fire of property is a misdemeanor. For purposes of this paragraph, unlawfully causing a fire of property does not include one burning or causing to be burned his own personal property unless there is injury to another person or to another person's structure, forest land or property.

(e) In the case of any person convicted of violating this section while confined in a state prison, prison road camp, prison forestry camp, or other prison camp or prison farm, or while confined in a county jail while serving a term of imprisonment for a felony or misdemeanor conviction, any sentence imposed shall be consecutive to the sentence for which the person was then confined.

2 - SUMMARY:

On August 25th, 2021, at approximately 1:51 PM, Redding Emergency Command Center received a report of a vegetation fire near the intersection of Muletown Road and Placer Street in the community of Redding. The vegetation fire burned approximately 10 acres of vegetation, a vehicle, a trailer, and a garage. I arrived at scene and determined the fire burned on four different properties. A utility company was working in the area when the fire ignited. Brice BENNETT conducted witness interviews before I arrived at scene. I conducted the cause and origin investigation of the wildland fire.

Based on the witness statements, burn pattern indicators, and evidence present at scene, I determined the fire ignited around a utility pole. The utility pole was being worked on to upgrade the dropline going to [redacted] Witness statements indicate the utility worker caused sparks while working at the top of the utility pole. Burn pattern indicators indicate the fire originated near the base of the utility pole. Utility workers attempted to extinguish the fire using fire extinguishers, a backpack water pump and a tank water trailer hooked to a vehicle (water buffalo). The fire burned until fire personnel arrived at scene and controlled the fire at approximately 10 acres.

3 – RESPONSIBLE PARTY:

Rockstad Power
United States Headquarters
8825 Aero Dr. Ste 305
San Diego, CA, 92123-2270
Phone: (888) 310-8830

4 – VICTIM & WITNESS:

W-1

[redacted]

Foreman Rockstad Power

Phone: [redacted]

DL number: [redacted]

DOB [redacted]

See BENNETT's supplemental report for witness statements.

MURPHY can attest to:

- **Crew was performing a "tree connect" in the area of** [redacted]
- **Performed a tailboard safety meeting regarding plan for a fire and other subjects.**
- **Heard transformer explode and saw fire near the bottom of the pole** [redacted] **was working on.**
- **Operated Rockstad vehicle and water buffalo consumed by the fire.**

W-2

[redacted]

Rockstad Power employee

Phone: [redacted]

DOB: [redacted]

See BENNETT's supplemental report for witness statements.

[redacted] **can attest to:**

- **Working on the utility pole near the area the fire ignited.**

- Working on a "hot secondaries" meaning electricity was still moving through the lines.
- [redacted] told BENNETT he was careless and grounded his tool causing an arc.
- Initially saw two or three small fires near the base of the utility pole after his tool arced.

W-3

[redacted]

Rockstad Power employee

Phone: [redacted]

DOB: [redacted]

See BENNETT's supplemental report for witness statements.

[redacted] can attest to:

- [redacted] saw a flash when [redacted] cut the second line.
- [redacted] saw a portion of [redacted] tool missing after the flash.
- [redacted] attempted to extinguish the fire by stomping on it.

W-4

[redacted]

Liaison officer for Canus (subcontractor for PG&E quality control)

Phone: [redacted]

DOB: [redacted]

See BENNETT's supplemental report for witness statements

W-5

[redacted]

Roackstad Power employee

Phone: [redacted]

DOB: [redacted]

See BENNETT's supplemental report for witness statements.

[redacted] **can attest to:**

- **Hearing a "buzz fault"**
- **Seeing the fire at the base of the pole** [redacted] **was working on.**
- **Attempting to extinguish the fire using a dry chemical fire extinguisher.**

5 - EVIDENCE:

E-1 A thumb drive containing 100 Digital Pictures

6 – CONDITION:

The fire occurred during the high fire danger portion of the year in Shasta County. The fuels in August are typically dryer with a higher ignition probability than other times of the year. The fire occurred in western Shasta County. Western Shasta County has experienced several recent large fires such as the Carr Fire and the Zogg Fire. Shasta County has experienced approximately years of drought conditions prior to the ignition of the Mule fire.

The fuels in the area are predominantly annual grasses, brush, oak trees and gray pine trees. This type of fuel model is commonly referred to as “grass-oak woodland”. The grass in the area around the fire was approximately 12 inches tall and in a completely cured state.

The fire occurred near the base of a slope. Fires igniting at the base of a slope promotes fire spread. Fire moving up hill preheats the vegetation prior to direct flame impingement allowing the fire to spread at a faster rate.

The weather at scene was recorded by CAL FIRE Captain Greg FRANK. Temperature was 98 Fahrenheit, wind 8 MPH out of the south, relative humidity 18%, in grass-oak woodland.

7 – VEHICLE/EQUIPMENT:

1 fully consumed full size pickup
1 fully consumed tow behind water tank trailer (water buffalo)

Both vehicles belonged to Rockstad Power.

8 - PROPERTY:

V-1
[redacted]
Property owners of [redacted]
APN [redacted]

V-2
[redacted]
Property owners of [redacted]
APN [redacted]

V-3
[redacted]
Property owners of [redacted]
APN [redacted]

V-4
[redacted]
Property owners of [redacted]
APN [redacted]

9 - NARRATIVE:

On Wednesday, August 25th, 2021, Peace Officer JT ZULLIGER and I were on duty in a marked CAL FIRE law enforcement vehicle wearing CAL FIRE approved law enforcement duty uniforms. At approximately 1:54 PM, Redding Emergency Command Center (ECC) dispatched a vegetation fire in the area of Placer Road and Muletown Road in the community of Redding. ZULLIGER and I arrived at scene at approximately 2:54 PM and observed approximately 10 acres of vegetation burning on both sides of Placer Road, a vehicle with a trailer, and a detached shop actively burning. ZULLIGER and I responded from Trinity County. The fire caused approximately 400,000 dollars of property damage. Office of State Fire Marshall, Deputy State Fire Marshall Brice BENNETT was at scene of the fire taking witness statements from Rockstad utility workers. See BENNETTS attached supplemental report for witness statements and information regarding the water "buffalo".

Based on the fire behavior I observed when I arrived at scene, the wind and topography I determined the fire began on the south side of Placer Road. I began by walking around the south portion of the fire both clockwise and counterclockwise to determine a general origin area. During my walk around of the fire I observed an area around a utility pole that appeared to have a small amount of unburned vegetation around it. The utility pole appeared to be the service drop to [redacted] The utility pole was located approximately 325 feet to the south of Placer Road and approximately 150 feet to the west of the residence [redacted]. To the north of the utility pole, I observed most of the oak leaves burned off the oak trees and most of the brush consumed with only stems still present. Based on the consumption level of the leaves I determined the fire was advancing to the north of the utility pole. South of the utility pole I observed most of the leaves still present on the oak trees and brush. Based on the consumption level of the oak trees and brush I determined the fire was backing to the south of the utility pole. From the wind, topography, observations, advancing and backing indicators present I determined my general area of origin was a 15-foot circle around the utility pole. The burn patter indicator needle freeze consistently indicated the fire moved from the area of the utility pole outward. When I approached the utility pole, I found several indicators of attempted fire suppression. I found two dry chemical fire extinguishers and portions of a backpack type water pump near the utility pole. I noticed a rope hanging from the top of the utility pole. I found several hand tools such as pliers, wrenches, and rachets at the base of the utility pole that received damage from the fire. Based on the evidence of attempted fire suppression and the burned hand tools near the base of the utility pole I determined there was work being performed at the utility pole. Based on the burn pattern indicator stem fall present I was able to narrow the origin of the fire down to a five-foot area to the east of the utility pole. The five-foot specific origin area was adjacent to the utility pole.

Brice BENNET told me in summary that Rockstad power workers had been preforming work in the area. BENNET told me in summary that [redacted] had been working up on the utility pole (near the specific origin area) and [redacted] was [redacted] ground support person. [redacted] saw an arc while [redacted] was cutting the second wire. [redacted] was the first person to notice the fire and yelled down to [redacted]. [redacted] told BENNETT he saw a fire near the base of the utility pole. [redacted] attempted to extinguish the fire by stomping it out, then retreated to the main roadway. [redacted] was the foreman for the job being completed. [redacted] was located on Placer Road near the driveway of [redacted] Once the fire was recognized by [redacted] he drove the "water buffalo" down the two-track road and attempted to extinguish the fire using the firehose connected to the water buffalo. [redacted] was almost immediately overtaken by fire. [redacted] retreated to the vehicle attached to the water buffalo and attempted to leave the area. While [redacted] was backing the truck and trailer up toward Placer Road, he traveled off the two-track road. The vehicle became stuck and was consumed by fire. [redacted] was working in on the same powerline off the two-track road with a bucket truck. [redacted] noticed the fire and began attempting to extinguish the fire using a dry chemical type fire extinguisher from his vehicle. [redacted] was unsuccessful and retreated to his vehicle to move it to safety.

Based on my knowledge, skills, education, training, experience, evidence, and witness statements I believe the vegetation fire began from an arc that occurred when [redacted] grounded his tool. The arc produced several pieces of hot debris that fell into the dry grass and ignited the Mule fire. The arc produced several pieces of hot debris creating several points of ignition in the specific origin area near the base of the utility pole. The fire then began spreading and efforts were made to extinguish the fire using dry chemical fire extinguishers, a backpack style water pump, and the "water buffalo" water/pumping trailer. The fire became too intense for the work crew to suppress. The hand tool the utility worker was using when the arc was created was never produced.

I reviewed the recorded 911 calls forwarded to me by the Redding Emergency Command Center. I was not able to gather any additional information regarding the incident.

Conclusion

[redacted] was conducting "hot work" on energized conductors, during the heat of the day. Fire suppression resources belonging to the utility company were not pre-staged in anticipation of the potential risk of fire. The combination of these factors resulted in a fire that escaped the control of the utility workers and caused property damage.

END OF REPORT

10 - ATTACHMENTS:

1. **CALFIRS report**
2. **Mule Fire Sketch**
3. **Mule Fire Map**
4. **BENNETT's supplemental Report**
5. **Photo Log**
6. **Evidence Log**
7. **FC34 CAL FIRE Incident and dispatch action report**
8. **Thumb Drive of 100 digital photographs and initial 911 calls**
9. **County Assessors Documents**
   - **A. 7273 Placer Road, Redding California, 96001**
   - **B. 7249 Placer Road, Redding California, 96001**
   - **C. 7250 Placer Road, Redding California, 96001**
   - **D. 7300 Placer Road, Redding California, 96001**

Ernst Curran #2235

Incident Number: 21CASHU0009196 **Exposure:** 0 **Incident Date:** 8/25/2021

Investigation Report

Incident Information

DPA Authority at Origin: State

Region: Northern

Incident Type: 142-Brush or brush-and-grass mixture fire

Incident Name: MULE

Action Taken: 11-Extinguishment by fire service personnel

Aid Given/Received: None

Battalion: 5

Casualties

Civilian Deaths: 0

Fire Service Deaths: 0

Civilian Injuries: 0

Fire Service Injuries: 0

Losses ($)

Estimated Property Losses: $400000

Estimated Content Losses: $50000

Estimated Property Pre-Incident Value : $550000

Estimated Contents Pre-Incident Value : $60000

Dates and Times

Alarm: 08/25/2021 13:52:10

Arrival: 08/25/2021 14:03:34

Controlled: 08/25/2021 23:00:00

Cleared: 08/26/2021 00:18:46

Location

Latitude: [redacted]

Longitude: [redacted]

County: SHASTA

Unit: SHU

FDID: 45555

Address: Placer street @ Muletown Road

Apt/Suite/Room:

Cross Street: [redacted]

City: IGO

State: CA

Zip Code: 96001

Details

Property Use: 419-1 or 2 family dwelling

Mixed Use Property: NN-Not mixed use

Apparatus and Personnel

Suppression Apparatus: 22

EMS Apparatus: 0

Other Apparatus: 0

Suppression Personnel: 73

EMS Personnel: 0

Other Personnel: 0

Incident Number: 21CASHU0009196 **Exposure:** 0 **Incident Date:** 8/25/2021

Officer in Charge

Name: CURRAN, ERNEST
Position or Rank: FIRE APPARATUS ENGINEER

Member Making Report

Name: CURRAN, ERNEST
Date: 09/17/2021 00:00:00

Position or Rank: FIRE APPARATUS ENGINEER

Statements and information included in this report are based on the best available information at the time of the report. I reserve the right to update and/or modify this report at any time, based on new or additional information becoming available.

Wildland Fire

Area Type: 3-Rural/urban or suburban
Wildland Fire Cause: 0E-Electrical Power
Fuel Model at Origin: 01-A: Annual Grasses.
Heat Source: 42-Molten, hot material

Material First Ignited: Dry Grass

Electrical Power Subcategory 1: Other

Factors Contributing to Ignition: 43-Installation deficiency
Human Factors Contributing to Ignition: None

Investigation

Reported: 08/25/2021 13:51:23

Possible: None

Possible - Explanation: See attached narrative...

Probable: Electrical Power

Probable - Explanation: See attached narrative

Investigation Attachments Included in Report?: Yes

Were there persons or property involved? (Victim, Witness, Subject): Yes

Narrative

Additional Narratives	Authored By	Authored Date

Incident Number: 21CASHU0009196 **Exposure:** 0 **Incident Date:** 8/25/2021

On Wednesday, August 25th, 2021, Peace Officer JT ZULLIGER and I were on duty in a marked CAL FIRE law enforcement vehicle wearing CAL FIRE approved law enforcement duty uniforms. At approximately 1:54 PM, Redding Emergency Command Center (ECC) dispatched a vegetation fire in the area of Placer Road and Muletown Road in the community of Centerville. I arrived at scene and observed approximately 10 acres of vegetation burning on both sides of Placer Road, a vehicle with a trailer, and a detached shop actively burning. The fire caused approximately 400,000 dollars of property damage. The list of property owners that the fire damaged: [redacted] and the [redacted]	ERNEST CURRAN	9/17/2021

Office of State Fire Marshall, Deputy State Fire Marshall Brice BENNETT was at scene of the fire taking witness statements from Rockstar utility workers. See BENNETTS attached supplemental report for witness statements and information regarding the water "buffalo".

Based on the fire behavior I observed when I arrived at scene, the wind and topography I determined the fire began on the south side of Placer Road. I began by walking around the south portion of the fire both clockwise and counterclockwise to determine a general origin area. During my walk around of the fire I observed an area around a utility pole that appeared to have a small amount of unburned vegetation around it. The utility pole appeared to be the dropline to [redacted] The utility pole was located approximately 325 feet to the south of Placer Road and approximately 150 feet to the west of the residence [redacted] To the north of the utility pole, I observed most of the oak leaves burned off the oak trees and most of the brush consumed with only stems still present. Based on the consumption level of the leaves I determined the fire was advancing to the north of the utility pole. South of the utility pole I observed most of the leaves still present on the oak trees and brush. Based on the consumption level of the oak trees and brush I determined the fire was backing to the south of the utility pole. From the wind, topography, observations, advancing and backing indicators present I determined my general area of origin was a 15-foot circle around the utility pole. The burn patter indicator needle freeze consistently indicated the fire moved from the area of the utility pole outward. When I approached the utility pole, I found several indicators of attempted fire suppression. I found two ABC type fire extinguishers and remanence of a backpack type water pump near the utility pole. I noticed a rope hanging from the top of the utility pole. I found several hand tools at the base of the utility pole that received fire damage from the fire. Based on the evidence of attempted fire suppression and the burned hand tools near the base of the utility pole I determined there was work being performed at the utility pole. I investigated the burn pattern indicator stem fall in the general origin area. Based on the burn pattern indicator stem fall present in the general origin area, I was able to narrow the origin of the fire down to a five-foot area to the east of the utility pole. The five-foot origin area was adjacent to the utility pole.

Based on my knowledge, skills, education, training, experience, evidence, and witness statements I believe the vegetation fire began from an arc that occurred. The arc produced several pieces of molten metal that fell into the dry grass and ignited a fire. The arc producing several hot pieces of molten metal produced several points of ignition in a small five-foot circle near the base of the utility pole. The fire then began spreading and efforts were made to extinguish the fire using ABC fire extinguishers, a backpack style water pump, and the "buffalo" water/pumping trailer. The fire became too intense for the operators of the water "buffalo". During an attempt to leave the area of the fire, the vehicle pulling the water "buffalo" backed off the roadway and was consumed by the fire.

END OF REPORT

Acres Burned

State Responsibility Area: 10
Local Responsibility Area: 0
Federal Responsibility Area: 0
Total Acres Burned: 10

Structures

Incident Number: 21CASHU0009196 **Exposure:** 0 **Incident Date:** 8/25/2021

Structures Damaged: 1 **Structures Destroyed:** 1

Mobile Property/Equipment Involved in Wildland Ignition

Equipment: 211-Electrical power (utility) line

Weather

Weather Observer: Greg Frank

Weather Observation Device: Digital

Weather Observation Date/Time: 08/25/2021 18:00:00

Weather Type: 10-Clear, less than 1/10 cloud cover

Relative Humidity (%): 18

Red Flag: No

Fire Weather Watch: No

Wind Direction: 5-South

Wind Speed (mph): 8

Air Temperature (F): 98

Conditions

Elevation (in feet): 929

Relative Position on Slope: 1-Lower Slope

Aspect: 4-South

Persons/Property Involved

9/17/2021 - 17:19

Fire Investigation - Victim, Witness, Subject Information

Incident Number: 21CASHU0009196 **Incident Type:** 142-Brush or brush-and-grass mixture fire

New Group

Question	Answer	Notes
Enter the Code and Statement of the Person Involved.		
Code and Statement	Witness	See attached report
Name (First, Middle, Last)	[redacted]	
Address (Physical)		
Address (Mailing)		
Parcel/Property ID		
State		
Phone	[redacted]	
License/ID#	[redacted]	
DOB	[redacted]	
Gender	Male	
Race		
Hair Color		
Eye Color		
Height		
Weight		

Persons/Property Involved

9/17/2021 - 17:20

Fire Investigation - Victim, Witness, Subject Information

Incident Number: 21CASHU0009196 **Incident Type:** 142-Brush or brush-and-grass mixture fire

New Group

Question	Answer	Notes
Enter the Code and Statement of the Person Involved.		
Code and Statement	Witness	See attached report
Name (First, Middle, Last)	[redacted]	
Address (Physical)		
Address (Mailing)		
Parcel/Property ID		
State		
Phone	[redacted]	
License/ID#		
DOB	[redacted]	
Gender	Male	
Race		
Hair Color		
Eye Color		
Height		
Weight		

Persons/Property Involved

9/17/2021 - 17:22

Fire Investigation - Victim, Witness, Subject Information

Incident Number: 21CASHU0009196 **Incident Type:** 142-Brush or brush-and-grass mixture fire

New Group

Question	Answer	Notes
Enter the Code and Statement of the Person Involved.		
Code and Statement	Witness	See attached report
Name (First, Middle, Last)	[redacted]	
Address (Physical)		
Address (Mailing)		
Parcel/Property ID		
State		
Phone	[redacted]	
License/ID#		
DOB	[redacted]	
Gender	Male	
Race		
Hair Color		
Eye Color		
Height		
Weight		

Persons/Property Involved

9/17/2021 - 17:22

Fire Investigation - Victim, Witness, Subject Information

Incident Number: 21CASHU0009196 **Incident Type:** 142-Brush or brush-and-grass mixture fire

New Group

Question	Answer	Notes
Enter the Code and Statement of the Person Involved.		
Code and Statement	Witness	See attached report
Name (First, Middle, Last)	[redacted]	
Address (Physical)		
Address (Mailing)		
Parcel/Property ID		
State		
Phone	[redacted]	
License/ID#		
DOB	[redacted]	
Gender	Male	
Race		
Hair Color		
Eye Color		
Height		
Weight		

Persons/Property Involved

9/17/2021 - 17:24

Fire Investigation - Victim, Witness, Subject Information

Incident Number: 21CASHU0009196 **Incident Type:** 142-Brush or brush-and-grass mixture fire

New Group

Question	Answer	Notes
Enter the Code and Statement of the Person Involved.		
Code and Statement	Witness	See attached report
Name (First, Middle, Last)	[redacted]	
Address (Physical)		
Address (Mailing)		
Parcel/Property ID		
State		
Phone	[redacted]	
License/ID#		
DOB	[redacted]	
Gender		
Race		
Hair Color		
Eye Color		
Height		
Weight		

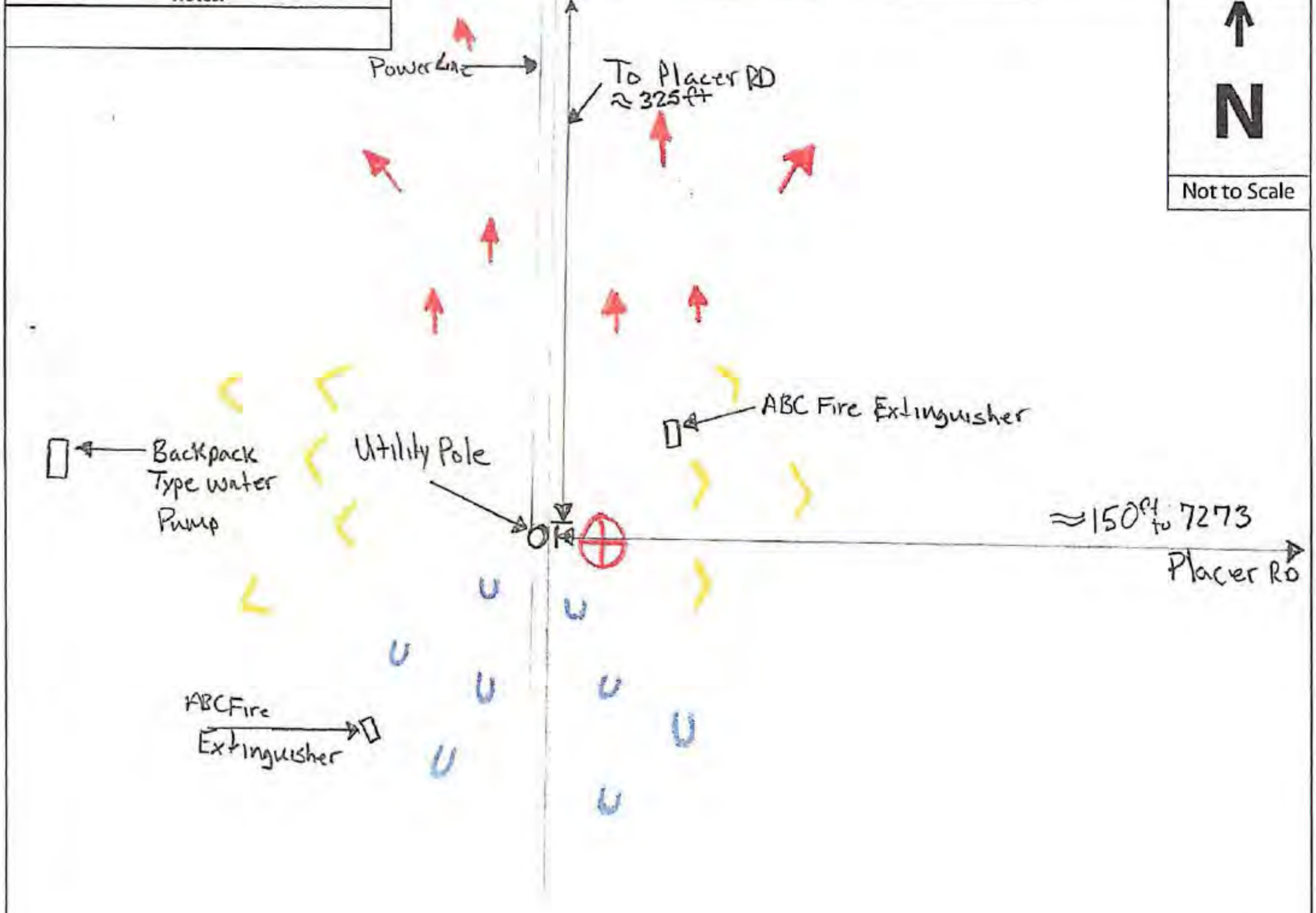
State of California *CAL FIRE* LE-66a (REV. 02-2012)	**Wildland Fire Investigation** **CONFIDENTIAL Origin & Cause Report**	**Incident Number**	
		Incident Date	

Sketch

Notes:

N

Not to Scale



Legend

⊕ = Area of Origin

↑ = Advancing Fire

U = Backing Fire

‹ = Lateral Fire

Vicinity Map

See Attached Map

☐ DISPATCH RPT FC-34	☐ FIRE RPT FC-18	☐ PHOTOS	☐ CHP RPT	☐ SKETCH	☐ DIAGRAM
☐ SUPPLEMENTAL RPT LE-71	☐ EVID RPT LE-75e	☐ PHOTOS LE-75p	☐ MAPS	OTHER:	

Reporting Officer:	**Signature:**
Date Report Completed:	**Badge Number:**
Reviewing Officer:	**Signature:**


MULE INCIDENT
21CASHU009196
Legend
Area of Origin
Mule Fire Parameter
Thompson's Home Maintenance
Muletown Rd
A16
Placer Rd
Castle View Ln
Area of Origin
Castle Ranch Alpacas
Google Earth
400 ft
N

SUPPLEMENTARY INVESTIGATION REPORT

STATE OF CALIFORNIA
DEPARTMENT OF FORESTRY AND FIRE PROTECTION
LE 71 (REV. 7/2011)

INCIDENT NUMBER
21CASHU009196
CASE NAME
PLACER

DAY	MONTH	DATE	YEAR	COUNTY	REGION	UNIT	CASE NUMBER
Wed	Aug	25	2021	Shasta	CNR	SHU	

On Wednesday August 25th, 2021 at approximately I was on duty with my partner Darren STEWART wearing our CAL FIRE law enforcement uniforms driving a marked CAL FIRE law enforcement pickup truck when we responded to a wildland fire a[redacted]in the community of Igo. I arrived at the reported address to find an active wildland fire on both sides of placer road being fought by multiple fire department resources. STEWART tasked me with witness interviews. Their statements are below in summary:

[redacted]
Foreman Rockstad Power
[redacted]

[redacted]was the foreman for the job that afternoon. They were performing a "tree connect" which removes powerlines that are attached to trees and connects them to newly placed power poles. [redacted]entire crew arrived between 11:30 and 12:00pm and notified the homeowner they would lose power at 1:00pm exactly so that they could connect the new wire from the transformer to their house. [redacted]stated they pulled the meter base to disconnect the house and the homeowner had a generator they started and used while the work was being performed. [redacted]performed a tailboard safety meeting with the entire crew covering job scope, slips, trips, falls, climbing safety, "R4" fire rating and fire suppression plan with the "buffalo" fire support trailer connected to the foreman vehicle before work started. The "buffalo" has 500 gallons of water, a gas powered water pump, 3 different fire hoses. Two of the 100ft sections of hose are pre-connected to water discharges and have nozzles on them for quick deployment. The trailer and foreman truck also have first aid, automated external defibrillator, assorted shovels, pulaskis, mcclouds and a Hudson sprayer.[redacted]remained with the foreman vehicle attached to the "buffalo" fire suppression trailer up at the roadside while the crew began the work. [redacted]heard the transformer explode and saw fire at the bottom of the pole[redacted]was working on. [redacted]immediately committed the truck and trailer down the dirt road, started the water pump and deployed 100ft of hose to begin

OFFICERS INITIALS BB

trying to suppress the fire. He was almost immediately overtaken by the fire running up hill at him. [redacted] attempted to back the truck and trailer up the dirt road when the trailer slid off the dirt road pulling the truck with it. [redacted] exited the truck and retreated to the main roadway.

[redacted]

Rockstad employee

[redacted] was the pole climber that was tasked with disconnecting the existing service from the transformer. They were working with "hot secondaries" and did not disconnect power to the transformer before they began work. [redacted] said he cut the first hot lead without incident but was "careless" when he cut the second one and grounded his cutting tool. [redacted] tool sparked, and he immediately looked down to see 2-3 small fires start in the grass around the base of the pole. [redacted] yelled to his ground support person [redacted] "FIRE FIRE FIRE." When [redacted] got down from the pole, the fires were established and running uphill. [redacted] retreated to the main roadway.

[redacted]

Rockstad employee

[redacted] was tasked with ground support for [redacted] who was climbing the pole that day. [redacted] had tools to complete the job at the base of the pole. Impact drill, Sawzall, and climbing rescue gear. [redacted] saw [redacted] cut the first leg with no incident. [redacted] then saw a flash when [redacted] cut the second leg and saw a chunk missing from [redacted] cutting tool. [redacted] did not see the fires around him until [redacted] yelled down to him. [redacted] then tried to stomp out the fires while [redacted] got down off the pole. [redacted] stated he could not stop the fires from spreading and it ran up the hillside very quickly. [redacted] retreated to the main roadway.

[redacted]

Liasion officer for Canus (subcontractor for PG&E Quality control)

OFFICERS INITIALS

[redacted] attended the tailboard safety meeting and remained up at his truck at the roadside doing paperwork. He heard commotion and saw flames. Saw [redacted] pull the "Buffalo" down the dirt road to start suppressing the fire. [redacted] attempted to get a headcount of all the crew from the dirt road.

[redacted]

Rockstad employee

[redacted] was setting up the bucket truck next to the new pole off the dirt road when he heard a "buzz fault." He looked down to the other pole with the transformer with [redacted] up on the pole, and saw fire in the grass below the pole. [redacted] grabbed the dry chemical extinguisher from his bucket truck and ran down the hill to try and extinguish the fire. [redacted] said the fire raced up the hillsides and he had no chance of stopping it with the extinguisher. [redacted] then backed the bucket truck down the dirt roadway past the house to keep it from being destroyed.

PRINTED NAME	SIGNATURE	BADGE NUMBER	DATE
Brice BENNETT	Brice Bennett	4237	9-1-21

OFFICERS INITIALS BB

MULE INCIDENT
21CASHU009196
PHOTO LOG

All pictures taken by E. Curran

Photo A: Picture taken from [redacted] driveway facing northeast

Photo B: Picture taken from same [redacted] driveway facing west

Photo C: Picture taken from [redacted] driveway facing south (towards the area of origin)

Photo D:

Photo E: Picture taken facing [redacted] Residence

Note: Garage in center of picture was damaged due to the fire.

Two-track road visible on right side of picture

Photo F: Rockstad vehicle visible on right side of pic

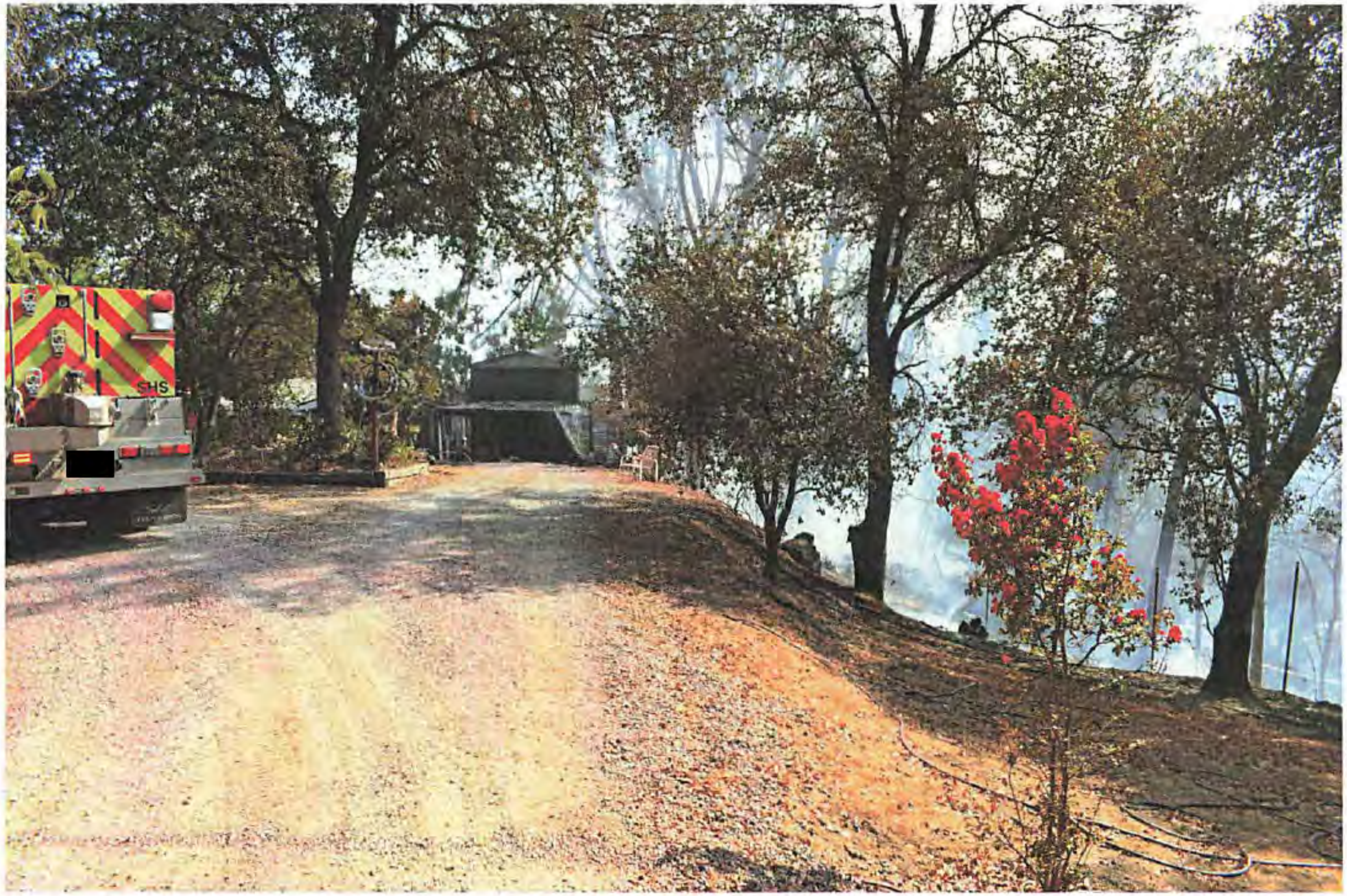


Photo G: Rockstad
vehicle and trailer/
water buffalo consumed
Below two-track road.

Photo H: Garage at residence [redacted] damaged by fire.

Photo I: Garage at residence [redacted] damaged by fire.

Photo J: Garage at residence [redacted] damaged by fire.

Photo K: Garage at residence [redacted] damaged by fire.

Photo L: Garage at residence [redacted] damaged by fire.

Photo M: Garage at residence [redacted] damaged by fire.

Photo N: [redacted]
residence

Note: downed drop line form utility pole

Photo O: Garage at residence [redacted] damaged by fire.

Photo P: Picture of tree and insulator that was supporting dropline to [redacted] Residence.

Note: old wire hanging from insulator.

Photo Q: Picture of tree and insulator that was supporting dropline to [redacted] Residence.

Note: New Utility Pole next to tree with insulator

Photo R: Picture taken from two-track road. Rockstad vehicle consumed by fire.

Note: New utility pole and tree with insulator in upper left of picture.

Area of origin flagged off on right side of picture.

Utility pole inside flagging near the specific area of origin.

Needle freeze indicating fire was moving away from the specific area of origin.

Photo S: Picture of Rockstad vehicle and trailer consumed by fire.

Note: Area of origin in background of picture

Photo T: Picture of Rockstad vehicle and trailer consumed by fire.

Photo U: Picture of Rockstad vehicle and trailer consumed by fire

Photo V: picture of two-track road.

Note: Off left of picture is Rockstad vehicles consumed by fire.

Picture facing west toward Placer Road.

Mostly consumed leaves, grass and brush consistent with advancing fire.

Photo W: several leaves and small vegetation present.

Photo X: Picture taken facing west.

Note drainage running up hill toward Placer Road. Drainage promoted rapid fire growth.

Needle freeze pointing away from area of origin was accounted for due to the Rockstad vehicles being off the right side of the picture. Excessive heat from vehicle burning cause needles to freeze away from the origin and toward the vehicle.

Photo Y: Picture taken facing southwest from two-track road toward origin.

Note: leaves present

Photo Z: Tree and insulator that supported the dropline to [redacted] residence.

Photo AA: Picture of bucket truck that was working near the new utility pole. Moved by [redacted] during the fire.

Note: lower intensity fire moving south of the area of origin.

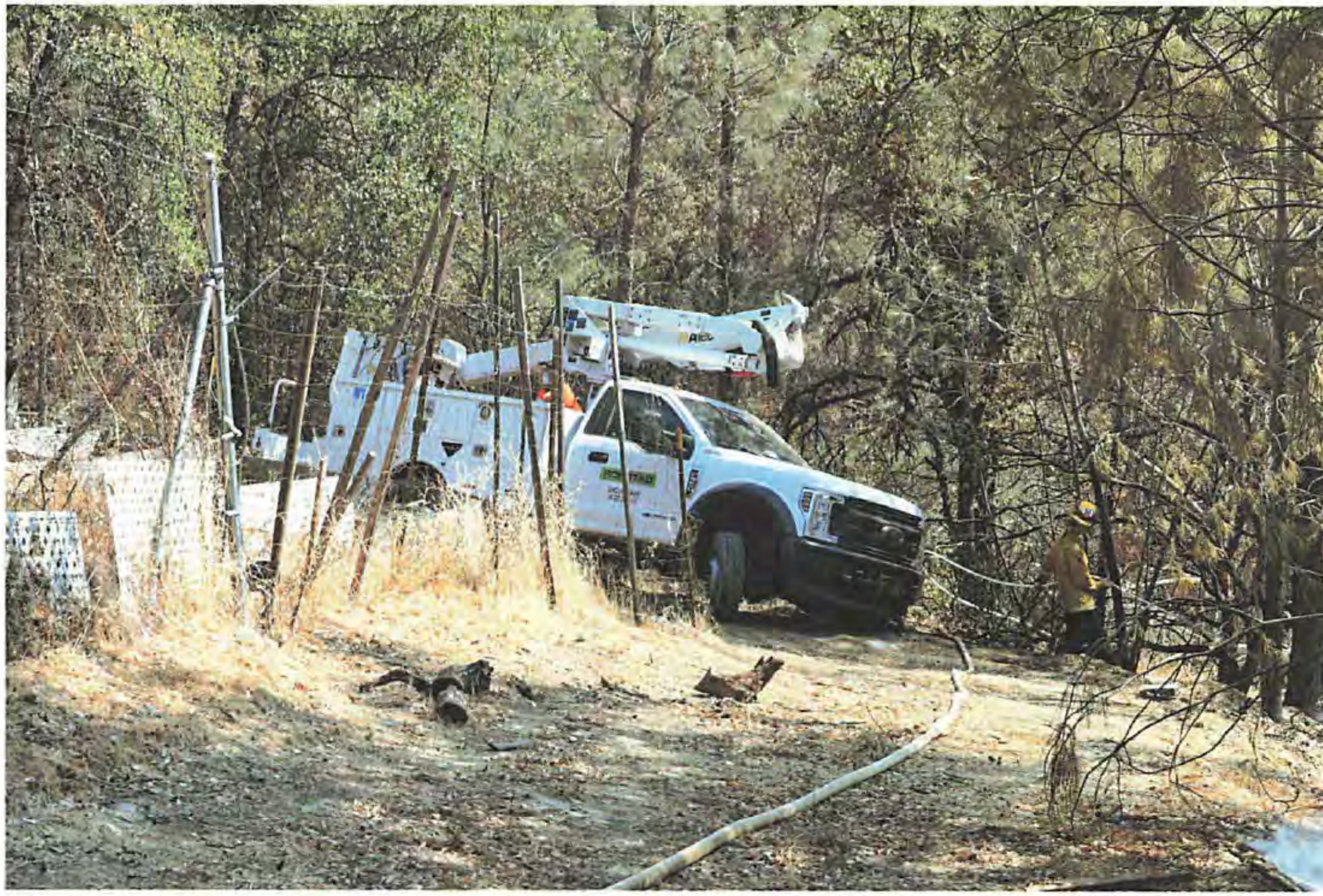


Photo AB: Picture taken facing south-west.

Needle freeze present indicating the fire moved from around the utility pole outward.

Landscape view showing location of the lower ABC fire extinguisher.

Photo AC: lower ABC fire extinguisher present on right side of picture.

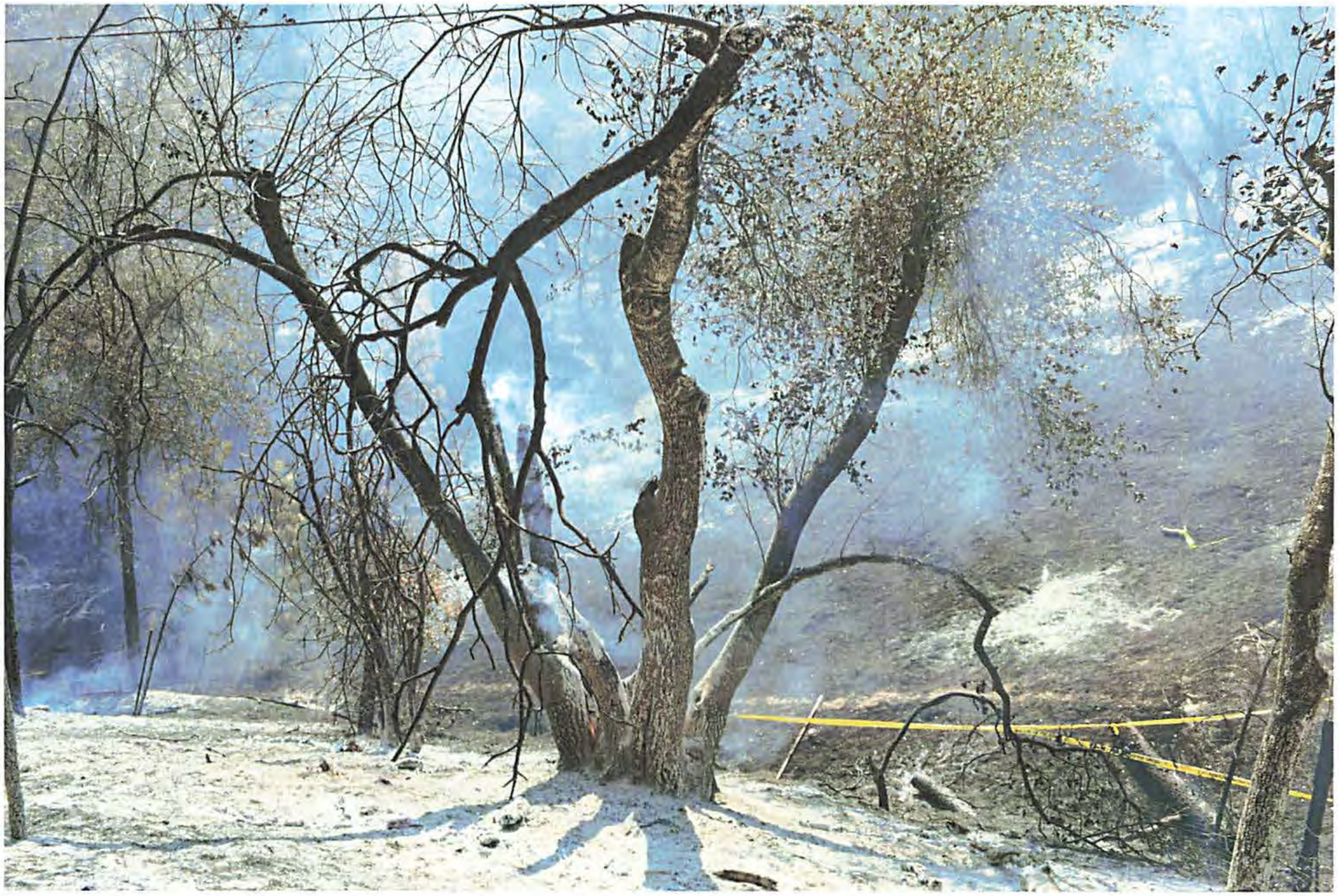


Photo AD: Picture facing northwest towards Placer Road.

This was the utility pole being worked on by [redacted] and [redacted]

Note: Rope hanging from pole

Photo AE: Picture taken facing north-west showing needle freeze present on pine trees. Needle freeze indicates fire began near the utility pole and move outward.

Note: Next slide is a closeup on needle freeze present on the pine tree on the left side of picture

Photo AF: Picture of needle freeze present indicating low intensity backing fire away from the utility pole.

Photo AG: Picture of lower ABC fire extinguisher with flagging for easy identification.

Photo AH: picture of heal of fire. Picture taken facing south/southwest.

Note: low intensity burning indicated by low vegetation not fully consumed.

Photo AI: Picture taken facing north/northwest. from area of lower ABC fire extinguisher.

Photo AJ: Photo of lower ABC fire extinguisher.

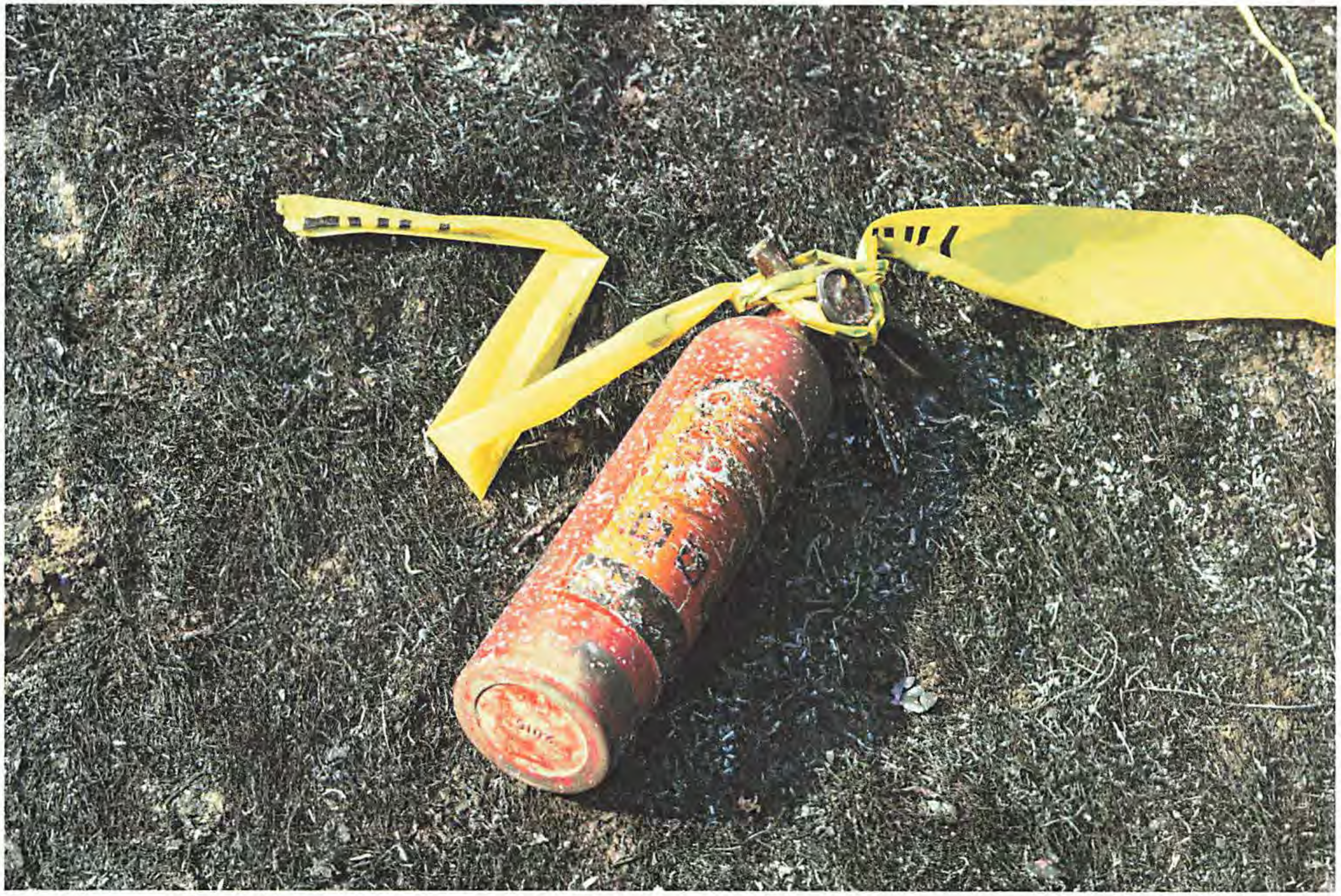


Photo AK: Photo of lower ABC fire extinguisher. Appears to have been discharged.

Photo AL: Picture taken from lower ABC fire extinguisher facing north.

Note: grass that appears to have not been burned in center of picture is consistent with the use of an ABC fire extinguisher in the dry grass.

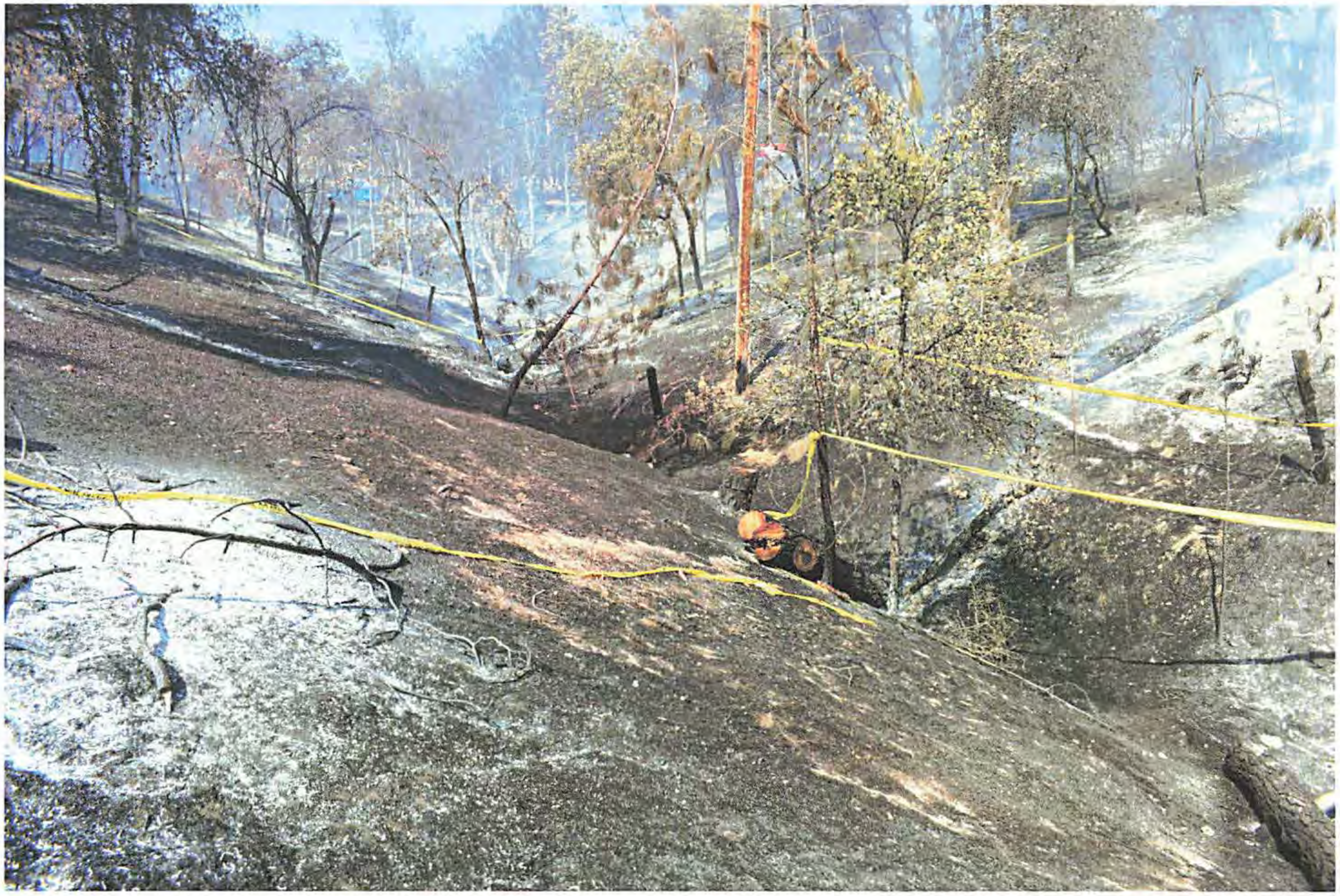


Photo AM: Picture taken facing west. Needle freeze indicates fire moved away from the area of origin.

Photo AN: Small fire in the bottom center of the picture in the remainder of a backpack type water pump that was consumed by fire.

Note: Needle Freeze near the utility pole indicates the fire moved away from the utility pole outward.

Photo AO: Picture of Specific area of origin.

Note: low intensity burning present near the pole.

Photo AP: Brass portion of backpack type water pump.

Photo AQ: Picture of fire damaged backpack water pump.

Photo AR: Picture of specific area of origin.

Note: hand tools present above utility pole.

Climbing spurs present near fence line on left of picture.

Low intensity burning present above the utility pole.

Photo AS: Picture of specific area of origin.

Note: hand tools present above utility pole.

Climbing spurs present near fence line on left of picture.

Low intensity burning present above the utility pole.

Second ABC fire extinguisher visible left of power line

Photo AT: Picture of climbing spurs and other mics tools/bag.

Photo AU: Picture of hand tools and second ABC fire extinguisher above the utility pole towards [redacted] garage.

Photo AV: low intensity burning left portion of picture.

Evidence of attempted extinguishment in center of picture.

Utility pole just out of the picture to the left.

Photo AW: picture looking north towards Placer Road.

Photo AX: Picture taken facing south needle feeze present on several trees indicate fire moved from the area of the utility pole outward.

Photo AY: Picture of transformer on the top of the pole that [redacted] was working on.

Photo AZ: Picture of power line running from the specific area of origin to [redacted] residence.

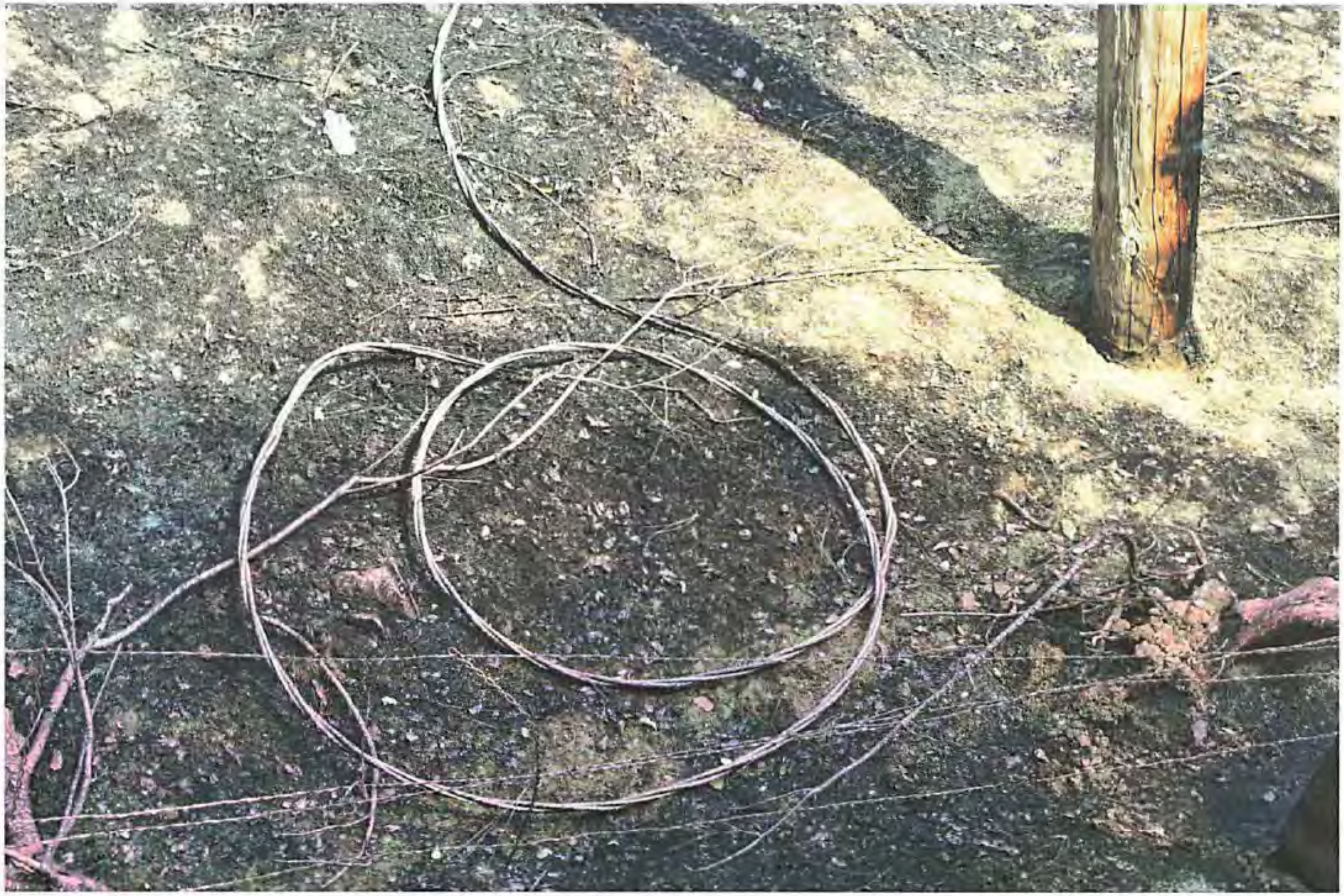


Photo BA: Low intensity burning upper right portion of photo

Photo BB: Picture of Rockstad vehicle and trailer consumed by fire.

Photo BC: Picture taken facing south on the west edge of the fire.

Photo BD: Picture taken facing north on the west edge of the fire below Placer road.

Photo BE: Picture of [redacted] residence from western fires edge.

Photo BF: Picture taken facing south on the west edge of the fire.

Photo BG: Photo taken facing north on western edge of fire.

Placer Road in the paved road in the picture.

Photo BH: Picture taken facing north from Placer Road.

[redacted] residence in background of picture.

Photo BI: Picture taken from Placer Road looking south toward the area of origin.

Note: two track road on left of picture.

Photo BJ: Picture taken looking west from placer road [redacted] on the upper right portion of the picture.

Photo BK: Picture of easter edge of fire from [redacted] Driveway

Photo BL: Picture taken from [redacted] property looking down onto Placer Road.

Photo BM: Picture of northern edge of fire on the [redacted] property

Photo BN: Picture of norther edge of fire on the [redacted] property

Photo BO: Picture of northern edge of fire on the [redacted] property

Photo BP: Picture of northern edge of fire on the [redacted]

Photo BQ: Picture of northern edge of fire looking east

Photo BR: Picture taken below [redacted] residence.

Photo BS: Picture taken below [redacted] residence.

Photo BT: Picture taken below [redacted] residence.

Photo BU: Picture taken below [redacted] residence.

Photo BV: Picture taken below [redacted] residence.

Photo BW: Picture taken below [redacted] residence.

Photo BX: Picture taken below [redacted] residence.

Photo BY: [redacted]

Photo BZ: [redacted]

Photo CA [redacted]
Road from Placer Road.

Photo CB: Picture of Brass portion of a backpack type water extinguisher.

(believed to be unrelated to the Mule Incident)

Photo CC: Picture of Rockstad vehicle and trailer

Photo CD: Picture of equipment in bed of Rockstad vehicle consumed by fire.

Photo CE: Contents of utility bed on Rockstad vehicle.

Photo CF: fire tools still in the bracket after the fire.

Photo CG: fire tools still in the bracket after the fire.

Photo CH: Contents of utility bed on Rockstad vehicle.

Photo CI: Fire extinguisher bracket near the specific area of origin.

Photo CJ: Evidence of attempted fire control near the area of origin.

Photo CK: Picture form east of the area of origin looking east.

Note: second fire extinguisher, hand tools, and power line traveling toward [redacted] residence.

Photo CL: Low intensity burning in the area or origin.

Photo CM: Specific area of origin with several points of ignition and low intensity burning.

Photo CN: Picture of needle freeze indicating the fire moved from the utility pole up towards [redacted]

Note: Second ABC fire extinguisher and hand tools.

Photo CO: Picture of rock fire moving from the direction of the utility pole outward.

Photo CP: Fence just west of the utility pole and Specific area or origin.

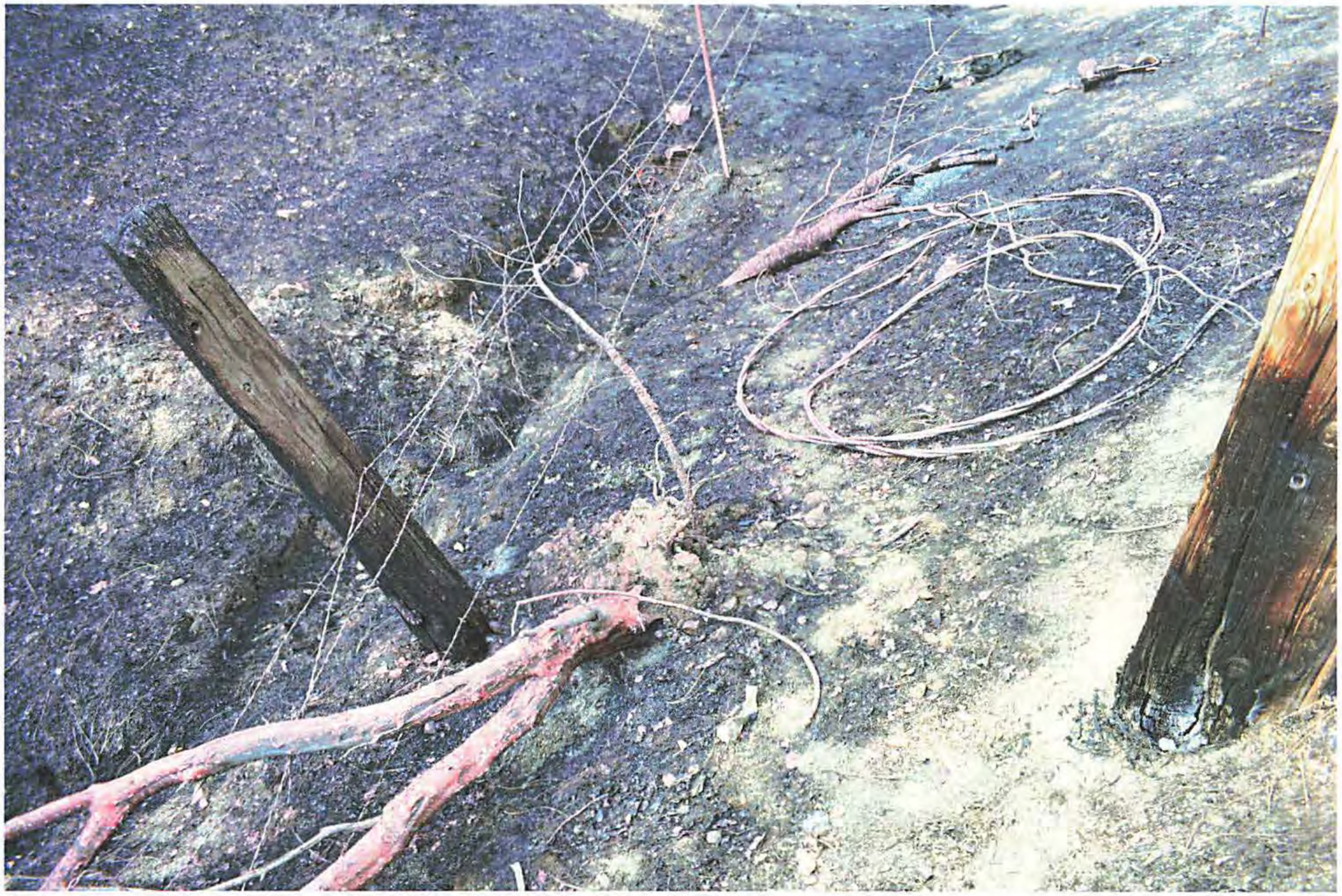


Photo CQ: Picture facing west needle freeze indicating fire moved from the area of the utility pole outward.

Photo CR: Close up of CQ Picture facing west needle freeze indicating fire moved from the area of the utility pole outward.

Photo CS: Picture of specific area of origin.

Note: low intensity burning above the utility pole.

Photo CT: Picture of entire specific area of origin, with several indicators fire came from around the utility pole and moved outward.

Photo CU: picture taken facing north towards placer road.

Note: high intensity advancing fire from the utility pole moving north towards Placer road.

Photo CV: Picture of two-track road with Rockstad vehicle.

MULE INCIDENT
21CASHU009196
PHOTO LOG
END OF PHOTO LOG

All pictures taken by E. Curran

Evidence Log (LE-75e)

STATE OF CALIFORNIA
DEPARTMENT OF FORESTRY AND FIRE PROTECTION
SHU - Shasta-Trinity Unit

Date and Time Printed: Jan 12, 2022 11:54 AM

Case Information
Incident #: 21CASHU009196 **Date and Time:** Aug 25, 2021 01:54 AM
Incident Type: Fire Wildland
Incident Location: [redacted] Redding, CA, USA
Submitted By: Ernest Curran

Item #: 1 **Date and Time Collected:** Aug 25, 2021 03:25 PM
Collected By: Ernest Curran
Collected Location: Mule Incident
Storage Location: Prep Room 1
Description: 100 Digital Pictures

Printed Name: Ernest CURRAN

Signature: Ernest Curran

Badge Number: #2235 Date: 1/12/2022

CAL FIRE

Interagency Report of Incident and Dispatch Action

Incident Number: 21-CASHU 009196
Incident Name: MULE
Event Number: 21010758

Detail Report-All Segment

Incident Location Incident Status: CLS

Location: [redacted] , IGO Apartment:
Lo Cross: Hi Cross:
City: IGO County: SHASTA Map Page: 3672/3672
Loc Com:

Latitude: [redacted] Agency: CAIGO Dispatch Zone: 2
Longitude: Jurisdiction: CAIGO Battalion: 5
Legal: 26_T31N_R06W_M DPA Agency: CAIGO Resp. Area: J18
UTM: 10 541071 4484981 Atom: J18

LEGAL 26_T31N_R06W_M 0

Reporting Party Information

Caller Name: VERIZON WIRELESS [redacted] Caller Phone: [redacted]
Caller Loc: [redacted] Call Source: 911

Incident Type/Response Information

Final Incident Type: FIRE, WILDLAND Initial Incident Type: FIRE, WILDLAND
Dispatch Level: H Response Plan: W501 Response Level: 1

Incident Date/Time Summary

			Personnel ID	CAD Workstation
Incident Call Rec.:	08/25/2021	13:51:23		
Incident Keystroke:	08/25/2021	13:51:24		
Incident Entry:	08/25/2021	13:52:10	DHAYES	SHUCAD02
Incident Dispatch:	08/25/2021	13:54:35	DLAZZARI	SHUCAD04
Incident Closed:	08/28/2021	9:06:12		

Fire Information

Status: CONT Contained: 08/25/2021 23:00:00 Controlled:
Fire Report Person: CURRAN Total Acres Burned : 9.23
Investigation Report Person:

Time Summary:

WAI 13:52:10	DSP 13:54:35	ACK 13:54:40	ENR 13:54:40	ONS 14:03:34	AAC 0:18:46	DSP 11:58:44
ENR 11:58:44	ONS 12:12:03	AAC 12:21:46	DSP 17:32:09	ONS 17:32:09	AAC 18:40:33	DSP 7:31:15
ENR 7:31:15	ONS 7:50:10	CLS 9:06:12				

CAL FIRE

Interagency Report of Incident and Dispatch Action

Incident Number: 21-CASHU 009196
Incident Name: MULE
Event Number: 21010758

Detail Report-All Segment

Unit Status Details

AE58

DSP 13:54:35	DSP 11:58:44	ACK 13:54:40	ENR 11:58:44	ONS 12:12:03	ENR 13:54:40	ONS 14:11:52
AOS 12:21:42	AOR 12:21:46	RTQ 23:00:56	AIQ 00:18:46			

B2

DSP 14:00:15	ENR 14:00:15	ONS 14:12:01	RTQ 20:30:09	AIQ 20:57:30

B2407

DSP 13:54:35	ENR 13:56:05	ONS 14:10:36	RTQ 21:25:40	AIQ 22:04:03

B2420

DSP 14:54:19	ONS 14:54:19	AIQ 22:47:01

CE25

DSP 14:00:45	ENR 14:00:45	ONS 14:27:17	RTQ 20:01:54	AIQ 20:57:30

CE45

DSP 14:03:46	ENR 14:03:46	ONS 14:13:01	RTQ 20:02:07	AIQ 20:57:30

CERDN

DSP 13:55:00	ACK 13:55:11	ENR 14:00:48	AIQ 14:00:50

COP102

DSP 14:14:11	REQ 14:14:11	ASN 14:14:45	ENR 14:20:06	ONS 14:48:24	AIQ 14:55:42

COPNEED

DSP 13:54:35	AIQ 13:56:18

E2588

DSP 13:54:35	REQ 13:54:35	ASN 13:56:00	ENR 14:05:08	ONS 14:29:47	RTQ 20:48:18	AIQ 20:57:30

EWNP2

DSP 14:02:32	ENR 14:02:32	ONS 14:22:13	RTQ 20:01:40	AIQ 20:57:30

HCINT1

DSP 13:54:35	REQ 13:54:35	ASN 13:57:23	ENR 14:33:03	AIQ 16:20:41

HCRFC1

DSP 14:29:30	ENR 14:29:30	ONS 15:31:54	RTQ 21:50:43	AIQ 22:04:01

P2429

DSP 14:54:19	ONS 14:54:19	RTQ 17:32:32	AIQ 17:32:42

P725

DSP 14:05:31	ENR 14:05:31	ONS 16:10:48	AOR 16:23:04

CAL FIRE

Interagency Report of Incident and Dispatch Action

Incident Number: 21-CASHU 009196
Incident Name: MULE
Event Number: 21010758

Detail Report-All Segment

PRVPRV

DSP	ENR	AIQ
13:54:35	14:09:43	14:09:45

T95

DSP	ONS	AIQ
14:03:06	14:03:34	15:04:43

TD2442

DSP	ENR	ONS	AIQ
13:54:35	13:55:02	15:13:28	15:19:34

TDDONDAV

DSP	ENR	ONS	RTQ	AIQ
13:54:35	14:01:13	14:40:53	16:10:43	16:16:56

TRNTRN

DSP	AIQ
13:54:35	14:01:03

U2475

DSP	ENR	ONS	AIQ
14:00:38	14:00:38	14:07:49	15:38:33

VE246

DSP	DSP	DSP	ONS	ENR	ENR	ONS
13:54:35	07:31:15	17:32:09	17:32:09	13:58:44	07:31:15	14:07:51
ONS	AOR	AIQ	AIQ			
07:50:10	18:40:33	21:39:39	09:06:12			

VE533

DSP	ENR	ONS	RTQ	AIQ
13:54:35	13:58:44	14:40:38	21:32:19	22:04:01

VE542

DSP	ENR	ONS	AIQ
13:54:35	13:58:44	14:10:26	21:19:10

VOL50

DSP	AIQ
13:54:35	14:48:27

WT33

DSP	ENR	ONS	AIQ
14:15:14	14:15:14	14:43:38	22:36:02

WT50

DSP	ONS	AIQ
13:54:35	14:40:42	22:57:35

WT547

DSP	ACK	ENR	ONS	AIQ
14:13:07	14:19:33	14:31:30	15:05:23	15:11:34

WT56

DSP	AIQ
13:54:35	14:48:27

WT7

DSP	ACK	ENR	ONS	AIQ
13:56:57	13:57:29	14:05:15	14:34:28	15:19:22

CAL FIRE

Interagency Report of Incident and Dispatch Action

Incident Number: 21-CASHU 009196
Incident Name: MULE
Event Number: 21010758

Detail Report-All Segment

Incident Remarks:

08/25/2021	13:52:10	place. mule mine	DHAYES
08/25/2021	13:55:47	just past diggins ways	DHAYES
08/25/2021	14:08:57	scso is aware	DHAYES
08/25/2021	21:27:24	1 damaged structure	DLAZZARI

CAL FIRE

Interagency Report of Incident and Dispatch Action

Incident Number: 21-CASHU 009196
Incident Name: MULE
Event Number: 21010758

Detail Report-All Segment

REC 08/25/2021 13:51:23 DHAYES SHUCAD02
FDID: 45555

LOCVER 08/25/2021 13:51:26 DHAYES SHUCAD02

ENTRY 08/25/2021 13:52:10 DHAYES SHUCAD02
FDID: 45555

AUTO-SII 08/25/2021 13:52:11 DHAYES SHUCAD02
Event sent to IRW from match in AGC form.

AVRRSUGG 08/25/2021 13:52:37 AWILLIAM SHUCAD03
Primary: B2407 @[BAT]14:38 COPNEED [HEL2]24.13 AE58 +@[ENG]13:34 E2588 +@E[ENG3]33:49 VE571 M[ENG3]54:54 E2494 +@M[ENG3]63:30 E2461 +@[ENG3]73:37 E2486 +@M[ENG3]83:50 HCINT1 +@E[CRW1]118:30 TDDONDAV M[DOZ2]13:34 TD2442 +@[TRP]73:11 PRVPRV [PRV]14:26 TRNTRN [TRN]14:38 VOL50 [VOL]3:45 WT50 [WT1]3:45 WT56 [WT1]14:07

SUGDEF 08/25/2021 13:52:37 AWILLIAM SHUCAD03
1 (A) T:A/A 2 (A) T:A/T 1 (G) T:CRW

AVRRSUGG 08/25/2021 13:52:37 AWILLIAM SHUCAD03
Nearby: AA503 T[A/A]11.39 AA501 +[A/A]11.39 T94 [A/T3]11.39 T95 [A/T3]11.39 COP506 M[HEL2]11.39 AA24(+[A/A]34.26 C906TGU +TE[HEL1]47.95 COP102 +TE[HEL2]75.38 AA120 +TE[A/A]84.61

AVRRSUGG 08/25/2021 13:52:49 AWILLIAM SHUCAD03
Nearby: AA503 T[A/A]11.39 AA501 +[A/A]11.39 T94 [A/T3]11.39 T95 [A/T3]11.39 COP506 M[HEL2]11.39 AA24(+[A/A]34.26 C906TGU +TE[HEL1]47.95 COP102 +TE[HEL2]75.38 AA120 +TE[A/A]84.61

SUGDEF 08/25/2021 13:52:49 AWILLIAM SHUCAD03
1 (A) T:A/A 2 (A) T:A/T 1 (G) T:CRW

AVRRSUGG 08/25/2021 13:52:49 AWILLIAM SHUCAD03
Primary: B2407 @[BAT]14:38 COPNEED [HEL2]24.13 AE58 +@[ENG]13:34 E2588 +@E[ENG3]33:49 VE571 M[ENG3]54:54 E2494 +@M[ENG3]63:30 E2461 +@[ENG3]73:37 E2486 +@M[ENG3]83:50 HCINT1 +@E[CRW1]118:30 TDDONDAV M[DOZ2]13:34 TD2442 +@[TRP]73:11 PRVPRV [PRV]14:26 TRNTRN [TRN]14:38 VOL50 [VOL]3:45 WT50 [WT1]3:45 WT56 [WT1]14:07

SUGDEF 08/25/2021 13:52:51 DLAZZARI SHUCAD04
1 (A) T:A/A 2 (A) T:A/T 1 (G) T:CRW

AVRRSUGG 08/25/2021 13:52:51 DLAZZARI SHUCAD04
Primary: B2407 @[BAT]14:38 COPNEED [HEL2]24.13 AE58 +@[ENG]13:34 E2588 +@E[ENG3]33:49 VE571 M[ENG3]54:54 E2494 +@M[ENG3]63:30 E2461 +@[ENG3]73:37 E2486 +@M[ENG3]83:50 HCINT1 +@E[CRW1]118:30 TDDONDAV M[DOZ2]13:34 TD2442 +@[TRP]73:11 PRVPRV [PRV]14:26 TRNTRN [TRN]14:38 VOL50 [VOL]3:45 WT50 [WT1]3:45 WT56 [WT1]14:07

AVRRSUGG 08/25/2021 13:52:52 DLAZZARI SHUCAD04
Nearby: AA503 T[A/A]11.39 AA501 +[A/A]11.39 T94 [A/T3]11.39 T95 [A/T3]11.39 COP506 M[HEL2]11.39 AA24(+[A/A]34.26 C906TGU +TE[HEL1]47.95 COP102 +TE[HEL2]75.38 AA120 +TE[A/A]84.61

CIN 08/25/2021 13:52:59 AWILLIAM SHUCAD03
--> PLACER

INCCMT 08/25/2021 13:53:01 AWILLIAM SHUCAD03
TAC12

AVRRSUGG 08/25/2021 13:53:21 AWILLIAM SHUCAD03
Nearby: AA503 T[A/A]11.39 AA501 +[A/A]11.39 T94 [A/T3]11.39 T95 [A/T3]11.39 COP506 M[HEL2]11.39 AA24(+[A/A]34.26 C906TGU +TE[HEL1]47.95 COP102 +TE[HEL2]75.38 AA120 +TE[A/A]84.61

SUGDEF 08/25/2021 13:53:21 AWILLIAM SHUCAD03
1 (A) T:A/A 2 (A) T:A/T 1 (G) T:CRW

AVRRSUGG 08/25/2021 13:53:21 AWILLIAM SHUCAD03
Primary: B2407 @[BAT]14:38 COPNEED [HEL2]24.13 VE246 M[ENG2]12:51 AE58 +@[ENG]13:34 VE533 M[ENG3]21:: E2588 +@E[ENG3]33:49 VE542 M[ENG3]46:18 VE571 M[ENG3]54:54 HCINT1 +@E[CRW1]118:30 TDDONDAV M[DOZ2]13 TD2442 +@[TRP]73:11 PRVPRV [PRV]14:26 TRNTRN [TRN]14:38 VOL50 [VOL]3:45 WT50 [WT1]3:45 WT56 [WT1]14:(

AVRRSUGG 08/25/2021 13:53:23 DLAZZARI SHUCAD04
Primary: B2407 @[BAT]14:38 COPNEED [HEL2]24.13 VE246 M[ENG2]12:51 AE58 +@[ENG]13:34 VE533 M[ENG3]21:: E2588 +@E[ENG3]33:49 VE542 M[ENG3]46:18 VE571 M[ENG3]54:54 HCINT1 +@E[CRW1]118:30 TDDONDAV M[DOZ2]13 TD2442 +@[TRP]73:11 PRVPRV [PRV]14:26 TRNTRN [TRN]14:38 VOL50 [VOL]3:45 WT50 [WT1]3:45 WT56 [WT1]14:(

SUGDEF 08/25/2021 13:53:23 DLAZZARI SHUCAD04
1 (A) T:A/A 2 (A) T:A/T 1 (G) T:CRW

Detail Report-All Segment

AVRRSUGG 08/25/2021 13:53:24 DLAZZARI SHUCAD04
Nearby: AA503 T[A/A]11.39 AA501 +[A/A]11.39 T94 [A/T3]11.39 T95 [A/T3]11.39 COP506 M[HEL2]11.39 AA24
+[A/A]34.26 C906TGU +TE[HEL1]47.95 COP102 +TE[HEL2]75.38 AA120 +TE[A/A]84.61

AVRRSUGG 08/25/2021 13:53:38 AWILLIAM SHUCAD03
Nearby: AA503 T[A/A]11.39 AA501 +[A/A]11.39 T94 [A/T3]11.39 T95 [A/T3]11.39 COP506 M[HEL2]11.39 AA24
+[A/A]34.26 C906TGU +TE[HEL1]47.95 COP102 +TE[HEL2]75.38 AA120 +TE[A/A]84.61

SUGDEF 08/25/2021 13:53:38 AWILLIAM SHUCAD03
1 (A) T:A/A 2 (A) T:A/T 1 (G) T:CRW

AVRRSUGG 08/25/2021 13:53:38 AWILLIAM SHUCAD03
Primary: B2407 @[BAT]14:38 COPNEED [HEL2]24.13 VE246 M[ENG2]12:51 AE58 +@[ENG]13:34 VE533 M[ENG3]21:
E2588 +@E[ENG3]33:49 VE542 M[ENG3]46:18 VE571 M[ENG3]54:54 HCINT1 +@E[CRW1]118:30 TDDONDAV M[DOZ2]13
TD2442 +@[TRP]73:11 PRVPRV [PRV]14:26 TRNTRN [TRN]14:38 VOL50 [VOL]3:45 WT50 [WT1]3:45 WT56 [WT1]14:

SUGDEF 08/25/2021 13:54:16 AWILLIAM SHUCAD03
1 (A) T:A/A 2 (A) T:A/T 1 (G) T:CRW

AVRRSUGG 08/25/2021 13:54:16 AWILLIAM SHUCAD03
Nearby: AA503 T[A/A]11.39 AA501 +[A/A]11.39 T94 [A/T3]11.39 T95 [A/T3]11.39 COP506 M[HEL2]11.39 AA24
+[A/A]34.26 C906TGU +TE[HEL1]47.95 COP102 +TE[HEL2]75.38 AA120 +TE[A/A]84.61

AVRRSUGG 08/25/2021 13:54:16 AWILLIAM SHUCAD03
Primary: B2407 @[BAT]14:38 COPNEED [HEL2]24.13 VE246 M[ENG2]12:51 AE58 +@[ENG]13:34 VE533 M[ENG3]21:
E2588 +@E[ENG3]33:49 VE542 M[ENG3]46:18 VE571 M[ENG3]54:54 HCINT1 +@E[CRW1]118:30 TDDONDAV M[DOZ2]13
TD2442 +@[TRP]73:11 PRVPRV [PRV]14:26 TRNTRN [TRN]14:38 VOL50 [VOL]3:45 WT50 [WT1]3:45 WT56 [WT1]14:

PRIUNIT 08/25/2021 13:54:35 DLAZZARI SHUCAD04
B2407

INCN 08/25/2021 13:54:35 DLAZZARI SHUCAD04
Jurisdiction Number $CAIGO000129 Created

INCN 08/25/2021 13:54:35 DLAZZARI SHUCAD04
Site Number $CASHU009196 Created

FREQA 08/25/2021 13:54:35 DLAZZARI SHUCAD04
Command: LOCAL/4 (Tx:159.270 Rx:151.160); Primary Tactical: TAC 11 (Tx:151.445 Rx:151.445); Altern
Tactical: VFIRE22 (Tx:154.2650 Rx:154.2650); Air to Ground: CAL FIRE A2G2 (Tx:159.2625 Rx:159.2625
Air to Air: AIR TAC 23 (Tx:151.3025 Rx:151.3025); Victor: RAAB VICTOR (Tx:118.950 Rx:118.950)

DSP 08/25/2021 13:54:35 DLAZZARI SHUCAD04
B2407 (BAT) COPNEED (HEL2) VE246 (ENG2) AE58 (ENG) VE533 (ENG3) E2588 (ENG3) VE542 (ENG3) HCINT1 (CR
TDDONDAV (DOZ2) TD2442 (TRP) PRVPRV (PRV) TRNTRN (TRN) VOL50 (VOL) WT50 (WT1) WT56 (WT1) JURISDICTI
NUMBER $CAIGO000129

AID_REQ 08/25/2021 13:54:36 DLAZZARI SHUCAD04
Auto-Aid request for HCINT1 (LMU-INT1) sent to LMU

AID_REQ 08/25/2021 13:54:36 DLAZZARI SHUCAD04
Auto-Aid request for E2588 (TGU-E2588) sent to TGU

ACK 08/25/2021 13:54:40 CAMDC RMAE58
AE58

ENR 08/25/2021 13:54:40 CAMDC RMAE58
AE58

CACPT 08/25/2021 13:54:48 AWILLIAM SHUCAD03
[redacted],IGO] ==> []

CHNG 08/25/2021 13:54:48 AWILLIAM SHUCAD03
Location: =L(40.515351,-122.514499) ,IGO ==> [redacted],IGO ;

DSP 08/25/2021 13:55:00 AWILLIAM SHUCAD03
CERDN(ENG)

ENR 08/25/2021 13:55:02 CAMDC RMTD2442
TD2442

ACK 08/25/2021 13:55:11 AWILLIAM SHUCAD03
CERDN, SAWYER COPIES DIVERT FROM OLD INC

CIN 08/25/2021 13:55:36 AWILLIAM SHUCAD03
PLACER --> MULE

APND 08/25/2021 13:55:47 DHAYES SHUCAD02

CAL FIRE

Interagency Report of Incident and Dispatch Action

Incident Number: 21-CASHU 009196
Incident Name: MULE
Event Number: 21010758

Detail Report-All Segment

Location: [redacted] ,IGO ;Caller: VERIZON WIRELESS [redacted] ;Address: [redacted] ;Phone: [redacted] ;Type: FWL;

OOU	08/25/2021	13:56:00	CISWKS	CISWKS
AUTOASN notification for E2588 (TGU-E2588) has been received from CISWKS at TGU.				
ENR	08/25/2021	13:56:05	CAMDC	RMB2407
B2407				
AIQ	08/25/2021	13:56:18	AWILLIAM	SHUCAD03
COPNEED				
PRIUNIT	08/25/2021	13:56:57	AWILLIAM	SHUCAD03
WT7				
DSP	08/25/2021	13:56:57	AWILLIAM	SHUCAD03
WT7 (WT1)				
OOU	08/25/2021	13:57:23	CISWKS	CISWKS
AUTOASN notification for HCINT1 (LMU-INT1) has been received from CISWKS at LMU.				
ACK	08/25/2021	13:57:29	AWILLIAM	SHUCAD03
WT7, SCOM COPIES REQ				
ENR	08/25/2021	13:58:44	AWILLIAM	SHUCAD03
VE542				
ENR	08/25/2021	13:58:44	AWILLIAM	SHUCAD03
VE533				
ENR	08/25/2021	13:58:44	AWILLIAM	SHUCAD03
VE246				
STATUSX	08/25/2021	13:59:39		
Unit VOL50 Status timer expired after 5 MIN				
STATUSX	08/25/2021	13:59:39		
Unit TRNTRN Status timer expired after 5 MIN				
STATUSX	08/25/2021	13:59:39		
Unit TDDONDAV Status timer expired after 5 MIN				
STATUSX	08/25/2021	13:59:39		
Unit AE58 Status timer expired after 5 MIN				
STATUSX	08/25/2021	13:59:39		
Unit PRVPRV Status timer expired after 5 MIN				
STATUSX	08/25/2021	13:59:40		
Unit WT56 Status timer expired after 5 MIN				
STATUSX	08/25/2021	13:59:40		
Unit WT50 Status timer expired after 5 MIN				
STATUSX	08/25/2021	14:00:04		
Unit TD2442 Status timer expired after 5 MIN				
PRIUNIT	08/25/2021	14:00:15	AWILLIAM	SHUCAD03
B2				
DE	08/25/2021	14:00:15	AWILLIAM	SHUCAD03
B2 (BAT)				
PLCREQ	08/25/2021	14:00:23	AWILLIAM	SHUCAD03
Req#:TBA. Temporary ID:SHU58.003. Item:ENG2. Catalog:ENGINE TYPE 2. When Needed:08/25/2021-13:59:50. Agency preference:. Place with:CARICC. FAA:. ROS notified.				
PLCREQ	08/25/2021	14:00:23	AWILLIAM	SHUCAD03
Req#:TBA. Temporary ID:SHU58.002. Item:DOZ2. Catalog:DOZER TYPE 2. When Needed:08/25/2021-13:59:50. Agency preference:. Place with:CARICC. FAA:. ROS notified.				
PLCREQ	08/25/2021	14:00:23	AWILLIAM	SHUCAD03
Req#:TBA. Temporary ID:SHU58.001. Item:ENG2. Catalog:ENGINE TYPE 2. When Needed:08/25/2021-13:59:50. Agency preference:. Place with:CARICC. FAA:. ROS notified.				
PLCREQ	08/25/2021	14:00:23	AWILLIAM	SHUCAD03
Req#:TBA. Temporary ID:SHU58.004. Item:ENG3. Catalog:ENGINE TYPE 3. When Needed:08/25/2021-13:59:50. Agency preference:. Place with:CARICC. FAA:. ROS notified.				
ROSRFR	08/25/2021	14:00:23	AWILLIAM	SHUCAD03
Fill requests sent for: AE58,TD2442,VE246,VE533,VE542,B2407				

Detail Report-All Segment

PLCREQ 08/25/2021 14:00:23 AWILLIAM SHUCAD03
Req#:TBA. Temporary ID:SHU58.006. Item:CHFO. Catalog:CHIEF OFFICER. When Needed:08/25/2021-13:59:50. Agency preference:. Place with:CARICC. FAA:. ROS notified.

PLCREQ 08/25/2021 14:00:23 AWILLIAM SHUCAD03
Req#:TBA. Temporary ID:SHU58.005. Item:ENG3. Catalog:ENGINE TYPE 3. When Needed:08/25/2021-13:59:50. Agency preference:. Place with:CARICC. FAA:. ROS notified.

DE 08/25/2021 14:00:38 AWILLIAM SHUCAD03
U2475(UTL)

PRIUNIT 08/25/2021 14:00:45 AWILLIAM SHUCAD03
CE25

DE 08/25/2021 14:00:45 AWILLIAM SHUCAD03
CE25 (ENG3)

ENR 08/25/2021 14:00:48 AWILLIAM SHUCAD03
CERDN

AIQ 08/25/2021 14:00:50 AWILLIAM SHUCAD03
CERDN

PLCRNUM 08/25/2021 14:00:57 CISWKS CISWKS
Req#:E-1 assigned to temporary ID:SHU58.002.

CAD-CIS 08/25/2021 14:00:57 POLLROSI
Event Identifiers: CAD: SHU, Agc: CAIGO, Event #:21010758, Request #:E-1, CAD temp Id: SHU58.002, Kind/Type needed:, Qual. needed:, Cat descr: , Cat Xlat: NO CAT, Ross Text: , When needed:, Requesti User Agc:, Req. User:, Fill resource Ros ID: , Ros Name: , Res ETD:, Res ETA:, Cell phone:, Remarks:

AIQ 08/25/2021 14:01:03 AWILLIAM SHUCAD03
TRNTRN

STATUSX 08/25/2021 14:01:04
Unit B2407 Status timer expired after 5 MIN

ENR 08/25/2021 14:01:13 AWILLIAM SHUCAD03
TDDONDAV

PLCRNUM 08/25/2021 14:01:22 CISWKS CISWKS
Req#:E-2 assigned to temporary ID:SHU58.003.

CAD-CIS 08/25/2021 14:01:22 POLLROSI
Event Identifiers: CAD: SHU, Agc: CAIGO, Event #:21010758, Request #:E-2, CAD temp Id: SHU58.003, Kind/Type needed:, Qual. needed:, Cat descr: , Cat Xlat: NO CAT, Ross Text: , When needed:, Requesti User Agc:, Req. User:, Fill resource Ros ID: , Ros Name: , Res ETD:, Res ETA:, Cell phone:, Remarks:

PLCRNUM 08/25/2021 14:01:34 CISWKS CISWKS
Req#:E-3 assigned to temporary ID:SHU58.004.

CAD-CIS 08/25/2021 14:01:34 POLLROSI
Event Identifiers: CAD: SHU, Agc: CAIGO, Event #:21010758, Request #:E-3, CAD temp Id: SHU58.004, Kind/Type needed:, Qual. needed:, Cat descr: , Cat Xlat: NO CAT, Ross Text: , When needed:, Requesti User Agc:, Req. User:, Fill resource Ros ID: , Ros Name: , Res ETD:, Res ETA:, Cell phone:, Remarks:

PLCREQ 08/25/2021 14:01:50 AWILLIAM SHUCAD03
Req#:TBA. Temporary ID:SHU58.007. Item:ENG3. Catalog:ENGINE TYPE 3. When Needed:08/25/2021-14:01:26. Agency preference:N. Place with:CATGCC. FAA:. ROS notified.

ROSRRQ 08/25/2021 14:01:50 AWILLIAM SHUCAD03
1 resources request(s) for ENG3 placed with CATGCC

PLCRNUM 08/25/2021 14:01:54 CISWKS CISWKS
Req#:E-4 assigned to temporary ID:SHU58.005.

CAD-CIS 08/25/2021 14:01:54 POLLROSI
Event Identifiers: CAD: SHU, Agc: CAIGO, Event #:21010758, Request #:E-4, CAD temp Id: SHU58.005, Kind/Type needed:, Qual. needed:, Cat descr: , Cat Xlat: NO CAT, Ross Text: , When needed:, Requesti User Agc:, Req. User:, Fill resource Ros ID: , Ros Name: , Res ETD:, Res ETA:, Cell phone:, Remarks:

PLCRNUM 08/25/2021 14:02:11 CISWKS CISWKS
Req#:O-1 assigned to temporary ID:SHU58.006.

CAD-CIS 08/25/2021 14:02:11 POLLROSI
Event Identifiers: CAD: SHU, Agc: CAIGO, Event #:21010758, Request #:O-1, CAD temp Id: SHU58.006, Kind/Type needed:, Qual. needed:, Cat descr: , Cat Xlat: NO CAT, Ross Text: , When needed:, Requesti User Agc:, Req. User:, Fill resource Ros ID: , Ros Name: , Res ETD:, Res ETA:, Cell phone:, Remarks:

Detail Report-All Segment

DE	08/25/2021	14:02:32	AWILLIAM	SHUCAD03
EWNP2 (ENG4)				
PRIUNIT	08/25/2021	14:02:32	AWILLIAM	SHUCAD03
EWNP2				
DSP	08/25/2021	14:03:06	AWILLIAM	SHUCAD03
T95(A/T3)				
RSI	08/25/2021	14:03:27	DHAYES	SHUCAD02
Incident sent to ROS.				
ONS	08/25/2021	14:03:34	DHAYES	SHUCAD02
T95				
PLCRNUM	08/25/2021	14:03:43	CISWKS	CISWKS
Req#:E-5 assigned to temporary ID:SHU58.007.				
CAD-CIS	08/25/2021	14:03:43		POLLROSI
Event Identifiers: CAD: SHU, Agc: CAIGO, Event #:21010758, Request #:E-5, CAD temp Id: SHU58.007, Kind/Type needed:, Qual. needed:, Cat descr: , Cat Xlat: NO CAT, Ross Text: , When needed:, Requesti User Agc:, Req. User:, Fill resource Ros ID: , Ros Name: , Res ETD:, Res ETA:, Cell phone:, Remarks:				
DE	08/25/2021	14:03:46	AWILLIAM	SHUCAD03
CE45 (ENG3)				
PRIUNIT	08/25/2021	14:03:46	AWILLIAM	SHUCAD03
CE45				
STATUSX	08/25/2021	14:03:48		
Unit VE246 Status timer expired after 5 MIN				
STATUSX	08/25/2021	14:03:48		
Unit VE533 Status timer expired after 5 MIN				
STATUSX	08/25/2021	14:03:48		
Unit VE542 Status timer expired after 5 MIN				
PLCREQ	08/25/2021	14:03:54	DHAYES	SHUCAD02
Req#:TBA. Temporary ID:SHU58.008. Item:A/A. Catalog:FIXED WING AIR TACTICAL. When Needed:08/25/2021-14:03:38. Agency preference:N. Place with:CAONCC. FAA:. ROS notified.				
ROSRRQ	08/25/2021	14:03:54	DHAYES	SHUCAD02
1 resources request(s) for A/A placed with CAONCC				
FIRECODE	08/25/2021	14:03:55	CISWKS	CISWKS
ROS Fire code set to PN N8ZA 1522 Is an assist: true Is multi-jurisdictional: false Involves trespassing: false Is reimbursable: true				
CAD-CIS	08/25/2021	14:03:55		POLLROSI
Site Agency:, Incident #:, Incident Name:, Inc Type:, County:, RAR:				
PLCRNUM	08/25/2021	14:04:21	CISWKS	CISWKS
Req#:A-1 assigned to temporary ID:SHU58.008.				
CAD-CIS	08/25/2021	14:04:21		POLLROSI
Event Identifiers: CAD: SHU, Agc: CAIGO, Event #:21010758, Request #:A-1, CAD temp Id: SHU58.008, Kind/Type needed:, Qual. needed:, Cat descr: , Cat Xlat: NO CAT, Ross Text: , When needed:, Requesti User Agc:, Req. User:, Fill resource Ros ID: , Ros Name: , Res ETD:, Res ETA:, Cell phone:, Remarks:				
PLCREQ	08/25/2021	14:04:33	AWILLIAM	SHUCAD03
Req#:TBA. Temporary ID:SHU58.009. Item:ENG3. Catalog:ENGINE TYPE 3. When Needed:08/25/2021-14:04:23. Agency preference:. Place with:CARICC. FAA:. ROS notified.				
PLCREQ	08/25/2021	14:04:33	AWILLIAM	SHUCAD03
Req#:TBA. Temporary ID:SHU58.010. Item:ENG3. Catalog:ENGINE TYPE 3. When Needed:08/25/2021-14:04:23. Agency preference:. Place with:CARICC. FAA:. ROS notified.				
ROSRFR	08/25/2021	14:04:33	AWILLIAM	SHUCAD03
Fill requests sent for: CE25,CE45				
R-ENR	08/25/2021	14:05:08	CISWKS	CISWKS
E2588 TAKE				
OOU	08/25/2021	14:05:08	CISWKS	CISWKS
AUTORES notification for E2588 (TGU-E2588) has been received from TGUCAD03 at TGU.				
ENR	08/25/2021	14:05:15	DLAZZARI	SHUCAD04
WT7				

Detail Report-All Segment

STATUSX 08/25/2021 14:05:19
Unit B2 Status timer expired after 5 MIN

PLCREQ 08/25/2021 14:05:22 DHAYES SHUCAD02
Req#:TBA. Temporary ID:SHU58.011. Item:A/T. Catalog:AIRTANKER TYPE ANY. When Needed:08/25/2021-14:04:51. Agency preference:N. Place with:CARICC. FAA:. ROS notified.

ROSRRQ 08/25/2021 14:05:22 DHAYES SHUCAD02
2 resources request(s) for A/T placed with CARICC

PLCREQ 08/25/2021 14:05:22 DHAYES SHUCAD02
Req#:TBA. Temporary ID:SHU58.012. Item:A/T. Catalog:AIRTANKER TYPE ANY. When Needed:08/25/2021-14:04:51. Agency preference:N. Place with:CARICC. FAA:. ROS notified.

PLCRNUM 08/25/2021 14:05:28 CISWKS CISWKS
Req#:E-6 assigned to temporary ID:SHU58.009.

CAD-CIS 08/25/2021 14:05:28 POLLROSI
Event Identifiers: CAD: SHU, Agc: CAIGO, Event #:21010758, Request #:E-6, CAD temp Id: SHU58.009, Kind/Type needed:, Qual. needed:, Cat descr: , Cat Xlat: NO CAT, Ross Text: , When needed:, Requesti User Agc:, Req. User:, Fill resource Ros ID: , Ros Name: , Res ETD:, Res ETA:, Cell phone:, Remarks:

PRIUNIT 08/25/2021 14:05:31 DLAZZARI SHUCAD04
P725

DE 08/25/2021 14:05:31 DLAZZARI SHUCAD04
P725 (PRV)

STATUSX 08/25/2021 14:05:37
Unit U2475 Status timer expired after 5 MIN

ROSRRQ 08/25/2021 14:05:41 DHAYES SHUCAD02
1 resources request(s) for HEL2 placed with CAONCC

PLCREQ 08/25/2021 14:05:41 DHAYES SHUCAD02
Req#:TBA. Temporary ID:SHU58.013. Item:HEL2. Catalog:HELICOPTER TYPE 2 STANDARD. When Needed:08/25/2021-14:05:29. Agency preference:N. Place with:CAONCC. FAA:. ROS notified.

STATUSX 08/25/2021 14:05:49
Unit CE25 Status timer expired after 5 MIN

PLCRNUM 08/25/2021 14:05:52 CISWKS CISWKS
Req#:E-7 assigned to temporary ID:SHU58.010.

CAD-CIS 08/25/2021 14:05:52 POLLROSI
Event Identifiers: CAD: SHU, Agc: CAIGO, Event #:21010758, Request #:E-7, CAD temp Id: SHU58.010, Kind/Type needed:, Qual. needed:, Cat descr: , Cat Xlat: NO CAT, Ross Text: , When needed:, Requesti User Agc:, Req. User:, Fill resource Ros ID: , Ros Name: , Res ETD:, Res ETA:, Cell phone:, Remarks:

STATUSX 08/25/2021 14:06:13
Unit TDDONDAV Status timer expired after 5 MIN

PLCRNUM 08/25/2021 14:06:21 CISWKS CISWKS
Req#:A-2 assigned to temporary ID:SHU58.011.

CAD-CIS 08/25/2021 14:06:21 POLLROSI
Event Identifiers: CAD: SHU, Agc: CAIGO, Event #:21010758, Request #:A-2, CAD temp Id: SHU58.011, Kind/Type needed:, Qual. needed:, Cat descr: , Cat Xlat: NO CAT, Ross Text: , When needed:, Requesti User Agc:, Req. User:, Fill resource Ros ID: , Ros Name: , Res ETD:, Res ETA:, Cell phone:, Remarks:

PLCRNUM 08/25/2021 14:06:23 CISWKS CISWKS
Req#:A-3 assigned to temporary ID:SHU58.012.

CAD-CIS 08/25/2021 14:06:23 POLLROSI
Event Identifiers: CAD: SHU, Agc: CAIGO, Event #:21010758, Request #:A-3, CAD temp Id: SHU58.012, Kind/Type needed:, Qual. needed:, Cat descr: , Cat Xlat: NO CAT, Ross Text: , When needed:, Requesti User Agc:, Req. User:, Fill resource Ros ID: , Ros Name: , Res ETD:, Res ETA:, Cell phone:, Remarks:

PLCRNUM 08/25/2021 14:06:33 CISWKS CISWKS
Req#:A-4 assigned to temporary ID:SHU58.013.

CAD-CIS 08/25/2021 14:06:33 POLLROSI
Event Identifiers: CAD: SHU, Agc: CAIGO, Event #:21010758, Request #:A-4, CAD temp Id: SHU58.013, Kind/Type needed:, Qual. needed:, Cat descr: , Cat Xlat: NO CAT, Ross Text: , When needed:, Requesti User Agc:, Req. User:, Fill resource Ros ID: , Ros Name: , Res ETD:, Res ETA:, Cell phone:, Remarks:

ROSREQ 08/25/2021 14:06:39 CISWKS CISWKS
Req#: A-2. Item: A/T.New request from ROS.

Detail Report-All Segment

CAD-CIS 08/25/2021 14:06:39 POLLROSI
Event Identifiers: CAD: SHU, Agc: CAIGO, Event #:21010758, Request #:A-2, CAD temp Id: , Kind/Type needed:A/T, Qual. needed:, Cat descr: AIRTANKER TYPE ANY, Cat Xlat: A/T, Ross Text: , When needed:Aug-25-2021/14:05, Requesting User Agc:, Req. User:, Fill resource Ros ID: , Ros Name: , Res ETD:, Res ETA:, Cell phone:, Remarks:.

ROSREQ 08/25/2021 14:06:41 CISWKS CISWKS
Req#: A-3. Item: A/T.New request from ROS.

CAD-CIS 08/25/2021 14:06:41 POLLROSI
Event Identifiers: CAD: SHU, Agc: CAIGO, Event #:21010758, Request #:A-3, CAD temp Id: , Kind/Type needed:A/T, Qual. needed:, Cat descr: AIRTANKER TYPE ANY, Cat Xlat: A/T, Ross Text: , When needed:Aug-25-2021/14:05, Requesting User Agc:, Req. User:, Fill resource Ros ID: , Ros Name: , Res ETD:, Res ETA:, Cell phone:, Remarks:.

PLCREQ 08/25/2021 14:07:29 AWILLIAM SHUCAD03
Req#:TBA. Temporary ID:SHU58.014. Item:CRW. Catalog:CREW, FIRE TYPE ANY. When Needed:08/25/2021-14:07:18. Agency preference:N. Place with:CASIFC. FAA:. ROS notified.

ROSRRQ 08/25/2021 14:07:29 AWILLIAM SHUCAD03
1 resources request(s) for CRW placed with CASIFC

STATUSX 08/25/2021 14:07:32
Unit EWNP2 Status timer expired after 5 MIN

FRPNAME 08/25/2021 14:07:49 AWILLIAM SHUCAD03
<none> --> BOIC, DENNIS,JEO MULE TOWN RD STR THREAT CONT RESPONSE REQ ADD TYPE 2 COPTER

ONS 08/25/2021 14:07:49 AWILLIAM SHUCAD03
U2475, JEO MULE TOWN RD STR THREAT CONT RESPONSE REQ ADD TYPE 2 COPTER

ONS 08/25/2021 14:07:51 AWILLIAM SHUCAD03
VE246

PRIUNITX 08/25/2021 14:07:53 AWILLIAM SHUCAD03
B2407

PRIUNIT 08/25/2021 14:07:53 AWILLIAM SHUCAD03
U2475

TAB 08/25/2021 14:07:58 AWILLIAM SHUCAD03
2 (command: TAB)

PLCRNUM 08/25/2021 14:08:03 CISWKS CISWKS
Req#:C-1 assigned to temporary ID:SHU58.014.

CAD-CIS 08/25/2021 14:08:03 POLLROSI
Event Identifiers: CAD: SHU, Agc: CAIGO, Event #:21010758, Request #:C-1, CAD temp Id: SHU58.014, Kind/Type needed:, Qual. needed:, Cat descr: , Cat Xlat: NO CAT, Ross Text: , When needed:, Requesti User Agc:, Req. User:, Fill resource Ros ID: , Ros Name: , Res ETD:, Res ETA:, Cell phone:, Remarks:

MISC 08/25/2021 14:08:10 AWILLIAM SHUCAD03
U2475,2 ACRES OF GRASS POT ON BOTH SIDES OF PLACER (command: M)

STATUSX 08/25/2021 14:08:45
Unit CE45 Status timer expired after 5 MIN

CHNG 08/25/2021 14:08:57 DHAYES SHUCAD02
Remarks Entered;

ENR 08/25/2021 14:09:43 AWILLIAM SHUCAD03
PRVPRV

AIQ 08/25/2021 14:09:45 AWILLIAM SHUCAD03
PRVPRV

STATUSX 08/25/2021 14:10:10
Unit E2588 Status timer expired after 5 MIN

STATUSX 08/25/2021 14:10:16
Unit WT7 Status timer expired after 5 MIN

ONS 08/25/2021 14:10:26 AWILLIAM SHUCAD03
VE542

STATUSX 08/25/2021 14:10:34
Unit P725 Status timer expired after 5 MIN

ONS 08/25/2021 14:10:36 CAMDC RMB2407
B2407

Detail Report-All Segment

ONS 08/25/2021 14:11:52 AWILLIAM SHUCAD03
AE58

ONS 08/25/2021 14:12:01 AWILLIAM SHUCAD03
B2

ROSCLS 08/25/2021 14:12:41 AWILLIAM SHUCAD03
Place Request Record Closed for CADRequestID SHU58.001

ONS 08/25/2021 14:13:01 AWILLIAM SHUCAD03
CE45

PRIUNIT 08/25/2021 14:13:07 DLAZZARI SHUCAD04
WT547

DSP 08/25/2021 14:13:07 DLAZZARI SHUCAD04
WT547 (WT1)

DSP 08/25/2021 14:14:11 DHAYES SHUCAD02
COP102 (HEL2)

PRIUNIT 08/25/2021 14:14:11 DHAYES SHUCAD02
COP102

AID_REQ 08/25/2021 14:14:11 DHAYES SHUCAD02
Auto-Aid request for COP102 (HUU-C102) sent to HUU

PLCREQ 08/25/2021 14:14:22 AWILLIAM SHUCAD03
Req#:TBA. Temporary ID:SHU58.015. Item:ENG2. Catalog:ENGINE TYPE 2. When Needed:08/25/2021-14:14:18. Agency preference:. Place with:CARICC. FAA:. ROS notified.

ROSRFR 08/25/2021 14:14:22 AWILLIAM SHUCAD03
Fill requests sent for: AE58

OOU 08/25/2021 14:14:45 CISWKS CISWKS
AUTOASN notification for COP102 (HUU-C102) has been received from CISWKS at HUU.

DE 08/25/2021 14:15:14 AWILLIAM SHUCAD03
WT33(WT1)

ROSRRQ 08/25/2021 14:15:52 DHAYES SHUCAD02
1 resources request(s) for HEL2 placed with CARICC

PLCREQ 08/25/2021 14:15:52 DHAYES SHUCAD02
Req#:TBA. Temporary ID:SHU58.016. Item:HEL2. Catalog:HELICOPTER TYPE 2 STANDARD. When Needed:08/25/2021-14:15:31. Agency preference:N. Place with:CARICC. FAA:. ROS notified.

PLCRNUM 08/25/2021 14:16:16 CISWKS CISWKS
Req#:A-5 assigned to temporary ID:SHU58.016.

CAD-CIS 08/25/2021 14:16:16 POLLROSI
Event Identifiers: CAD: SHU, Agc: CAIGO, Event #:21010758, Request #:A-5, CAD temp Id: SHU58.016, Kind/Type needed:, Qual. needed:, Cat descr: , Cat Xlat: NO CAT, Ross Text: , When needed:, Requesti
User Agc:, Req. User:, Fill resource Ros ID: , Ros Name: , Res ETD:, Res ETA:, Cell phone:, Remarks:

ROSREQ 08/25/2021 14:16:49 CISWKS CISWKS
Req#: A-5. Item: HEL2.New request from ROS.

CAD-CIS 08/25/2021 14:16:49 POLLROSI
Event Identifiers: CAD: SHU, Agc: CAIGO, Event #:21010758, Request #:A-5, CAD temp Id: , Kind/Type needed:HEL2, Qual. needed:, Cat descr: HELICOPTER TYPE 2 STANDARD, Cat Xlat: HEL2, Ross Text: , Whe
needed:Aug-25-2021/14:15, Requesting User Agc:, Req. User:, Fill resource Ros ID: , Ros Name: , Res ETD:, Res ETA:, Cell phone:, Remarks:.

INCCMT 08/25/2021 14:17:06 AWILLIAM SHUCAD03
TAC9

ROSRRQ 08/25/2021 14:17:23 AWILLIAM SHUCAD03
1 resources request(s) for ENG placed with CARICC

PLCREQ 08/25/2021 14:17:23 AWILLIAM SHUCAD03
Req#:TBA. Temporary ID:SHU58.017. Item:ENG. Catalog:ENGINE TYPE ANY. When Needed:08/25/2021-14:17:14 Agency preference:N. Place with:CARICC. FAA:. ROS notified.

PLCRNUM 08/25/2021 14:18:00 CISWKS CISWKS
Req#:E-8 assigned to temporary ID:SHU58.017.

CAD-CIS 08/25/2021 14:18:00 POLLROSI

Detail Report-All Segment

Event Identifiers: CAD: SHU, Agc: CAIGO, Event #:21010758, Request #:E-8, CAD temp Id: SHU58.017, Kind/Type needed:, Qual. needed:, Cat descr: , Cat Xlat: NO CAT, Ross Text: , When needed:, Requesti
User Agc:, Req. User:, Fill resource Ros ID: , Ros Name: , Res ETD:, Res ETA:, Cell phone:, Remarks:

STATUSX 08/25/2021 14:18:09
Unit WT547 Status timer expired after 5 MIN

ROSREQ 08/25/2021 14:18:24 CISWKS CISWKS
Req#: E-8. Item: ENG.New request from ROS.

CAD-CIS 08/25/2021 14:18:24 POLLROSI
Event Identifiers: CAD: SHU, Agc: CAIGO, Event #:21010758, Request #:E-8, CAD temp Id: , Kind/Type needed:ENG, Qual. needed:, Cat descr: ENGINE TYPE ANY, Cat Xlat: ENG, Ross Text: , When needed:Aug-2021/14:17, Requesting User Agc:, Req. User:, Fill resource Ros ID: , Ros Name: , Res ETD:, Res ETA: Cell phone:, Remarks:.

PLCRFIL 08/25/2021 14:18:26 CISWKS CISWKS
Req#:E-5. Temporary ID:. Resource ID:{B33066B1-8050-45F9-AAF2-16798409CDA7}. ETD:08/25/2021-14:00:00 ETA:08/25/2021-14:05:00. Cell:. Remarks:.

CAD-CIS 08/25/2021 14:18:27 POLLROSI
Event Identifiers: CAD: SHU, Agc: CAIGO, Event #:21010758, Request #:E-5, CAD temp Id: , Kind/Type needed:, Qual. needed:, Cat descr: ENGINE TYPE 3, Cat Xlat: ENG3, Ross Text: , When needed:Aug-25-2021/14:01, Requesting User Agc:, Req. User:, Fill resource Ros ID: {B33066B1-8050-45F9-AAF2-16798409CDA7}, Ros Name: Engine - T3 - 2588, Res ETD:Aug-25-2021/14:00, Res ETA:Aug-25-2021/14:05, C phone: , Remarks:.

PLCRFIL 08/25/2021 14:18:32 CISWKS CISWKS
Req#:A-3. Temporary ID:. Resource ID:{A09CE573-373B-46EE-95AC-A7FEFEE5664D}. ETD:08/25/2021-14:00:00 ETA:08/25/2021-14:05:00. Cell:. Remarks:.

CAD-CIS 08/25/2021 14:18:33 POLLROSI
Event Identifiers: CAD: SHU, Agc: CAIGO, Event #:21010758, Request #:A-3, CAD temp Id: , Kind/Type needed:, Qual. needed:, Cat descr: AIRTANKER TYPE ANY, Cat Xlat: A/T, Ross Text: , When needed:Aug-2 2021/14:05, Requesting User Agc:, Req. User:, Fill resource Ros ID: {A09CE573-373B-46EE-95AC-A7FEFEE5664D}, Ros Name: Airtanker - T3 (Multi-Engine) - CDF 94, Res ETD:Aug-25-2021/14:00, Res ETA:Aug-25-2021/14:05, Cell phone: , Remarks:.

ROSFILL 08/25/2021 14:18:33 CISWKS CISWKS
Req#: A-3. Item: A/T.ROS reports FILL action.

CAD-CIS 08/25/2021 14:18:33 POLLROSI
Event Identifiers: CAD: SHU, Agc: CAIGO, Event #:21010758, Request #:A-3, CAD temp Id: , Kind/Type needed:, Qual. needed:, Cat descr: AIRTANKER TYPE ANY, Cat Xlat: A/T, Ross Text: , When needed:, Requesting User Agc:, Req. User:, Fill resource Ros ID: {A09CE573-373B-46EE-95AC-A7FEFEE5664D}, Ros Name: Airtanker - T3 (Multi-Engine) - CDF 94, Res ETD:Aug-25-2021/14:00, Res ETA:Aug-25-2021/14:05, Cell phone:N/A, Remarks:.

PLCRFIL 08/25/2021 14:18:33 CISWKS CISWKS
Req#:A-2. Temporary ID:. Resource ID:{FB6557EE-B077-4AA8-9823-E7E523148F9D}. ETD:08/25/2021-14:00:00 ETA:08/25/2021-14:05:00. Cell:. Remarks:.

CAD-CIS 08/25/2021 14:18:33 POLLROSI
Event Identifiers: CAD: SHU, Agc: CAIGO, Event #:21010758, Request #:A-2, CAD temp Id: , Kind/Type needed:, Qual. needed:, Cat descr: AIRTANKER TYPE ANY, Cat Xlat: A/T, Ross Text: , When needed:Aug-2 2021/14:05, Requesting User Agc:, Req. User:, Fill resource Ros ID: {FB6557EE-B077-4AA8-9823-E7E523148F9D}, Ros Name: Airtanker - T3 (Multi-Engine) - CDF 95, Res ETD:Aug-25-2021/14:00, Res ETA:Aug-25-2021/14:05, Cell phone: , Remarks:.

ROSFILL 08/25/2021 14:18:33 CISWKS CISWKS
Req#: A-2. Item: A/T.ROS reports FILL action.

CAD-CIS 08/25/2021 14:18:33 POLLROSI
Event Identifiers: CAD: SHU, Agc: CAIGO, Event #:21010758, Request #:A-2, CAD temp Id: , Kind/Type needed:, Qual. needed:, Cat descr: AIRTANKER TYPE ANY, Cat Xlat: A/T, Ross Text: , When needed:, Requesting User Agc:, Req. User:, Fill resource Ros ID: {FB6557EE-B077-4AA8-9823-E7E523148F9D}, Ros Name: Airtanker - T3 (Multi-Engine) - CDF 95, Res ETD:Aug-25-2021/14:00, Res ETA:Aug-25-2021/14:05, Cell phone:N/A, Remarks:.

ACK 08/25/2021 14:19:33 AWILLIAM SHUCAD03
WT547, E232 ENR TO STAFF

CAL FIRE

Interagency Report of Incident and Dispatch Action

Incident Number: 21-CASHU 009196
Incident Name: MULE
Event Number: 21010758

Detail Report-All Segment

R-ENR 08/25/2021 14:20:06 CISWKS CISWKS
COP102 TAKE

OOU 08/25/2021 14:20:06 CISWKS CISWKS
AUTORES notification for COP102 (HUU-C102) has been received from HUUCAD05 at HUU.

STATUSX 08/25/2021 14:20:16
Unit WT33 Status timer expired after 5 MIN

PRIUNITX 08/25/2021 14:20:29 AWILLIAM SHUCAD03
U2475

PRIUNIT 08/25/2021 14:20:29 AWILLIAM SHUCAD03
B2407

MISC 08/25/2021 14:20:38 AWILLIAM SHUCAD03
B2407,CONT ALL INCOMING CONF RESPONSE FROM WTS (command: M)

MISC 08/25/2021 14:21:05 AWILLIAM SHUCAD03
B2407,SO ONS PLACER RD SHUT DOWN FROM MULE TOWN (command: M)

ONS 08/25/2021 14:22:13 AWILLIAM SHUCAD03
EWNP2

ROSRRQ 08/25/2021 14:22:27 AWILLIAM SHUCAD03
1 resources request(s) for ENG3 placed with CARICC

PLCREQ 08/25/2021 14:22:27 AWILLIAM SHUCAD03
Req#:TBA. Temporary ID:SHU58.018. Item:ENG3. Catalog:ENGINE TYPE 3. When Needed:08/25/2021-14:22:17. Agency preference:N. Place with:CARICC. FAA:. ROS notified.

ROSRFR 08/25/2021 14:23:20 AWILLIAM SHUCAD03
Fill requests sent for: WT33,WT547,WT7

PLCREQ 08/25/2021 14:23:20 AWILLIAM SHUCAD03
Req#:TBA. Temporary ID:SHU58.021. Item:W/T1. Catalog:WATERTENDER TYPE 1 TACTICAL. When Needed:08/25/2021-14:22:44. Agency preference:. Place with:CARICC. FAA:. ROS notified.

PLCREQ 08/25/2021 14:23:20 AWILLIAM SHUCAD03
Req#:TBA. Temporary ID:SHU58.019. Item:W/T1. Catalog:WATERTENDER TYPE 1 TACTICAL. When Needed:08/25/2021-14:22:44. Agency preference:. Place with:CARICC. FAA:. ROS notified.

PLCREQ 08/25/2021 14:23:20 AWILLIAM SHUCAD03
Req#:TBA. Temporary ID:SHU58.020. Item:W/T1. Catalog:WATERTENDER TYPE 1 TACTICAL. When Needed:08/25/2021-14:22:44. Agency preference:. Place with:CARICC. FAA:. ROS notified.

PLCRNUM 08/25/2021 14:23:21 CISWKS CISWKS
Req#:E-9 assigned to temporary ID:SHU58.018.

CAD-CIS 08/25/2021 14:23:22 POLLROSI
Event Identifiers: CAD: SHU, Agc: CAIGO, Event #:21010758, Request #:E-9, CAD temp Id: SHU58.018, Kind/Type needed:, Qual. needed:, Cat descr: , Cat Xlat: NO CAT, Ross Text: , When needed:, Requesti
User Agc:, Req. User:, Fill resource Ros ID: , Ros Name: , Res ETD:, Res ETA:, Cell phone:, Remarks:

STATUSX 08/25/2021 14:23:37
Unit T95 Status timer expired after 20 MIN

PLCRNUM 08/25/2021 14:24:18 CISWKS CISWKS
Req#:E-10 assigned to temporary ID:SHU58.019.

CAD-CIS 08/25/2021 14:24:18 POLLROSI
Event Identifiers: CAD: SHU, Agc: CAIGO, Event #:21010758, Request #:E-10, CAD temp Id: SHU58.019, Kind/Type needed:, Qual. needed:, Cat descr: , Cat Xlat: NO CAT, Ross Text: , When needed:, Requesti
User Agc:, Req. User:, Fill resource Ros ID: , Ros Name: , Res ETD:, Res ETA:, Cell phone:, Remarks:

PLCRNUM 08/25/2021 14:24:34 CISWKS CISWKS
Req#:E-11 assigned to temporary ID:SHU58.020.

CAD-CIS 08/25/2021 14:24:34 POLLROSI
Event Identifiers: CAD: SHU, Agc: CAIGO, Event #:21010758, Request #:E-11, CAD temp Id: SHU58.020, Kind/Type needed:, Qual. needed:, Cat descr: , Cat Xlat: NO CAT, Ross Text: , When needed:, Requesti
User Agc:, Req. User:, Fill resource Ros ID: , Ros Name: , Res ETD:, Res ETA:, Cell phone:, Remarks:

PLCRNUM 08/25/2021 14:24:50 CISWKS CISWKS
Req#:E-12 assigned to temporary ID:SHU58.021.

CAD-CIS 08/25/2021 14:24:50 POLLROSI

Detail Report-All Segment

Event Identifiers: CAD: SHU, Agc: CAIGO, Event #:21010758, Request #:E-12, CAD temp Id: SHU58.021, Kind/Type needed:, Qual. needed:, Cat descr: , Cat Xlat: NO CAT, Ross Text: , When needed:, Requesti
User Agc:, Req. User:, Fill resource Ros ID: , Ros Name: , Res ETD:, Res ETA:, Cell phone:, Remarks:

ROSREQ 08/25/2021 14:24:57 CISWKS CISWKS
Req#: E-9. Item: ENG3.New request from ROS.

CAD-CIS 08/25/2021 14:24:57 POLLROSI
Event Identifiers: CAD: SHU, Agc: CAIGO, Event #:21010758, Request #:E-9, CAD temp Id: , Kind/Type needed:ENG3, Qual. needed:, Cat descr: ENGINE TYPE 3, Cat Xlat: ENG3, Ross Text: □, When needed:Aug-2021/14:22, Requesting User Agc:, Req. User:, Fill resource Ros ID: , Ros Name: , Res ETD:, Res ETA: Cell phone:, Remarks:.

STATUSX 08/25/2021 14:25:07
Unit COP102 Status timer expired after 5 MIN

MISC 08/25/2021 14:25:23 AWILLIAM SHUCAD03
ST9246C ENR FROM HILLTOP DRIVE (command: M)

ONS 08/25/2021 14:27:17 DLAZZARI SHUCAD04
CE25

STATUSX 08/25/2021 14:27:51
Unit U2475 Status timer expired after 20 MIN

STATUSX 08/25/2021 14:27:57
Unit VE246 Status timer expired after 20 MIN

DE 08/25/2021 14:29:30 AWILLIAM SHUCAD03
HCRFC1 (CRWD)

ONS 08/25/2021 14:29:47 AWILLIAM SHUCAD03
E2588

STATUSX 08/25/2021 14:30:29
Unit VE542 Status timer expired after 20 MIN

STATUSX 08/25/2021 14:30:41
Unit B2407 Status timer expired after 20 MIN

ENR 08/25/2021 14:31:30 AWILLIAM SHUCAD03
WT547

STATUSX 08/25/2021 14:31:54
Unit AE58 Status timer expired after 20 MIN

STATUSX 08/25/2021 14:32:00
Unit B2 Status timer expired after 20 MIN

R-ENR 08/25/2021 14:33:03 CISWKS CISWKS
HCINT1 TAKE

OOU 08/25/2021 14:33:04 CISWKS CISWKS
AUTORES notification for HCINT1 (LMU-INT1) has been received from LMUCAD01 at LMU.

STATUSX 08/25/2021 14:33:06
Unit CE45 Status timer expired after 20 MIN

ONS 08/25/2021 14:34:28 DLAZZARI SHUCAD04
WT7

STATUSX 08/25/2021 14:34:31
Unit HCRFC1 Status timer expired after 5 MIN

PLCRFIL 08/25/2021 14:34:51 CISWKS CISWKS
Req#:E-9. Temporary ID:. Resource ID:{7C65D380-3A07-4163-9DBE-470379030ECD}. ETD:08/25/2021-14:00:00 ETA:08/25/2021-14:20:00. Cell:. Remarks:.

CAD-CIS 08/25/2021 14:34:51 POLLROSI
Event Identifiers: CAD: SHU, Agc: CAIGO, Event #:21010758, Request #:E-9, CAD temp Id: , Kind/Type needed:, Qual. needed:, Cat descr: ENGINE TYPE 3, Cat Xlat: ENG3, Ross Text: , When needed:Aug-25-2021/14:22, Requesting User Agc:, Req. User:, Fill resource Ros ID: {7C65D380-3A07-4163-9DBE-470379030ECD}, Ros Name: Engine - T3 - 2, Res ETD:Aug-25-2021/14:00, Res ETA:Aug-25-2021/14:20, Cell phone: , Remarks:.

ROSFILL 08/25/2021 14:34:51 CISWKS CISWKS
Req#: E-9. Item: ENG3.ROS reports FILL action.

CAD-CIS 08/25/2021 14:34:51 POLLROSI

CAL FIRE

Interagency Report of Incident and Dispatch Action

Incident Number: 21-CASHU 009196
Incident Name: MULE
Event Number: 21010758

Detail Report-All Segment

Event Identifiers: CAD: SHU, Agc: CAIGO, Event #:21010758, Request #:E-9, CAD temp Id: , Kind/Type needed:, Qual. needed:, Cat descr: ENGINE TYPE 3, Cat Xlat: ENG3, Ross Text: , When needed:, Requesting User Agc:, Req. User:, Fill resource Ros ID: {7C65D380-3A07-4163-9DBE-470379030ECD}, Ros Name: Engine - T3 - 2, Res ETD:Aug-25-2021/14:00, Res ETA:Aug-25-2021/14:20, Cell phone:N/A, Remarks

STATUSX	08/25/2021	14:36:32		
Unit WT547 Status timer expired after 5 MIN				
STATUSX	08/25/2021	14:38:10		
Unit HCINT1 Status timer expired after 5 MIN				
ONS	08/25/2021	14:40:38	DLAZZARI	SHUCAD04
VE533				
ONS	08/25/2021	14:40:42	DLAZZARI	SHUCAD04
WT50				
ONS	08/25/2021	14:40:53	DLAZZARI	SHUCAD04
TDDONDAV				
STATUSX	08/25/2021	14:42:12		
Unit EWNP2 Status timer expired after 20 MIN				
ONS	08/25/2021	14:43:38	CMCNAMA	SHUCAD01
WT33				
STATUSX	08/25/2021	14:47:22		
Unit CE25 Status timer expired after 20 MIN				
ONS	08/25/2021	14:48:24	AWILLIAM	SHUCAD03
COP102				
AIQ	08/25/2021	14:48:27	AWILLIAM	SHUCAD03
VOL50 WT56				
MISC	08/25/2021	14:48:48	AWILLIAM	SHUCAD03
T94 T95 REL LOADED ETE 5 MINS (command: M)				
MISC	08/25/2021	14:49:28	AWILLIAM	SHUCAD03
B2407,NEG NEED FOR WT32 HYDRANTS IN AREA (command: M)				
STATUSX	08/25/2021	14:49:47		
Unit E2588 Status timer expired after 20 MIN				
PLCRFIL	08/25/2021	14:50:18	CISWKS	CISWKS
Req#:A-1. Temporary ID:. Resource ID:{0672C912-0202-4534-BD43-0F122072FB71}. ETD:08/25/2021-14:30:00 ETA:08/25/2021-14:35:00. Cell:. Remarks:.				
CAD-CIS	08/25/2021	14:50:18		POLLROSI
Event Identifiers: CAD: SHU, Agc: CAIGO, Event #:21010758, Request #:A-1, CAD temp Id: , Kind/Type needed:, Qual. needed:, Cat descr: FIXED WING AIR TACTICAL, Cat Xlat: A/A, Ross Text: , When needed:Aug-25-2021/14:04, Requesting User Agc:, Req. User:, Fill resource Ros ID: {0672C912-0202-4534-BD43-0F122072FB71}, Ros Name: Fixed Wing - Air Tactical - 77HS, Res ETD:Aug-25-2021/14:30, Res ETA:Aug-25-2021/14:35, Cell phone: , Remarks:.				
CAD-CIS	08/25/2021	14:50:18		POLLROSI
Event Identifiers: CAD: SHU, Agc: CAIGO, Event #:21010758, Request #:A-4, CAD temp Id: , Kind/Type needed:, Qual. needed:, Cat descr: HELICOPTER TYPE 2 STANDARD, Cat Xlat: HEL2, Ross Text: , When needed:Aug-25-2021/14:05, Requesting User Agc:, Req. User:, Fill resource Ros ID: {CDBB2F17-D829-4217-8FEC-80C87A1841D1}, Ros Name: Helicopter - T2 Standard - CDF 102, Res ETD:Aug-25-2021/14:10, Res ETA:Aug-25-2021/14:50, Cell phone: , Remarks:.				
PLCRFIL	08/25/2021	14:50:18	CISWKS	CISWKS
Req#:A-4. Temporary ID:. Resource ID:{CDBB2F17-D829-4217-8FEC-80C87A1841D1}. ETD:08/25/2021-14:10:00 ETA:08/25/2021-14:50:00. Cell:. Remarks:.				
DOS	08/25/2021	14:54:19	AWILLIAM	SHUCAD03
B2420 (BAT) P2429 (PRV1)				
PRIUNIT	08/25/2021	14:54:19	AWILLIAM	SHUCAD03
B2420				
STATUSX	08/25/2021	14:54:33		
Unit WT7 Status timer expired after 20 MIN				
MISC	08/25/2021	14:55:22	AWILLIAM	SHUCAD03
AA C102 REL TO KNEELAND 1539 (command: M)				

Detail Report-All Segment

ROSCLS 08/25/2021 14:55:42 DHAYES SHUCAD02
Place Request Record Closed for RequestNumber A-4

AIQ 08/25/2021 14:55:42 DHAYES SHUCAD02
COP102

TAB 08/25/2021 14:58:57 AWILLIAM SHUCAD03
15 (command: TAB)

STATUSX 08/25/2021 15:00:42
Unit WT50 Status timer expired after 20 MIN

STATUSX 08/25/2021 15:00:42
Unit VE533 Status timer expired after 20 MIN

STATUSX 08/25/2021 15:00:55
Unit TDDONDAV Status timer expired after 20 MIN

STATUSX 08/25/2021 15:03:38
Unit WT33 Status timer expired after 20 MIN

CAD-CIS 08/25/2021 15:04:34 POLLROSI
Event Identifiers: CAD: SHU, Agc: CAIGO, Event #:21010758, Request #:C-1, CAD temp Id: , Kind/Type needed:, Qual. needed:, Cat descr: CREW, FIRE TYPE ANY, Cat Xlat: CRW, Ross Text: , When needed:Aug-2 2021/14:07, Requesting User Agc:, Req. User:, Fill resource Ros ID: {5348989C-925D-4686-9F88-0F14050B2343}, Ros Name: Fire - Crew, T1 - Intermountain 1, Res ETD:Aug-25-2021/14:15, Res ETA:Aug-2 2021/17:15, Cell phone: , Remarks:.

PLCRFIL 08/25/2021 15:04:34 CISWKS CISWKS
Req#:C-1. Temporary ID:. Resource ID:{5348989C-925D-4686-9F88-0F14050B2343}. ETD:08/25/2021-14:15:00 ETA:08/25/2021-17:15:00. Cell:. Remarks:.

ROSCLS 08/25/2021 15:04:43 DHAYES SHUCAD02
Place Request Record Closed for RequestNumber A-2

AIQ 08/25/2021 15:04:43 DHAYES SHUCAD02
T95

ONS 08/25/2021 15:05:23 CMCNAMA SHUCAD01
WT547

AIQ 08/25/2021 15:11:34 AWILLIAM SHUCAD03
WT547

ROSCLS 08/25/2021 15:11:35 AWILLIAM SHUCAD03
Place Request Record Closed for RequestNumber E-11

ONS 08/25/2021 15:13:28 AWILLIAM SHUCAD03
TD2442

STATUSX 08/25/2021 15:14:21
Unit B2420 Status timer expired after 20 MIN

STATUSX 08/25/2021 15:14:21
Unit P2429 Status timer expired after 20 MIN

AIQ 08/25/2021 15:19:22 DLAZZARI SHUCAD04
WT7

ROSCLS 08/25/2021 15:19:22 DLAZZARI SHUCAD04
Place Request Record Closed for RequestNumber E-12

AIQ 08/25/2021 15:19:34 DLAZZARI SHUCAD04
TD2442

ROSCLS 08/25/2021 15:19:34 DLAZZARI SHUCAD04
Place Request Record Closed for RequestNumber E-1

ROSCLS 08/25/2021 15:30:55 DHAYES SHUCAD02
Place Request Record Closed for RequestNumber A-5

ROSCLS 08/25/2021 15:30:55 DHAYES SHUCAD02
Place Request Record Closed for RequestNumber A-3

ROSCLS 08/25/2021 15:30:55 DHAYES SHUCAD02
Place Request Record Closed for RequestNumber A-1

ONS 08/25/2021 15:31:54 AWILLIAM SHUCAD03
HCRFC1

AIQ 08/25/2021 15:38:33 AWILLIAM SHUCAD03
U2475

Detail Report-All Segment

STATUSX 08/25/2021 15:51:56
Unit HCRFC1 Status timer expired after 20 MIN

TAB 08/25/2021 15:57:38 AWILLIAM SHUCAD03
9.23 (command: TAB)

MISC 08/25/2021 15:58:31 AWILLIAM SHUCAD03
B2407,3 HOURS COM TIME SOME LONGER (command: M)

RTQ 08/25/2021 16:10:43 AWILLIAM SHUCAD03
TDDONDAV

ONS 08/25/2021 16:10:48 AWILLIAM SHUCAD03
P725

STATUSX 08/25/2021 16:11:44
Unit TDDONDAV Status timer expired after 1 MIN

AIQ 08/25/2021 16:16:56 DHAYES SHUCAD02
TDDONDAV

AIQ 08/25/2021 16:20:41 DHAYES SHUCAD02
HCINT1

ROSCLS 08/25/2021 16:20:41 DHAYES SHUCAD02
Place Request Record Closed for RequestNumber C-1

MISC 08/25/2021 16:22:51 AWILLIAM SHUCAD03
P725,CLR ENR KESWICK (command: M)

PREMP 08/25/2021 16:23:04 AWILLIAM SHUCAD03
P725

AVRRSUGG 08/25/2021 16:43:41 AWILLIAM SHUCAD03
Primary: AA240 +[A/A]11.39 T94 [A/T3]11.39 T95 [A/T3]11.39 COP506 M[HEL2]11.39 E2583 +@E[ENG3]32:54 AE73 +@M[ENG2]46:18 VE571 M[ENG3]54:54 VE532 +MA[ENG3]56:19 E2494 +@M[ENG3]63:30 E2486 +@M[ENG3]84:5 TD2444 +@M[TRP]12:02 TDDONDAV M[DOZ2]13:34 PRVPRV [PRV]14:26 TRNTRN [TRN]14:38 VOL50 [VOL]3:45 WT56 [WT1]14:07 WT42 A[WT1]17:22

SUGDEF 08/25/2021 16:43:41 AWILLIAM SHUCAD03
2 (G) T:CRW

AVRRSUGG 08/25/2021 16:43:42 AWILLIAM SHUCAD03
Nearby: C906TGU +TE[HEL1]47.95 COP205 +TE[HEL2]47.95 COP102 +TE[HEL2]75.39 AA120 +T?E[A/A]84.61 T96 TE[A/T3]84.61 AA110 +TE[A/A]102.60 COP101 +TE[HEL2]102.60 E2495 +@M[ENG3]13:34 HCINT1 +@T?E[CRW1]14:

PLCREQ 08/25/2021 16:44:46 AWILLIAM SHUCAD03
Req#:TBA. Temporary ID:SHU58.022. Item:CRW1. Catalog:CREW, FIRE TYPE 1. When Needed:08/25/2021-16:43:43. Agency preference:. Place with:CARICC. FAA:. ROS notified.

ROSRFR 08/25/2021 16:44:46 AWILLIAM SHUCAD03
Fill requests sent for: HCRFC1

ROSDEFER 08/25/2021 16:44:52 AWILLIAM SHUCAD03
Closed Received Request for Req # E-9, Event Number CAIGO21010758; Action: DEFER; By AWILLIAM at wks SHUCAD03;

ROSDEFER 08/25/2021 16:44:52 AWILLIAM SHUCAD03
Closed Received Request for Req # E-8, Event Number CAIGO21010758; Action: DEFER; By AWILLIAM at wks SHUCAD03;

ROSDEFER 08/25/2021 16:44:52 AWILLIAM SHUCAD03
Closed Received Request for Req # A-2, Event Number CAIGO21010758; Action: DEFER; By AWILLIAM at wks SHUCAD03;

ROSDEFER 08/25/2021 16:44:52 AWILLIAM SHUCAD03
Closed Received Request for Req # A-5, Event Number CAIGO21010758; Action: DEFER; By AWILLIAM at wks SHUCAD03;

ROSDEFER 08/25/2021 16:44:52 AWILLIAM SHUCAD03
Closed Received Request for Req # A-3, Event Number CAIGO21010758; Action: DEFER; By AWILLIAM at wks SHUCAD03;

PLCRNUM 08/25/2021 16:45:30 CISWKS CISWKS
Req#:C-2 assigned to temporary ID:SHU58.022.

CAD-CIS 08/25/2021 16:45:30 POLLROSI

CAL FIRE

Interagency Report of Incident and Dispatch Action

Incident Number: 21-CASHU 009196
Incident Name: MULE
Event Number: 21010758

Detail Report-All Segment

Event Identifiers: CAD: SHU, Agc: CAIGO, Event #:21010758, Request #:C-2, CAD temp Id: SHU58.022, Kind/Type needed:, Qual. needed:, Cat descr: , Cat Xlat: NO CAT, Ross Text: , When needed:, Requesti User Agc:, Req. User:, Fill resource Ros ID: , Ros Name: , Res ETD:, Res ETA:, Cell phone:, Remarks:

RTQ	08/25/2021	17:32:32	DHAYES	SHUCAD02
P2429				
AIQ	08/25/2021	17:32:42	DHAYES	SHUCAD02
P2429				
FRPNAME	08/25/2021	18:36:48	AWILLIAM	SHUCAD03
BOIC, DENNIS --> CURRAN				
CACPT	08/25/2021	18:37:19	AWILLIAM	SHUCAD03
[redacted] IGO]				
CHNG	08/25/2021	18:37:19	AWILLIAM	SHUCAD03
Location: [redacted] ==> =L [redacted] ,IGO ;				
MISC	08/25/2021	18:38:27	AWILLIAM	SHUCAD03
P2429 400K IN DMG // ELECTRICAL (command: M)				
RTQ	08/25/2021	20:01:40	DLAZZARI	SHUCAD04
EWNP2				
RTQ	08/25/2021	20:01:54	DLAZZARI	SHUCAD04
CE25				
RTQ	08/25/2021	20:02:07	DLAZZARI	SHUCAD04
CE45				
STATUSX	08/25/2021	20:02:39		
Unit EWNP2 Status timer expired after 1 MIN				
STATUSX	08/25/2021	20:02:57		
Unit CE25 Status timer expired after 1 MIN				
STATUSX	08/25/2021	20:03:09		
Unit CE45 Status timer expired after 1 MIN				
RTQ	08/25/2021	20:30:09	DLAZZARI	SHUCAD04
B2				
STATUSX	08/25/2021	20:31:15		
Unit B2 Status timer expired after 1 MIN				
RTQ	08/25/2021	20:48:18	DLAZZARI	SHUCAD04
E2588				
STATUSX	08/25/2021	20:49:20		
Unit E2588 Status timer expired after 1 MIN				
AIQ	08/25/2021	20:57:30	TPHELPS	SHUCAD02
B2 CE25 CE45 E2588 EWNP2				
ROSCLS	08/25/2021	20:57:30	TPHELPS	SHUCAD02
Place Request Record Closed for RequestNumber E-6				
ROSCLS	08/25/2021	20:57:30	TPHELPS	SHUCAD02
Place Request Record Closed for RequestNumber E-7				
ROSCLS	08/25/2021	20:57:30	TPHELPS	SHUCAD02
Place Request Record Closed for RequestNumber E-5				
ROSCLS	08/25/2021	21:19:10	TPHELPS	SHUCAD02
Place Request Record Closed for RequestNumber E-4				
AIQ	08/25/2021	21:19:10	TPHELPS	SHUCAD02
VE542				
PRIUNIT	08/25/2021	21:25:33	DLAZZARI	SHUCAD04
AE58				
PRIUNITX	08/25/2021	21:25:33	DLAZZARI	SHUCAD04
B2407				
RTQ	08/25/2021	21:25:40	DLAZZARI	SHUCAD04
B2407				
STATUSX	08/25/2021	21:26:43		
Unit B2407 Status timer expired after 1 MIN				
CHNG	08/25/2021	21:27:24	DLAZZARI	SHUCAD04
Remarks Entered:				

Detail Report-All Segment

RTQ 08/25/2021 21:32:19 DLAZZARI SHUCAD04
VE533

STATUSX 08/25/2021 21:33:23
Unit VE533 Status timer expired after 1 MIN

PLCREQ 08/25/2021 21:36:10 DLAZZARI SHUCAD04
Req#:TBA. Temporary ID:SHU58.023. Item:W/T1. Catalog:WATERTENDER TYPE 1 TACTICAL. When Needed:08/25/2021-21:35:01. Agency preference:. Place with:CARICC. FAA:. ROS notified.

ROSRFR 08/25/2021 21:36:10 DLAZZARI SHUCAD04
Fill requests sent for: WT50

CAD-CIS 08/25/2021 21:36:35 POLLROSI
Event Identifiers: CAD: SHU, Agc: CAIGO, Event #:21010758, Request #:E-13, CAD temp Id: SHU58.023, Kind/Type needed:, Qual. needed:, Cat descr: , Cat Xlat: NO CAT, Ross Text: , When needed:, Requesti User Agc:, Req. User:, Fill resource Ros ID: , Ros Name: , Res ETD:, Res ETA:, Cell phone:, Remarks:

PLCRNUM 08/25/2021 21:36:35 CISWKS CISWKS
Req#:E-13 assigned to temporary ID:SHU58.023.

ROSCLS 08/25/2021 21:39:39 TPHELPS SHUCAD02
Place Request Record Closed for RequestNumber E-2

AIQ 08/25/2021 21:39:39 TPHELPS SHUCAD02
VE246

RTQ 08/25/2021 21:50:43 TPHELPS SHUCAD02
HCRFC1

STATUSX 08/25/2021 21:51:46
Unit HCRFC1 Status timer expired after 1 MIN

AIQ 08/25/2021 22:04:01 TPHELPS SHUCAD02
HCRFC1 VE533

ROSCLS 08/25/2021 22:04:01 TPHELPS SHUCAD02
Place Request Record Closed for RequestNumber C-2

ROSCLS 08/25/2021 22:04:01 TPHELPS SHUCAD02
Place Request Record Closed for RequestNumber E-3

AIQ 08/25/2021 22:04:03 TPHELPS SHUCAD02
B2407

ROSCLS 08/25/2021 22:04:03 TPHELPS SHUCAD02
Place Request Record Closed for RequestNumber O-1

AIQ 08/25/2021 22:36:02 TPHELPS SHUCAD02
WT33

ROSCLS 08/25/2021 22:36:02 TPHELPS SHUCAD02
Place Request Record Closed for RequestNumber E-10

AIQ 08/25/2021 22:47:01 TPHELPS SHUCAD02
B2420

AIQ 08/25/2021 22:57:35 TPHELPS SHUCAD02
WT50

ROSCLS 08/25/2021 22:57:35 TPHELPS SHUCAD02
Place Request Record Closed for RequestNumber E-13

RTQ 08/25/2021 23:00:56 TPHELPS SHUCAD02
AE58

CHNG 08/25/2021 23:01:31 TPHELPS SHUCAD02
ContainDate: <empty> ==> 08/25/2021-23:00 Fire Status:<empty> ==> CONT;

STATUSX 08/25/2021 23:01:58
Unit AE58 Status timer expired after 1 MIN

AIQ 08/26/2021 0:18:46 TPHELPS SHUCAD02
AE58

AAC 08/26/2021 0:18:46 TPHELPS SHUCAD02

ROSCLS 08/26/2021 6:08:34 TPHELPS SHUCAD02
Place Request Record Closed for RequestNumber E-8

ROSCLS 08/26/2021 6:08:35 TPHELPS SHUCAD02
Place Request Record Closed for RequestNumber E-9

Detail Report-All Segment

ROSCLS 08/26/2021 6:08:40 TPHELPS SHUCAD02
Place Request Record Closed for CADRequestID SHU58.015

INCCMT 08/26/2021 6:44:17 AWILLIAM SHUCAD03
.

DE 08/26/2021 11:58:44 DLAZZARI SHUCAD01
AE58 (ENG)

PRIUNIT 08/26/2021 11:58:44 DLAZZARI SHUCAD01
AE58

STATUSX 08/26/2021 12:03:45
Unit AE58 Status timer expired after 5 MIN

ONS 08/26/2021 12:12:03 CAMDC RMAE58
AE58

AVRRSUGG 08/26/2021 12:15:12 JBATES SHUCAD04
Primary: B2419 @[BAT]14:29 AA240 +[A/A]11.49 T94 [A/T3]11.49 T95 [A/T3]11.49 COP506 M[HEL2]11.49 VE2
M[ENG2]12:47 EWNP2 [ENG4]18:24 VE532 +M[ENG3]21:20 AE73 +@[ENG2]21:52 VE533 M[ENG3]32:48 E2588
+@E[ENG3]33:12 HC2449 +[CRW2]19:47 HCRFC1 [CRWD]19:47 TD2444 +@[TRP]13:52 TDARCHIB [DOZ2]21:20 PRVPR
[PRV]14:45 TRNTRN [TRN]14:56 VOL50 [VOL]3:41 WT50 [WT1]3:41 WT56 [WT1]14:25

AVRRSUGG 08/26/2021 12:15:12 JBATES SHUCAD04
Nearby: C906TGU +TE[HEL1]47.97 COP102 +TE[HEL2]75.30 AA120 +TE[A/A]84.51 T96 TE[A/T3]84.51 AA110
+TE[A/A]102.52 COP101 +TE[HEL2]102.52 HC24A +@M[CRWG]10:56 E2496 @MT[ENG3]14:56 E2457 +@M[ENG3]16:15

AOS 08/26/2021 12:21:42 JBATES SHUCAD04
AE58

AUTPRE 08/26/2021 12:21:46 JBATES SHUCAD04
AE58

DOS 08/26/2021 17:32:09 AWILLIAM SHUCAD03
VE246 (ENG2)

PRIUNIT 08/26/2021 17:32:09 AWILLIAM SHUCAD03
VE246

STATUSX 08/26/2021 17:52:12
Unit VE246 Status timer expired after 20 MIN

PREMP 08/26/2021 18:40:33 AWILLIAM SHUCAD03
VE246,TWO SMOKES FOUND RET 57

GEN 08/26/2021 18:40:33 AWILLIAM SHUCAD03
TWO SMOKES FOUND RET 57

DE 08/28/2021 7:31:15 AWILLIAM SHUCAD03
VE246 (ENG2) ,ENR TO CHKL

PRIUNIT 08/28/2021 7:31:15 AWILLIAM SHUCAD03
VE246

STATUSX 08/28/2021 7:36:17
Unit VE246 Status timer expired after 5 MIN

ONS 08/28/2021 7:50:10 AWILLIAM SHUCAD03
VE246

STATUSX 08/28/2021 8:10:13
Unit VE246 Status timer expired after 20 MIN

AIQ 08/28/2021 9:06:12 JBATES SHUCAD04
VE246

CLOSE 08/28/2021 9:06:12 JBATES SHUCAD04

Pacific Gas and Electric Company

Utility Standard: TD-8123S
Publication Date: 01/31/2020 Rev: 0

Electric System (T/S/D) Patrol, Inspection, and Maintenance Program

SUMMARY

This standard describes Pacific Gas and Electric Company’s requirements, methodology, and record management for the Electric Transmission, Substation, and Distribution System patrol, inspection, preventative maintenance, and corrective maintenance generated by patrols and inspection activities.

The patrol, inspection, and maintenance programs for each of the three asset families employ a risk-informed strategy to identify and mitigate asset and component risks to public safety and system reliability. The requirements of this standard are intended to meet or exceed the compliance requirements of the California Public Utilities Commission’s (CPUC) General Orders 95, 128, 165, and 174, North American Electric Reliability Corporation (NERC), the Western Electricity Coordinating Council (WECC), Federal Energy Regulatory Commission (FERC), as well as satisfy the inspection and maintenance requirements imposed by the California Independent System Operator (CAISO) through the Transmission Owner Agreement.

TARGET AUDIENCE

PG&E personnel in Electric Operations who are responsible for the planning, implementation, execution, and quality control of electric system inspections and maintenance programs applicable to Transmission, Distribution, and Substation facilities.

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2	Patrol, Inspection, and Maintenance Program Requirements	2
3	Patrol, Inspection, and Maintenance Program Methodology	3
4	Inspection Records	5

REQUIREMENTS

1 Roles and Responsibilities

1.1 Electric Standards and Work Methods is responsible for:

- Initiating, developing, or modifying this standard.
- Authorizing updates to the exhibits or attachments to this standard.
- Supporting continuous improvement of the patrol, inspection, and maintenance programs.

1.2 Asset Strategy is responsible for:

- Developing the patrol, inspection, and maintenance program strategy for each asset family, using a risk-informed approach.
- Identifying and validating the asset base and cycle for patrols, inspections, and maintenance by asset family.
- Providing guidance on corrective maintenance work prioritization.
- Supporting continuous improvement of the patrol, inspection, and maintenance programs.

1.3 System Inspection is responsible for:

- Establishing performance measures and schedules for reporting the progress of patrols and inspections.
- Directing the patrols and inspections of electric facilities in each asset family in a safe, efficient, and timely manner.
- Training the personnel who are accountable for complying with this standard.
- Ensuring that personnel who perform the patrol and inspection activities are qualified to perform assigned tasks in a safe, efficient, and timely manner.
- Developing a Quality Control (QC) process in coordination with Asset Strategy to verify patrol and inspection program accuracy, completeness, and record keeping.
- Supporting continuous improvement of the patrol, inspection, and maintenance programs.

2 Patrol, Inspection, and Maintenance Program Requirements

2.1 Patrol, inspections, and maintenance programs must be conducted in accordance with applicable Company and regulatory guidance, including:

- TD-8123M, Electric System Inspections & Preventative Maintenance Program
- CPUC General Order 95
- CPUC General Order 128
- CPUC General Order 165
- CPUC General Order 174
- CAISO

2.1 (continued)

- FERC
- NERC
- WECC

3 Patrol, Inspection, and Maintenance Program Methodology

3.1 Patrol, inspection, and maintenance program guidance and requirements must be based on asset health and condition, manufacturer’s recommendations (if available), and the experience of PG&E employees, consistent with utility guidance documents contained in TD-8123M.

3.2 A Failure Mode and Effects Analysis (FMEA) must be developed and maintained for each asset family to identify component-level single points of failure that could lead to a risk to public or employee safety.

1. An FMEA may include, but is not limited to, the following elements:
   - Identification of asset
   - Description of failure
   - Potential cause of failure
   - Inspection/detection methods
   - Occurrence (O) probability (ranked 1–10)
   - Severity (S) rating (ranked 1–10)
   - Detection (D) rating (ranked 1–10)
   - Risk prioritization number ($O \times S \times D$)
   - Recommended mitigation

3.3 Each line of business must create an inspection checklist to assess field asset status that is based on the results of the FMEA:

1. The inspection checklist must include all known potential failure modes (to the extent possible) and the respective severity of the field condition, as defined within the FMEA.
2. The inspection checklist may require the collection of additional asset data used to inform future inspection and preventative maintenance plans.

3.4 Component-level failures or non-conformances identified through the patrols and inspection process must be identified for corrective maintenance and prioritized in accordance with the magnitude of risk to public safety, system reliability, and regulatory guidance.

1. If a corrective maintenance condition is discovered during a patrol or inspection, the priority level of the issue must be identified consistent with Table 1, "Risk Prioritization" below.

Table 1. Risk Prioritization

Priority	Description	Required Action
Level 1	The condition is of immediate risk of high potential impact to safety or reliability.	Immediate response and continued action until the condition no longer presents a potential hazard ("make safe") – either by fully repairing or by temporarily repairing and reclassifying to a lower priority.
Level 2	The condition is of moderate potential impact to safety or reliability.	Corrective action is required within 12 months from the date the condition is identified (or within 6 months, if tag is within HFTD Tier 3). Take corrective action within specified time period (either by fully repairing or by temporarily repairing and reclassifying to Level 3 priority). Time period for corrective action may be determined at the time of identification by a qualified company representative. Data-driven, risk informed processes and analyses shall be established to ultimately classify Level 2 work and associated due dates based on field nominations and other available asset information.
Level 3	The condition is of low potential impact to safety or reliability.	Address corrective actions for facilities within 60 months from the date the condition is identified. **EXCEPTION** – Potential violations specified in GO 95 Appendix J or subsequently approved through Commission processes, including, but not limited to, a Tier 2 Advice Letter under GO 96B, that can be completed at a future time as opportunity-based maintenance. Where an exception has been granted, repair of a potential violation must be completed the next time the company's crew is at the structure to perform tasks at the same or higher work level, i.e., the public, communications, or electric level. The condition's record in the auditable maintenance program must indicate the relevant exception and the date of the corrective action.

4 Inspection Records

4.1 Collect and store patrol, inspections, and maintenance records in an approved system.

4.2 Maintain test reports and inspection records in accordance with Corporation Standard GOV-7101S, “Enterprise Records and Information Management Standard.”

END of Requirements

DEFINITIONS

The following definitions have been adapted from CPUC General Order 165:

Asset Family

“Patrol” or "Patrol inspection" shall be defined as a simple visual inspection, of applicable utility equipment and structures that is designed to identify obvious structural problems and hazards. Patrol inspections may be carried out in the course of other company business.

"Detailed inspection” **or “Inspection”** shall be defined as one where individual pieces of equipment and structures are carefully examined, visually and through use of routine diagnostic test, as appropriate, and (if practical and if useful information can be so gathered) opened, and the condition of each rated and recorded.

"Intrusive inspection” or “Testing” is defined as one involving movement of soil, taking samples for analysis, and/or using more sophisticated diagnostic tools beyond visual inspections or instrument reading.

"Corrective Action" or “Corrective Maintenance” shall be defined as activities that address a deficiency found during an asset inspection. For purposes of this standard, these activities are limited to those identified during an inspection.

IMPLEMENTATION RESPONSIBILITIES

The Director in charge of Standards and Work Methods will communicate the publication of this standard to Electric Asset Strategy and Electric System Inspections, as well as, issue a general notification regarding the publication of this standard.

GOVERNING DOCUMENT

GOV-1038S, “Inspection and Corrective Maintenance Governance”

COMPLIANCE REQUIREMENT / REGULATORY COMMITMENT

This utility standard is consistent with the pertinent requirements of the following regulatory orders and codes:

- CPUC General Order 95
- CPUC General Order 128
- CPUC General Order 165
- CPUC General Order 174
- CAISO Transmission Control Agreement, Appendix C, "ISO Maintenance Standards"
- NERC Standard MOD-025-2, "Verification and Data Reporting of Generator Real and Reactive Power Capability and Synchronous Condenser Reactive Power Capability"
- NERC Standard PRC-005-6, "Protection System, Automatic Reclosing and Sudden Pressure Relaying Maintenance"
- WECC Standard FAC-501-WECC-2, "Transmission Maintenance"

REFERENCE DOCUMENTS

Developmental References:

NA

Supplemental References:

NA

APPENDICES

NA

ATTACHMENTS

NA

DOCUMENT RECISION

NA

DOCUMENT APPROVER

[redacted], Director, Standards and Work Methods

DOCUMENT OWNER

[redacted] Manager, Engineering Center of Excellence

DOCUMENT CONTACT

Transmission
[redacted] entral Inspect Review Team (CIRT) Subject Matter Expert
, Senior Electric Standards Engineer

Distribution
[redacted], Senior Manager, Compliance Support
Supervisor, Distribution Automation Engineering Standards

Substation
[redacted] Expert Work Methods & Procedures Specialist
Senior Electric Standards Engineer

REVISION NOTES

Where?	What Changed?
NA	This is a new document

PG&E's 2019 Corrective Tag Execution Approach

SUMMARY

This bulletin summarizes PG&E’s modification in execution approach for Electric Corrective (EC) / Line Corrective (LC) tags in the field as communicated to the California Public Utilities Commission (CPUC) on August 20, 2019, via Wildfire Safety Inspection Program (WSIP) Compliance Plan and Interim Controls.

Based on a significant increase in volume of the tags from the 2019 Wildfire Safety Inspection Program (WSIP), it is anticipated that some number of open notifications will not be resolved prior to the assigned SAP due date. The modified execution approach will follow a risk-informed, circuit-based (Transmission and Distribution only) approach for all open Priority E and F tags, to which Work and Resource Management group will specify the execution prioritization independent of the associated compliance date.

PG&E will monitor and perform a safety re-assessment on an annual basis before the initiation of Fire Season (as determined by the California Department of Forestry and Fire Protection (CALFIRE)) each year for the tags meeting the following conditions:

- Exceed their compliance date
- Remain open
- Contain time-dependent asset deterioration based on “Facility, Damage, Action” (FDA) SAP work management code of the corrective tag
- On line temporarily de-energized (Transmission Line only)

Level of Use: Informational Use

AFFECTED DOCUMENT

Wildfire Safety Inspection Program (WSIP) Compliance Plan and Interim Controls, August 20, 2019

TARGET AUDIENCE

Utility employees, electric inspection, maintenance, and construction employees, electric estimators

WHAT YOU NEED TO KNOW

1 PG&E’s 2019 WSIP Scope and Resulting Tags

1.1 PG&E’s 2019 WSIP involved inspecting approximately 695,000 distribution structures, 50,000 transmission structures and 200 substations that are in high fire risk areas.

1.2 As a result of the inspections, PG&E identified approximately 277,000 corrective actions, which have resulted in the creation of EC or LC tags (see Table 1 on Page 2).

PG&E's 2019 Corrective Tag Execution Approach

1.2 (continued)

NOTE

EC is a nomenclature used for distribution, while LC is used for Transmission and Substation.

Table 1. EC and LC Tags

Asset Type	Tag Type	Approximate Tag Numbers
Electric Distribution	EC	177,000
Electric Transmission	LC	97,000
Electric Substation	LC	3,000

2 Specific Priority Tags (Priority H)

2.1 PG&E is forecasting that a significant number of moderate and low priority tags (Priority E and F tags, respectively) will not be completed in accordance with the timelines established in PG&E’s programs to meet General Order requirements.

2.2 To address identified Priority E tags efficiently, while also mitigating the most risk system-wide, PG&E conducted a holistic desktop review of these identified tags for Distribution and Transmission systems. The review identified the tags that can be most efficiently and safely executed through the following project types:

1. Inclusion into existing capital projects
2. Cluster of tags into new system hardening projects
3. Proactive removal of idle or unnecessary electric facilities

2.3 Together, these identified tags are designated as specific priority (Priority H) – to distinguish from tags requiring individual execution.

3 Issue Prioritization Approach

3.1 PG&E utilized the following risk-informed prioritization approach to address the highest risk issues on PG&E’s facilities (see Table 2 below).

Table 2. Tag Prioritization

Tag’s Priority	Tag Type	Response/Timeframe
A	Emergency	Requires immediate response or stand-by
B	Urgent	Address within 3 months of the identification date
E & F	Risk-based	Prioritize based on wildfire risk circuit prioritization
H	Distribution only	Execute as a part of system hardening / proactive removal projects

3.2 Aligned with a risk-informed, circuit-based (Transmission and Distribution only) approach for Priority E and F tags, Work and Resource Management group follows the tag execution prioritization independent of compliance date for individual tags. In some cases, execution timing may shift based on unforeseen events such as inclement weather and accessibility or based on resource efficiency.

4 Tags Subject to Safety Re-Assessment

4.1 PG&E will monitor field conditions and perform safety re-assessments on an annual basis before the initiation of Fire Season (as determined by CAL FIRE) for the tags meeting the following conditions ("tags subject to safety re-assessment"):

- Exceed their compliance date
- Remain open
- Contain time-dependent asset deterioration based on "Facility, Damage, Action" (FDA) SAP work management code of the corrective tag
- On line temporarily de-energized (for Transmission only)

4.2 For the tags subject to safety re-assessment, a trained and qualified inspector will re-assess the field condition of the identified open corrective action (including Priority H tags) and create a written record in SAP.

1. The written record will document if there is an urgency in the field condition that would require escalation of the tag to Priority A or B.

4.3 For further information, see *VI. Safety Reassessment Process and Interim Controls*, of the Wildfire Safety Inspection Program (WSIP) Compliance Plan and Interim Controls.

DOCUMENT APPROVER

[redacted], Senior Director, Asset Strategy, Electric Operations

DOCUMENT CONTACT

[redacted] Senior Manager, Distribution Asset Strategy; Electric Operations

[redacted] Manager, Transmission Asset Strategy, Electric Operations

[redacted] Manager, Substation Asset Strategy, Electric Operations

INCLUSION PLAN

This bulletin will be incorporated into Electric Inspection and Maintenance guidance documents in the future.

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[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

<u>Question No. 7:</u>

EC Tag 119117143 was identified as priority E on 6/6/2020 with a required date of 6/6/2021. "Utility Standard TD-8123C" states that corrective actions for Level 2 tags within High Fire Threat District (HFTD) Tier 3 areas are required to be done within six months. "PG&E Electric Distribution Preventive Maintenance Manual" (EDPM, TD2305M) also states that corrective actions for Priority E tags within HFTD Tier 3 areas are required to be done within six months.

a. Explain why the required date for EC Tag 119117143 was listed as 6/6/2021 instead of 12/6/2020.
b. Explain why the re-assessment was not performed before 12/6/2020.
c. Explain why the two policies identified above state that corrective actions should be performed in Tier 3 areas within six months, but the re- assessment indicated that the suggested due date be moved to one year rather than six months.

Response to Question No. 7:

a. Discrepancies between SAP (System Applications and Products) ID#s likely contributed to the incorrect logic in SAP, which failed to force Electric Corrective (EC) Tag 119117143 to have a six month required due date. SAP uses the High Fire Threat District (HFTD) indicator to determine the applicable due date. In this instance, this tag was for a tree-connect that was likely unmapped and/or the asset data did not show as a Tier 3 asset when it was originally created in 2020. As a result, SAP did not have the correct data to apply a HFTD Tier 3 due date.

b. The Field Safety Review (FSR) process includes tags that are not in the current work year plan, and that have gone or will go past due. The due date in the system for EC Tag 119117143 was June 6, 2021, and therefore was not within the scope of FSR for 2020. It was reassessed on April 19, 2021, before June 6, 2021, per PG&E procedures.

c. Please refer to our response to Question 7a. The suggested due date was moved to one year rather than six months because SAP did not have the correct data to apply a HFTD Tier 3 due date.

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

Question No. 9:

"Utility Bulletin: TD-8999B-001" appears to apply only to tags that were generated as part of the 2019 Wildfire Safety Inspection Program (WSIP). However, it appears to be applied to tags that are not part of the 2019 WSIP, such as EC Tag 119117143. Explain this discrepancy.

Response to Question No. 9:

The prioritization method initiated in 2019, as per Utility Bulletin: TD-8999B-001, was intended to be a moving forward approach on tag execution, as reflected in the 2017 General Rate Case (GRC), and was not solely for 2019 WSIP tags. We are in the process of updating Utility Bulletin: TD-8999B-001.

Question No. 10:

One contractor appears to have SAFE-1503WBT expired on April 4, 2021, meaning it was expired at the time of the incident, per ISN Training Records, provided as "Attachment 08_Q16_ISN Training Records_Rokstad_CONF.pdf" to "Data Request SED-001-Mule Fire" (DR-1), Question 16. Did this contractor work on the work associated with EC Tag 119117143, and if so, was SAFE- 1503WBT training required for this contractor?

Response to Question No. 10:

During the SIF-Potential incident review, we identified several classifications that were not profiled for SAFE-1503WBT. The on-site inspector, whose SAFE-1503WBT training was expired, had a classification known as "CONT – Crew Inspector" and this specific classification was missed in the original profiling. This has since been corrected as of March 23, 2022.

While formal training was not completed, the contents of TD-1464S are covered annually with all inspectors and are regularly reinforced through local leader safety meetings and field observations.

[redacted]

[redacted]

[redacted]

[redacted]

<u>Question No. 12:</u>

Public Resources Code section 4427 states in pertinent part, "[d]uring any time of the year when burning permits are required in an area pursuant to this article, no person shall use or operate any motor, engine, boiler, stationary equipment, welding equipment, cutting torches, tarpots, or grinding devices from which a spark, fire, or flame may originate, which is located on or near any forest-covered land, brush-covered land, or grass-covered land, without doing both of the following: (a) First clearing away all flammable material, including snags, from the area around such operation for a distance of 10 feet. (b) Maintain one serviceable round point shovel with an overall length of not less than forty-six (46) inches and one backpack pump water-type fire extinguisher fully equipped and ready for use at the immediate area during the operation."

a. Assuming the response to DR-1, Question 10 is correct, "Attachment 03_Q05_Utility Standard – TD-1464S_CONF" appears inconsistent with Public Resources Code section 4427. Explain this discrepancy with regard to the 10-foot clearance requirement. Has this discrepancy been corrected in the new editions?

b. Explain why a backpack pump water-type fire extinguisher was not at the immediate area of the incident location when the repair work was performed on August 25, 2021.

<u>Response to Question No. 12:</u>

a. There is no discrepancy between Public Resources Code section 4427 (PRC-4427) and Standard TD-1464S. In the case of the Mule Fire, no actions were taken that violated the requirements in PRC-4427, i.e., that no person shall use or operate any motor, engine, boiler, stationary equipment, welding equipment, cutting torches, tarpots, or grinding devices from which a spark, fire, or flame may originate. The Mule Fire investigation concluded a set of handheld wire cutters resulted in the spark leading to the ignition of the fire. A handheld set of wire cutters does not apply to the above noted PRC-4427.

b. Per our response to DR-1, Question 13a., all vehicles that were parked on Placer Road near the entrance to the access path and equipment had the required water backpack tools per TD-1464S step 2.3.2. The Foreman and other workers made a conscious decision to place a dry chemical fire extinguisher at the location of the subject pole where the ignition(s) occurred. These workers, who are not fireman, were not aware that a dry chemical fire extinguisher is less effective that a backpack pump water-type fire extinguisher for vegetation fires. TD-1464S and SAFE-1503WBT have been amended to train workers that water contained within the backpack pump is more effective than dry chemical fire extinguishers at suppressing vegetation fires.

Question No. 13:

"Attachment 01_Q06_TD-2360P-01_CONF," provided in response to DR-1, Question 6, requires in Section 3.1 that when working on or near energized conductors, employees must use insulating protective equipment to cover all the energized conductors, grounded conductors, or guy wires in the work area that could come in to contact with them. Explain if the work practices performed by the contractor, who did not insulate the neutral conductor while cutting the energized conductor, violated this standard and if so, why the standard was not followed.

Response to Question No. 13:

The PG&E contractors are not required to follow PG&E Utility Procedure TD-2360P-01. The PG&E contractors are required to follow the National Electrical and Communications Association (NECA) Red Book safety rules. A vast library of work procedures is based off Title 8 Electric Safety Rules, as is the NECA Red Book. It is more operationally feasible to have contractors follow a common set of rules within the International Brotherhood of Electrical Workers (IBEW) 1245, versus attempting to train them on our procedures that differ from other California based energy companies.

Please refer to Sections 2.05 Working Distance and 2.05 (c) of *"Attachment 05_Q13_NECA Red Book.pdf"* for more information regarding these NECA Red Book safety rules.

[redacted]

[redacted]

[redacted]

[redacted]

Question No. 15:

PG&E's response to Question No. 10 in DR-1 states that the ground was not wetted or cleared down to mineral soil because at the time of the incident the standard did not require it while performing overhead energized work. "Attachment 03_Q05_Utility Standard - TD-1464S_CONF", published on 7/20/2021 states in Attachment 1, Wildfire Mitigation Matrix, that when the fire index rating is R4, all requirements for R1, R2, and R3 rating must be met including a requirement to clear a 10-foot radius down to mineral soil when performing work that can produce a spark. Explain why this standard was not followed when the work was performed at the incident location.

Response to Question No. 15:

Wetting and clearing down the ground to mineral soil was not required by our standards when the work was performed at the Incident Location. The work that was performed at the time of the incident was at the pole top during R4 conditions. Section 2.7 of "Attachment 03_Q05_Utility Standard - TD-1464S_CONF," which was in effect at the time of the incident, and submitted in response to Question No. 05 in DR-1, states under these conditions only a Working Fire Watch was required.

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

<u>Question No. 19:</u>

The water buffalo parked 292 feet down a road with its 200 feet of hose not extended appears to be in violation of "Attachment 03_Q05_Utility Standard - TD- 1464S_CONF" Section 5.2. Section 5.2 requires at least 120 gallons of water at the jobsite when the fire index rating is R4. Is PG&E of the opinion that the water buffalo was "at the jobsite" where it was parked approximately 292 feet from the incident location?

<u>Response to Question No. 19:</u>

We are of the opinion that the water buffalo was at the jobsite in accordance with the standard as it existed at the time.

On January 6, 2022, PG&E amended TD-1464S, Section 5.4, to state, "the trailer-mounted water tank, water tender, or other water-delivery/fire-suppression must be in the immediate area where the spark, fire, or flame may occur – with a hose long enough to reach the entire jobsite, at all times, while performing normal work duties."

[redacted]

[redacted]

[redacted]

[redacted]

Question No. 18:

EC Tag 119117143 was identified as priority E with a required date of 6/6/2021. The work was performed on 8/25/2021.

a. Explain why the work on this tag was performed late.

b. Provide the procedure that shows how tags are assigned. Explain how the Priority E tag designation in EC Tag 119117143 relates to the requirements and deadlines for completion of corrective actions mandated in GO95 Section 18.1.a.

c. The tag had comments indicating there was a field safety reassessment that proposed a later due date for the tag. Explain why the initial due date was not updated to reflect the proposed later due date.

d. Provide the field safety reassessment procedure and any procedures for non-late exempted work, if available.

Response to Question No. 18:

a. Tier 3 Electric Corrective (EC) Notifications that are not completed by the original replacement date go through a Field Safety Review (FSR) and are given a new recommended date of replacement as part of that assessment. An FSR was performed on April 19, 2021, and the Field Inspector recommended a new replacement date of 4/20/2022 based on the condition of the Tree Attachment. Note that the FSR process is annual, and an important part of how we manage the overall tag volume. If an FSR identifies that a pole has a more immediate need of replacement, then it is updated to a Priority B based on the condition of the facility.

b. We classify field findings by levels of corrective Priority "A," "B," "E," "F" as defined in the Electric Distribution Preventive Maintenance Manual (EDPM, TD-2305M) and provided as part of the 2020 WMP. Work is then prioritized and placed in a project reporting year(s) based upon the budget. The Priority E designation on EC Tag 119117143 specifies the date for completion of the corrective actions mandated in GO95 Section 18.1.a. The Risk Prioritization table in *"Attachment 14_Q18_Utility Standard TD-8123C_CONF.pdf"* identifies Notification 119117143 as a Level 2 – "Corrective action and a date within 12 months from the date the condition is identified (or within 6 months, if tag is within HFTD Tier 3)." An FSR was performed on 4/19/2021 and given a condition of 003-21 - Condition needs to be addressed within next 12 months. The E Priority Notification to install a CL Pole (Clearance Pole) was created as a result of a strained secondary tree attachment to a dead/dying tree. Installation of the Clearance Pole and tree attachment removed from tree was completed from 8/24/21 – 8/26/2021. Completed EC Form documentation was then uploaded to SAP and Notification was Closed in SAP.

c. Initial due dates (Otherwise Known As: Required End Date) are not updated in SAP unless a Notification notes a Scope Changed. The original “Required End Date” remains the same. The only updates made are at the notification level in long-text updates.

d. *“Attachment 15_Q18_Bulletin TD-8999B-001_CONF.pdf”* describes how our Asset Strategy organization determines which EC Notifications require an FSR. We currently do not have a formal procedure document describing the CIRT / FSR processes.

Please note that *“Attachment 14_Q18_Utility Standard TD-8123C_CONF.pdf”* and *“Attachment 15_Q18_Bulletin TD-8999B-001_CONF.pdf”* contains confidential information.

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]				
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

PG&E

Notification #: 117528582

Priority: E **Sub Priority:**

PM Order #:

Date Identified: 03/21/2019

Date Required: 12/31/2019

Identified in Field By:	[redacted]	Plat:	Q2604
Street Address:		Circuit:	10340-1101, GIRVAN
		SSD:	10779
City:	REDDING	Equipment #:	
Cross Street:		Pin #:	____________________
Division:	North Valley	Pole #:	____________________
Latitude:	[redacted]	OIS #:	____________________
Longitude:		SAP Func. Location:	ED.87-Q260400000.STRU.POLE
Description:	VEG TAG - [redacted],	SAP Equipment:	103146889
		Accessibility Tier:	

Item Details

	Facility Type	Damage	Cause	Action
Item 1	TREE Tree/Vine	ZOTH Other		REMV Remove

☒ Completed ☐ Canceled

☐ Pole Test Sheet

User Status

Conductor/Operating Information		Field Identification		Field Condition (Exposure)		Field Condition (Accessibility)		Other	
Status	Description	Status	Description	Status	Description	Status	Description	Status	Description

Job Estimates

Issued To

Est. Total Hrs. to Complete: 0

Est. Electric Crew Size: 00

WTC: 564, HNA_Non-RoutineTreeTrimming

Main Work Center: REDDING, Redding

Gas Crew Size: 00

MAT:

Funded Repair Date:

Reviewed By: ______________________________

Date of Field Review: ______________________________

Completed or Canceled in Field By (LAN ID): [redacted]

If No LAN ID Last Name, First Name: ______________________________

Complete or Cancel Date: 12/18/2019

Actual Hours: __________

*Check One: PG&E Crew ☐ T-Man ☐ Contractor ☐

*Check One: Completed ☒ Canceled ☐ Found Completed Upon Arrival ☐

Signature: ______________________________

I verify that all maintenance on this notification is addressed (completed, canceled, or found completed upon arrival)

***Public Safety & Regulatory Reviewer: If notification was canceled, check one (required):**

☐ **CONV:** Converted to another Notif-Type

☐ **DUMM:** "Dummy" for order only

☐ **DUPL:** Duplicate EC for Same Location

☐ **EROR:** Created in Error (Desk Cancelation)

☐ **NCOA:** All Found Completed/Resolved on Arrival

☐ **NOCR:** No Compelling/Regulator Condition Exist

☐ **PROG:** Completed under another Program

List of Tasks on Notification

Completed

Completed By: [redacted]

Completion Date: 12/18/2019

Notification #: **117528582**

Priority: **E** **Sub Priority:**

PM Order #:

Date Identified: **03/21/2019** **Date Required:** **12/31/2019**

Field Comments:

Comments

07/01/2019 09:57:26 PST [redacted]
"This EC Veg Notification has been batch created using data from the
2019 WSIP Pronto ED OH Inspection Starcloud file extracted on
6/20/2019. Data from that file was used to create this notification,
attach photos, and attach the WSIP ED OH Inspection PDF.
Approved per [redacted].
07/03/2019 19:31:20 PST [redacted]
Non exempt cutouts and arrestors associated with pole, need vegetation
at base of pole cleared. Non exempt cutouts and arrestors
associated with pole. Need to remove vegetation 10 radius from base of
pole . Refer to the Inspection PDF attached for more
details.
07/07/2019 21:24:58 PST [redacted]
07052019: Requested by [redacted]. Use controlling orders (CO)
8107778 for R1 Bay Area;
8107779 for R2 Central Coast;
8107780 for R3 North; and
8107781 for R4 Central Valley.
Contact [redacted] for questions. WO0000004335310
08/02/2019 15:01:31 PST [redacted]
08022019: Requested by [redacted]: WO0000004358805
Additional attachments were added to this notification because some
photo attachments contained incorrect links to the D-WSIP Inspection
photos. Please use the most recent attachment.
01/22/2020 15:52:35 PST [redacted]
COMPLETED BY [redacted] 12/18/2019. POLE IS IN COMPLIANCE WITH PRC 4292 AND IS
POLE #164871 ON GIRVAN 1101, WR#CHNY0000052W

FDA		New	Priority	Comp
[redacted]				

EMERGENCY ONLY Check Cause (Required)	
Dig In	
Equipment Failed	
Fire	
Lightning	
Third Party	
Water Damage	
Unknown	

All FDA's identified in field
Priority = Default Priority for B, E, G, & F-Regulatory FDA's
Comp = Check if completing FDA in Field

Electric Overhead Tag

Notification #: 116496018

PM Order #: 43679080

Priority: A **Sub Priority:**

Date Identified: 02/16/2019

Identified in Field By:	[redacted]	Plat:	Q2604
Street Address:		Circuit:	10340-1101, GIRVAN
		SSD:	346147
City:	REDDING LOC 435	Equipment #:	
Cross Street:		Pin #:	____________________
Division:	North Valley	Pole #:	____________________
Latitude:	[redacted]	OIS #:	____________________
Longitude:		SAP Func. Location:	ED.87-Q260400000.STRU.POLE
Description:	COND_BROK_REPA - 1N/O [redacted]	SAP Equipment:	101493984
		Accessibility Tier:	

Item Details

	Facility Type	Damage	Cause	Action
Item 1	COND Conductor	BROK Broken/Damaged	TRFL Tree Fell	REPA Repair

☒ Completed ☐ Canceled

☐ Pole Test Sheet

User Status

Conductor/Operating Information		Field Identification		Field Condition (Exposure)		Field Condition (Accessibility)		Other	
Status	Description	Status	Description	Status	Description	Status	Description	Status	Description

Job Estimates — Issued To

Est. Total Hrs. to Complete:	0	Est. Electric Crew Size:	03	WTC:	596, IFA - OH Exp Major EventsSTANDING
Main Work Center:	REDDING, Redding	Gas Crew Size:	00	MAT:	IFA, E Major Emgcy OH
Funded Repair Date:					

Reviewed By: ________________________ Date of Field Review: ________________________

Completed or Canceled in Field By (LAN ID): [redacted] If No LAN ID Last Name, First Name: ________________________

Complete or Cancel Date: 02/17/2019 Actual Hours: ___________ *Check One: PG&E Crew ☒ T-Man ☐ Contractor ☐

*Check One: Completed ☒ Canceled ☐ Found Completed Upon Arrival ☐

Signature: ____

I verify that all maintenance on this notification is addressed (completed, canceled, or found completed upon arrival)

***Public Safety & Regulatory Reviewer: If notification was canceled, check one (required):**

☐ **CONV:** Converted to another Notif-Type ☐ **DUMM:** "Dummy" for order only ☐ **DUPL:** Duplicate EC for Same Location

☐ **EROR:** Created in Error (Desk Cancelation) ☐ **NCOA:** All Found Completed/Resolved on Arrival ☐ **NOCR:** No Compelling/Regulator Condition Exist

☐ **PROG:** Completed under another Program

List of Tasks on Notification

Completed Completed By: [redacted] Completion Date: 02/17/2019

Electric Overhead Tag

Notification #: **116496018**

PM Order #: **43679080**

Priority: A **Sub Priority:**

Date Identified: 02/16/2019

Field Comments:

Comments

02/16/2019 08:54:10 PST INSPECTCPIC (INSPECTCPIC)

- Location : 9

Wire down. Repair

02/19/2019 14:43:58 PST [redacted]

STORM PACKET 435 - COMP BY [redacted] 2-17-19. CREW REPAIRED BROKEN CONDUTOR.

FDA		New	Priority	Comp
Anchor				
Broken/Damaged	Repair		E	
	Replace		E	
Corroded	Repair		E	
	Replace		E	
Missing	Install		F	
Soil/Eroded/Graded	Adjust		F	
	Replace		F	
Animal Mitigation				
Broken/Damaged	Replace		E	
Mitigation Missing	Install		E	
Bird Protection				
Bird Protection	Replace		E	
CB Pole				
Broken/Damaged	Replace		F	
Burnt	Replace		E	
Decayed/Rotten	Replace		F	
Booster/Regulator				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
Excessive Operation	Overhaul		E	
Leaks/Seeps/Weeps	Clean		E	
	Repair		E	
	Replace		E	
Capacitor				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
	Replace		E	
Leaks/Seeps/Weeps	Clean		B	
	Repair		E	
	Replace		E	
Climbing Space				
Obstructed	Adjust		F	

FDA		New	Priority	Comp
Conductor				
Broken/Damaged	Repair		E	X
	Replace		E	
Burnt	Repair		E	
	Replace		E	
Clearance Impaired	Adjust		E	
	Install CL Pole		E	
	RayChem		E	
Floater	Repair		E	
Idle Facilities	Remove		E	
Improper Connection	Adjust		E	
Overloaded	Test		E	
Sag/Clearance	Adjust		E	
	Replace		E	
	Install Spreader Bracket		E	
Connector				
Burnt	Replace		E	
Corroded	Repair		E	
	Replace		E	
Incorrectly Installed	Replace		E	
Temp Differential	Replace		E	
Crossarm				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
	Replace		E	
Decayed/Rotten	Repair		E	
	Replace		E	
Cutout				
Broken/Damaged	Repair		E	
	Replace		E	
Clearance Impaired	Adjust		E	
Flashed	Repair		E	
	Replace		E	
Decorative Streetlight				
Broken/Damaged	Replace		E	
Missing	Install		E	
Fault Indicators				
Broken/Damaged	Replace		E	
Ground				
Broken/Damaged	Repair		B	
	Replace		B	
Exposed	Repair		F	
Missing	Install		E	
Guy				
Broken/Damaged	Repair		E	
	Replace		E	
Clearance Impaired	Adjust		F	
Corroded	Repair		E	
	Replace		E	
Loose	Adjust		F	
Missing	Install		F	
Overgrown	Trim		E	
Strain/Abrasion	Adjust		F	
	Remove		F	
Guy Marker				
Missing	Install		F	
	Replace		F	

FDA		New	Priority	Comp
Hardware/Framing				
Bird Prot Required	Install		E	
Birdcage	Install		E	
Broken/Damaged	Repair		E	
	Replace		E	
Loose	Adjust		E	
Missing	Install		E	
High Sign				
Missing	Install		F	
Insulator				
Broken/Damaged	Replace		E	
Flashed	Replace		E	
Primary Squatter	Repair		E	
	Replace		E	
Secondary Squatter	Repair		E	
	Replace		E	
Jumper				
Burnt	Replace		E	
Clearance Impaired	Adjust		E	
	Replace		E	
LAPP Insulator				
Broken/Damaged	Replace		E	
Lightning Arrester				
Broken/Damaged	Repair		E	
	Replace		E	
Flashed	Repair		E	
	Replace		E	
Marking				
Broken/Damaged	Replace		F	
Missing	Install		F	
Molding				
Broken/Damaged	Repair		F	
	Replace		F	
Loose	Adjust		F	
Missing	Install		F	
OH Facility				
Bird Prot Required	Install		E	
Customer Related	Access		B	
	Appointment		B	
	Refusal		B	
Graffiti	Paint		E	
Idle Facilities	De-Energ		B	
	Remove		F	
	Transfer		F	
Limited Access	Inspect		B	
	Patrol		E	
	Remove		E	
Obstructed	Inspect		B	
	Remove		E	
	Replace		B	
Transmission Issue	Create LC		B	

FDA		New	Priority	Comp
Pole				
Broken/Damaged	Re-Frame		E	
	Repair		E	
	Replace		E	
	Pole Stub		E	
Burnt	Repair		E	
	Replace		E	
	Pole Stub		E	
Clearance Impaired	Repair		E	
	Replace		E	
Decayed/Rotten	Pole Top Repair		E	
	Repair		E	
	Replace		E	
	Pole Stub		E	
Idle Facilities	Remove		F	
Leaning	Adjust		E	
	Replace		E	
Overloaded	Replace		E	
	Test		E	
No Safe Access to Pole	Inspect		B	
Woodpecker Damage	Assessment		E	
Recloser/Sectionalizer				
Broken/Damaged	Repair		E	
	Replace		E	
Excessive Operation	Overhaul		E	
Flashed	Repair		E	
	Replace		E	
Leaks/Seeps/Weeps	Clean		E	
	Repair		E	
	Replace		E	
Riser/Pothead				
Broken/Damaged	Repair		E	
	Replace		F	
Installed in Error	Relocate		E	
Flashed	Repair		E	
	Replace		F	
ROAD				
No Safe Access to Pole	Repair		B	
RTVI				
Interference	Repair		E	
	Replace		E	
SCADA/PDAC				
Broken/Damaged	Repair		F	
	Replace		F	
Leaks/Seeps/Weeps	Repair		F	
	Replace		F	
	Test		B	
Steel Lattice Pole				
Guarding Missing	Install		E	
Pole Step				
Clearance Impaired	Remove		F	
Streetlight				
Broken/Damaged	Repair		E	
	Replace		E	
Missing	Install		E	
Steel Lattice Tower				
Broken/Damaged	Replace		E	
Switch				
Broken/Damaged	Repair		E	
	Replace		E	

EMERGENCY ONLY Check Cause (Required)			
☐	Animal	☐	Bird
☐	Equip Failed	☐	Fire
☐	Lightning	☐	Pole Rotten
☐	Third Party	☐	Tree Branch
☐	Tree Contact	☒	Tree Fell
☐	Unknown	☐	

All FDA's identified in field
Priority = Default Priority for B, E, G, & F-Regulatory FDA's
Comp = Check if completing FDA in Field

Electric Overhead Tag

Notification #: 116496018

PM Order #: 43679080

Priority: A **Sub Priority:**

Date Identified: 02/16/2019

FDA		New	Priority	Comp
Trans_Dist Pole				
Bonding Broken	Repair		E	
Tie Wire				
Broken/Damaged	Replace		E	
Loose	Replace		E	
Transformer				
Broken/Damaged	Repair		E	
	Replace		F	
Corroded	Replace		E	
Flashed	Repair		E	
	Replace		E	
Idle Facilities	Remove		F	
No Common Neutral	Relocate		E	
Overloaded	Test		E	
Parallel	Replace		E	
Leaks/Seeps/Weeps	Clean		B	
	Repair		F	
	Replace		E	
Tree/Vine				
Clearance Impaired	Remove		E	
	Trim		E	
Decayed/Rotten	Install CL Pole		E	
Overgrown	Remove		E	
	Trim		E	
Tree Connect	Assessment		B	
	Install CL Pole		E	
Trip Saver				
Broken/Damaged	Repair		E	
	Replace		E	
Under-Arm Bus				
Broken/Damaged	Repair		F	

Electric Overhead Tag

Notification #: 116806624

PM Order #: 31432300

Priority: B **Sub Priority:** FS

Date Identified: 03/21/2019

Date Required: 06/21/2019

Identified in Field By: [redacted]
Street Address:

City: REDDING
Cross Street:
Division: North Valley
Latitude: [redacted]
Longitude:
Description: CRSS_BROK_REPL - [redacted]

Plat: Q2604
Circuit: 10340-1101, GIRVAN
SSD: 346147
Equipment #:
Pin #: ______________
Pole #: ______________
OIS #: ______________
SAP Func. Location: ED.87-Q260400000.STRU.POLE
SAP Equipment: 101494001
Accessibility Tier:

Item Details

	Facility Type	Damage	Cause	Action
Item 1	CRSS Crossarm	BROK Broken/Damaged		REPL Replace

☒ Completed ☐ Canceled

☐ Pole Test Sheet

User Status

Conductor/Operating Information		Field Identification		Field Condition (Exposure)		Field Condition (Accessibility)		Other	
Status	Description	Status	Description	Status	Description	Status	Description	Status	Description
PRI	Primary			TER3	Tier3 Wildfire	BTKA	Bucket/Lift Truck Accessible	PRTO	WSIP Pronto
JPOL	Joint Pole			REMT	Remote Area	FLAG	Flagging Required	GO	General Order
OH	Overhead			FMOB	Submitted from Mobile	TRAF	Traffic Plan Required	COMP	Completed
								CCNT	Completed by Contractor

Job Estimates

Issued To

Est. Total Hrs. to Complete: 13
Est. Electric Crew Size: 03
WTC: 605, 2AA_Genl Repl_No_Est_OH

Main Work Center: REDDING, Redding
Gas Crew Size: 00
MAT: 2AA, OH Genl Repl

Funded Repair Date:

Reviewed By: ______________
Date of Field Review: ______________

Completed or Canceled in Field By (LAN ID): [redacted]
If No LAN ID Last Name, First Name: ______________

Complete or Cancel Date: 04/25/2019
Actual Hours: ______________
*Check One: PG&E Crew ☐ T-Man ☐ Contractor ☒

*Check One: Completed ☒ Canceled ☐ Found Completed Upon Arrival ☐

Signature: ______________

I verify that all maintenance on this notification is addressed (completed, canceled, or found completed upon arrival)

***Public Safety & Regulatory Reviewer: If notification was canceled, check one (required):**

☐ **CONV:** Converted to another Notif-Type
☐ **DUMM:** "Dummy" for order only
☐ **DUPL:** Duplicate EC for Same Location
☐ **EROR:** Created in Error (Desk Cancelation)
☐ **NCOA:** All Found Completed/Resolved on Arrival
☐ **NOCR:** No Compelling/Regulator Condition Exist
☐ **PROG:** Completed under another Program

List of Tasks on Notification

Electric Overhead Tag

Notification #: **116806624**

Priority: **B** **Sub Priority:** **FS**

PM Order #: **31432300**

Date Identified: **03/21/2019**

Date Required: **06/21/2019**

Completed Completed By: [redacted] Completion Date: 04/25/2019

Field Comments:

Comments

03/21/2019 14:19:38 PST INSPECTCPIC (INSPECTCPIC)

- Location : WSIP

Cross arm is split and insulator is pulled over. Pole needs new cross arm. 2 phase construction. Traffic: Medium. Truck accessible off of shoulder of roadway

03/29/2019 05:59:09 PST [redacted]

* 03/29/2019 05:59:08 PST [redacted]

Reason: Inspector recommended repair date or priority

replace cross arm with composite arm

b tag per inspector

04/03/2019 19:12:23 PST BCH_WM_ORDER (BCH_WM_ORDER)

Work not in ENV layer; No further Environmental review required

Based on the location data provided, no PIQ is required.

If the location or the scope of the job changes, please complete a Project Information Questionnaire.

In addition, if a field review identifies potential Environmental or Land issues,

please complete a Project Information Questionnaire and submit for review.

04/03/2019 19:12:24 PST BCH_WM_ORDER (BCH_WM_ORDER)

000116806624 - AEA Results: No PIQ required.

04/26/2019 08:28:43 PST AIMOBILECPIC (AIMOBILECPIC)

LAN ID: [redacted]

04/26/2019 12:44:37 PST [redacted]

31432300E Mapping Pre-Post Completed

04/26/2019 12:44:43 PST [redacted]

31432300E Mapping Received As-Built package

04/26/2019 12:44:52 PST [redacted]

31432300E Mapping Completed map & record posting, pending lead review

04/26/2019 12:44:59 PST [redacted]

31432300E Mapping Completed

04/26/2019 12:52:25 PST [redacted]

Electric Overhead Tag

Priority: B **Sub Priority:** FS
Date Identified: 03/21/2019

Notification #: 116806624
PM Order #: 31432300
Date Required: 06/21/2019

NO MAPPING REQ'D - WORK COMPLETED UPON ARRIVAL

04/20/2020 14:47:49 PST [redacted]

RCVD ZKOD ERROR REPORT FROM [redacted]

ZKOD ERROR: CAPITAL ORDER W/O MATERIAL

BUSINESS FINANCE OR CAPITAL ACCOUNTING ACTION

FDA		New	Priority	Comp
Anchor				
Broken/Damaged	Repair		E	
	Replace		E	
Corroded	Repair		E	
	Replace		E	
Missing	Install		F	
Soil/Eroded/Graded	Adjust		F	
	Replace		F	
Animal Mitigation				
Broken/Damaged	Replace		E	
Mitigation Missing	Install		E	
Bird Protection				
Bird Protection	Replace		E	
CB Pole				
Broken/Damaged	Replace		F	
Burnt	Replace		E	
Decayed/Rotten	Replace		F	
Booster/Regulator				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
Excessive Operation	Overhaul		E	
Leaks/Seeps/Weeps	Clean		E	
	Repair		E	
	Replace		E	
Capacitor				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
	Replace		E	
Leaks/Seeps/Weeps	Clean		B	
	Repair		E	
	Replace		E	
Climbing Space				
Obstructed	Adjust		F	

FDA		New	Priority	Comp
Conductor				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
	Replace		E	
Clearance Impaired	Adjust		E	
	Install CL Pole		E	
	RayChem		E	
Floater	Repair		E	
Idle Facilities	Remove		E	
Improper Connection	Adjust		E	
Overloaded	Test		E	
Sag/Clearance	Adjust		E	
	Replace		E	
	Install Spreader Bracket		E	
Connector				
Burnt	Replace		E	
Corroded	Repair		E	
	Replace		E	
Incorrectly Installed	Replace		E	
Temp Differential	Replace		E	
Crossarm				
Broken/Damaged	Repair		E	
	Replace		E	X
Burnt	Repair		E	
	Replace		E	
Decayed/Rotten	Repair		E	
	Replace		E	
Cutout				
Broken/Damaged	Repair		E	
	Replace		E	
Clearance Impaired	Adjust		E	
Flashed	Repair		E	
	Replace		E	
Decorative Streetlight				
Broken/Damaged	Replace		E	
Missing	Install		E	
Fault Indicators				
Broken/Damaged	Replace		E	
Ground				
Broken/Damaged	Repair		B	
	Replace		B	
Exposed	Repair		F	
Missing	Install		E	
Guy				
Broken/Damaged	Repair		E	
	Replace		E	
Clearance Impaired	Adjust		F	
Corroded	Repair		E	
	Replace		E	
Loose	Adjust		F	
Missing	Install		F	
Overgrown	Trim		E	
Strain/Abrasion	Adjust		F	
	Remove		F	
Guy Marker				
Missing	Install		F	
	Replace		F	

FDA		New	Priority	Comp
Hardware/Framing				
Bird Prot Required	Install		E	
Birdcage	Install		E	
Broken/Damaged	Repair		E	
	Replace		E	
Loose	Adjust		E	
Missing	Install		E	
High Sign				
Missing	Install		F	
Insulator				
Broken/Damaged	Replace		E	
Flashed	Replace		E	
Primary Squatter	Repair		E	
	Replace		E	
Secondary Squatter	Repair		E	
	Replace		E	
Jumper				
Burnt	Replace		E	
Clearance Impaired	Adjust		E	
	Replace		E	
LAPP Insulator				
Broken/Damaged	Replace		E	
Lightning Arrester				
Broken/Damaged	Repair		E	
	Replace		E	
Flashed	Repair		E	
	Replace		E	
Marking				
Broken/Damaged	Replace		F	
Missing	Install		F	
Molding				
Broken/Damaged	Repair		F	
	Replace		F	
Loose	Adjust		F	
Missing	Install		F	
OH Facility				
Bird Prot Required	Install		E	
Customer Related	Access		B	
	Appointment		B	
	Refusal		B	
Graffiti	Paint		E	
Idle Facilities	De-Energ		B	
	Remove		F	
	Transfer		F	
Limited Access	Inspect		B	
	Patrol		E	
	Remove		E	
Obstructed	Inspect		B	
	Remove		E	
	Replace		B	
Transmission Issue	Create LC		B	

FDA		New	Priority	Comp
Pole				
Broken/Damaged	Re-Frame		E	
	Repair		E	
	Replace		E	
	Pole Stub		E	
Burnt	Repair		E	
	Replace		E	
	Pole Stub		E	
Clearance Impaired	Repair		E	
	Replace		E	
Decayed/Rotten	Pole Top Repair		E	
	Repair		E	
	Replace		E	
	Pole Stub		E	
Idle Facilities	Remove		F	
Leaning	Adjust		E	
	Replace		E	
Overloaded	Replace		E	
	Test		E	
No Safe Access to Pole	Inspect		B	
Woodpecker Damage	Assessment		E	
Recloser/Sectionalizer				
Broken/Damaged	Repair		E	
	Replace		E	
Excessive Operation	Overhaul		E	
Flashed	Repair		E	
	Replace		E	
Leaks/Seeps/Weeps	Clean		E	
	Repair		E	
	Replace		E	
Riser/Pothead				
Broken/Damaged	Repair		E	
	Replace		F	
Installed in Error	Relocate		E	
Flashed	Repair		E	
	Replace		F	
ROAD				
No Safe Access to Pole	Repair		B	
RTVI				
Interference	Repair		E	
	Replace		E	
SCADA/PDAC				
Broken/Damaged	Repair		F	
	Replace		F	
Leaks/Seeps/Weeps	Repair		F	
	Replace		F	
	Test		B	
Steel Lattice Pole				
Guarding Missing	Install		E	
Pole Step				
Clearance Impaired	Remove		F	
Streetlight				
Broken/Damaged	Repair		E	
	Replace		E	
Missing	Install		E	
Steel Lattice Tower				
Broken/Damaged	Replace		E	
Switch				
Broken/Damaged	Repair		E	
	Replace		E	

EMERGENCY ONLY Check Cause (Required)			
☐	Animal	☐	Bird
☐	Equip Failed	☐	Fire
☐	Lightning	☐	Pole Rotten
☐	Third Party	☐	Tree Branch
☐	Tree Contact	☐	Tree Fell
☐	Unknown	☐	

All FDA's identified in field
Priority = Default Priority for B, E, G, & F-Regulatory FDA's
Comp = Check if completing FDA in Field

Electric Overhead Tag

Notification #: 116806624

PM Order #: 31432300

Priority: B **Sub Priority:** FS

Date Identified: 03/21/2019 **Date Required:** 06/21/2019

FDA		New	Priority	Comp
Trans_Dist Pole				
Bonding Broken	Repair		E	
Tie Wire				
Broken/Damaged	Replace		E	
Loose	Replace		E	
Transformer				
Broken/Damaged	Repair		E	
	Replace		F	
Corroded	Replace		E	
Flashed	Repair		E	
	Replace		E	
Idle Facilities	Remove		F	
No Common Neutral	Relocate		E	
Overloaded	Test		E	
Parallel	Replace		E	
Leaks/Seeps/Weeps	Clean		B	
	Repair		F	
	Replace		E	
Tree/Vine				
Clearance Impaired	Remove		E	
	Trim		E	
Decayed/Rotten	Install CL Pole		E	
Overgrown	Remove		E	
	Trim		E	
Tree Connect	Assessment		B	
	Install CL Pole		E	
Trip Saver				
Broken/Damaged	Repair		E	
	Replace		E	
Under-Arm Bus				
Broken/Damaged	Repair		F	

Electric Overhead Tag

Notification #: 116981650

PM Order #: 43730248

Priority: A **Sub Priority:**

Date Identified: 04/08/2019

Identified in Field By: [redacted]
Street Address:

City: REDDING
Cross Street:
Division: North Valley
Latitude: [redacted]
Longitude:
Description: COND_CLER_ADJU - [redacted]

Plat: Q2604
Circuit: 10340-1101, GIRVAN
SSD: 10779
Equipment #:
Pin #: ____________________
Pole #: ____________________
OIS #: 0000355915
SAP Func. Location: ED.87-Q260400000.STRU.POLE
SAP Equipment: 101494005
Accessibility Tier:

Item Details

	Facility Type	Damage	Cause	Action
Item 1	COND Conductor	CLER Clearance Impaired	TRFL Tree Fell	ADJU Adjust

☒ Completed ☐ Canceled

☐ Pole Test Sheet

User Status

Conductor/Operating Information		Field Identification		Field Condition (Exposure)		Field Condition (Accessibility)		Other	
Status	Description	Status	Description	Status	Description	Status	Description	Status	Description

Job Estimates — Issued To

Est. Total Hrs. to Complete: 10
Est. Electric Crew Size: 02
WTC: 550, BHB-EC - OH Exp Emergency
Main Work Center: REDDING, Redding
Gas Crew Size: 00
MAT: BHB, CM-E OH
Funded Repair Date:

Reviewed By: ______________________ Date of Field Review: ______________________

Completed or Canceled in Field By (LAN ID): [redacted] If No LAN ID Last Name, First Name: ______________________

Complete or Cancel Date: 04/09/2019 Actual Hours: ________ *Check One: PG&E Crew ☒ T-Man ☐ Contractor ☐

*Check One: Completed ☒ Canceled ☐ Found Completed Upon Arrival ☐

Signature: ______________________

I verify that all maintenance on this notification is addressed (completed, canceled, or found completed upon arrival)

***Public Safety & Regulatory Reviewer: If notification was canceled, check one (required):**

☐ **CONV:** Converted to another Notif-Type
☐ **DUMM:** "Dummy" for order only
☐ **DUPL:** Duplicate EC for Same Location
☐ **EROR:** Created in Error (Desk Cancelation)
☐ **NCOA:** All Found Completed/Resolved on Arrival
☐ **NOCR:** No Compelling/Regulator Condition Exist
☐ **PROG:** Completed under another Program

List of Tasks on Notification

Completed Completed By: [redacted] Completion Date: 04/09/2019

Electric Overhead Tag

Notification #: 116981650

PM Order #: 43730248

Priority: A **Sub Priority:**

Date Identified: 04/08/2019

Field Comments:

Comments

04/08/2019 15:40:44 PST WMFASCPIC (WMFASCPIC)

Form Summary (non-saved Fields)

- Identified By Contractor : [redacted]
- Meter Number : [redacted]
- Operating Number :

NEED CREW AND TREE CREW TO REMOVE TREE LEANING OVER PRIMARY

Photos were taken

04/10/2019 13:37:36 PST [redacted]

43730248E Construction Documentation Complete (CN07 Completed)

04/10/2019 13:38:39 PST [redacted]

[redacted] COMPLETED 04/09/19. FINAL CONFIRMATION COMPLETE. UPLOADED DOCS.

08/25/2019 16:47:17 PST [redacted]

08252019: Requested by [redacted]: WO0000000131957. Please batch the attached list of orders to PREC user status as they meet one of the following criteria:

1) User status is in DOCC, FICL, DCMN, CMPL, MAPP
2) CN24 or Construction confirmation (not within 90 days), no annual orders, no damage claims
3) DC33 (not within 90 days) for MWC KA, KB and KC
4) Damage claims MWC BHD or notification is CD with secondary user status "Bill"

Form Summary (non-saved Fields)

- Identified By Contractor : [redacted]
- Meter Number : [redacted]
- Operating Number :

NEED CREW AND TREE CREW TO REMOVE TREE LEANING OVER PRIMARY

Photos were taken

04/10/2019 13:37:36 PST [redacted]

43730248E Construction Documentation Complete (CN07 Completed)

04/10/2019 13:38:39 PST [redacted]

[redacted] COMPLETED 04/09/19. FINAL CONFIRMATION COMPLETE. UPLOADED DOCS.

Electric Overhead Tag

Notification #: **116981650**

PM Order #: **43730248**

Priority: A **Sub Priority:**

Date Identified: **04/08/2019**

08/25/2019 16:47:17 PST [redacted]

08252019: Requested by [redacted] WO0000000131957. Please batch the attached list of orders to PREC user status as they meet one of the following criteria:

1) User status is in DOCC, FICL, DCMN, CMPL, MAPP

2) CN24 or Construction confirmation (not within 90 days), no annual orders, no damage claims

3) DC33 (not within 90 days) for MWC KA, KB and KC

4) Damage claims MWC BHD or notification is CD with secondary user status "Bill"

FDA		New	Priority	Comp
Anchor				
Broken/Damaged	Repair		E	
	Replace		E	
Corroded	Repair		E	
	Replace		E	
Missing	Install		F	
Soil/Eroded/Graded	Adjust		F	
	Replace		F	
Animal Mitigation				
Broken/Damaged	Replace		E	
Mitigation Missing	Install		E	
Bird Protection				
Bird Protection	Replace		E	
CB Pole				
Broken/Damaged	Replace		F	
Burnt	Replace		E	
Decayed/Rotten	Replace		F	
Booster/Regulator				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
Excessive Operation	Overhaul		E	
Leaks/Seeps/Weeps	Clean		E	
	Repair		E	
	Replace		E	
Capacitor				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
	Replace		E	
Leaks/Seeps/Weeps	Clean		B	
	Repair		E	
	Replace		E	
Climbing Space				
Obstructed	Adjust		F	
Conductor				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
	Replace		E	
Clearance Impaired	Adjust		E	X
	Install CL Pole		E	
	RayChem		E	
Floater	Repair		E	
Idle Facilities	Remove		E	
Improper Connection	Adjust		E	
Overloaded	Test		E	
Sag/Clearance	Adjust		E	
	Replace		E	
	Install Spreader Bracket		E	
Connector				
Burnt	Replace		E	
Corroded	Repair		E	
	Replace		E	
Incorrectly Installed	Replace		E	
Temp Differential	Replace		E	
Crossarm				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
	Replace		E	
Decayed/Rotten	Repair		E	
	Replace		E	
Cutout				
Broken/Damaged	Repair		E	
	Replace		E	
Clearance Impaired	Adjust		E	
Flashed	Repair		E	
	Replace		E	
Decorative Streetlight				
Broken/Damaged	Replace		E	
Missing	Install		E	
Fault Indicators				
Broken/Damaged	Replace		E	
Ground				
Broken/Damaged	Repair		B	
	Replace		B	
Exposed	Repair		F	
Missing	Install		E	
Guy				
Broken/Damaged	Repair		E	
	Replace		E	
Clearance Impaired	Adjust		F	
Corroded	Repair		E	
	Replace		E	
Loose	Adjust		F	
Missing	Install		F	
Overgrown	Trim		E	
Strain/Abrasion	Adjust		F	
	Remove		F	
Guy Marker				
Missing	Install		F	
	Replace		F	
Hardware/Framing				
Bird Prot Required	Install		E	
Birdcage	Install		E	
Broken/Damaged	Repair		E	
	Replace		E	
Loose	Adjust		E	
Missing	Install		E	
High Sign				
Missing	Install		F	
Insulator				
Broken/Damaged	Replace		E	
Flashed	Replace		E	
Primary Squatter	Repair		E	
	Replace		E	
Secondary Squatter	Repair		E	
	Replace		E	
Jumper				
Burnt	Replace		E	
Clearance Impaired	Adjust		E	
	Replace		E	
LAPP Insulator				
Broken/Damaged	Replace		E	
Lightning Arrester				
Broken/Damaged	Repair		E	
	Replace		E	
Flashed	Repair		E	
	Replace		E	
Marking				
Broken/Damaged	Replace		F	
Missing	Install		F	
Molding				
Broken/Damaged	Repair		F	
	Replace		F	
Loose	Adjust		F	
Missing	Install		F	
OH Facility				
Bird Prot Required	Install		E	
Customer Related	Access		B	
	Appointment		B	
	Refusal		B	
Graffiti	Paint		E	
Idle Facilities	De-Energ		B	
	Remove		F	
	Transfer		F	
Limited Access	Inspect		B	
	Patrol		E	
	Remove		E	
Obstructed	Inspect		B	
	Remove		E	
	Replace		B	
Transmission Issue	Create LC		B	
Pole				
Broken/Damaged	Re-Frame		E	
	Repair		E	
	Replace		E	
	Pole Stub		E	
Burnt	Repair		E	
	Replace		E	
	Pole Stub		E	
Clearance Impaired	Repair		E	
	Replace		E	
Decayed/Rotten	Pole Top Repair		E	
	Repair		E	
	Replace		E	
	Pole Stub		E	
Idle Facilities	Remove		F	
Leaning	Adjust		E	
	Replace		E	
Overloaded	Replace		E	
	Test		E	
No Safe Access to Pole	Inspect		B	
Woodpecker Damage	Assessment		E	
Recloser/Sectionalizer				
Broken/Damaged	Repair		E	
	Replace		E	
Excessive Operation	Overhaul		E	
Flashed	Repair		E	
	Replace		E	
Leaks/Seeps/Weeps	Clean		E	
	Repair		E	
	Replace		E	
Riser/Pothead				
Broken/Damaged	Repair		E	
	Replace		F	
Installed in Error	Relocate		E	
Flashed	Repair		E	
	Replace		F	
ROAD				
No Safe Access to Pole	Repair		B	
RTVI				
Interference	Repair		E	
	Replace		E	
SCADA/PDAC				
Broken/Damaged	Repair		F	
	Replace		F	
Leaks/Seeps/Weeps	Repair		F	
	Replace		F	
	Test		B	
Steel Lattice Pole				
Guarding Missing	Install		E	
Pole Step				
Clearance Impaired	Remove		F	
Streetlight				
Broken/Damaged	Repair		E	
	Replace		E	
Missing	Install		E	
Steel Lattice Tower				
Broken/Damaged	Replace		E	
Switch				
Broken/Damaged	Repair		E	
	Replace		E	

EMERGENCY ONLY Check Cause (Required)			
[ ]	Animal	[ ]	Bird
[ ]	Equip Failed	[ ]	Fire
[ ]	Lightning	[ ]	Pole Rotten
[ ]	Third Party	[ ]	Tree Branch
[ ]	Tree Contact	[X]	Tree Fell
[ ]	Unknown	[ ]	

All FDA's identified in field
Priority = Default Priority for B, E, G, & F-Regulatory FDA's
Comp = Check if completing FDA in Field

PG&E

Electric Overhead Tag

Notification #: **116981650**

PM Order #: **43730248**

Priority: **A** **Sub Priority:**

Date Identified: **04/08/2019**

FDA		New	Priority	Comp
Trans_Dist Pole				
Bonding Broken	Repair		E	
Tie Wire				
Broken/Damaged	Replace		E	
Loose	Replace		E	
Transformer				
Broken/Damaged	Repair		E	
	Replace		F	
Corroded	Replace		E	
Flashed	Repair		E	
	Replace		E	
Idle Facilities	Remove		F	
No Common Neutral	Relocate		E	
Overloaded	Test		E	
Parallel	Replace		E	
Leaks/Seeps/Weeps	Clean		B	
	Repair		F	
	Replace		E	
Tree/Vine				
Clearance Impaired	Remove		E	
	Trim		E	
Decayed/Rotten	Install CL Pole		E	
Overgrown	Remove		E	
	Trim		E	
Tree Connect	Assessment		B	
	Install CL Pole		E	
Trip Saver				
Broken/Damaged	Repair		E	
	Replace		E	
Under-Arm Bus				
Broken/Damaged	Repair		F	

Electric Overhead Tag

Notification #: 118123609

PM Order #: 44084537

Priority: A **Sub Priority:**

Date Identified: 10/30/2019

Identified in Field By:	[redacted]	Plat:	Q2604
Street Address:		Circuit:	10340-1101, GIRVAN
		SSD:	346147
City:	REDDING LOC 15	Equipment #:	
Cross Street:	MULETOWN	Pin #:	____________________
Division:	North Valley	Pole #:	____________________
Latitude:	[redacted]	OIS #:	____________________
Longitude:		SAP Func. Location:	ED.87-Q260400000.STRU.POLE
Description:	TIEW_BROK_REPL-[redacted]	SAP Equipment:	101493982
		Accessibility Tier:	IT3 INACCESSIBLE TIER 3

Item Details

	Facility Type	Damage	Cause	Action
Item 1	TIEW Tie Wire	BROK Broken/Damaged	UNKN Unknown	REPL Replace

☒ Completed ☐ Canceled

☐ Pole Test Sheet

User Status

Conductor/Operating Information		Field Identification		Field Condition (Exposure)		Field Condition (Accessibility)		Other	
Status	Description	Status	Description	Status	Description	Status	Description	Status	Description

Job Estimates — Issued To

Est. Total Hrs. to Complete:	0	Est. Electric Crew Size:	03	WTC:	596, IFA - OH Exp Major EventsSTANDING
Main Work Center:	REDDING, Redding	Gas Crew Size:	00	MAT:	IFA, E Major Emgcy OH
Funded Repair Date:					

Reviewed By: ______________________________ Date of Field Review: ______________________________

Completed or Canceled in Field By (LAN ID): [redacted] If No LAN ID Last Name, First Name: ____________________

Complete or Cancel Date: 10/30/2019 Actual Hours: __________ *Check One: PG&E Crew ☐ T-Man ☐ Contractor ☒

*Check One: Completed ☒ Canceled ☐ Found Completed Upon Arrival ☐

Signature: ____

I verify that all maintenance on this notification is addressed (completed, canceled, or found completed upon arrival)

*Public Safety & Regulatory Reviewer: If notification was canceled, check one (required):

☐ **CONV:** Converted to another Notif-Type ☐ **DUMM:** "Dummy" for order only ☐ **DUPL:** Duplicate EC for Same Location

☐ **EROR:** Created in Error (Desk Cancelation) ☐ **NCOA:** All Found Completed/Resolved on Arrival ☐ **NOCR:** No Compelling/Regulator Condition Exist

☐ **PROG:** Completed under another Program

List of Tasks on Notification

Completed Completed By: [redacted] Completion Date: 10/30/2019

Electric Overhead Tag

Notification #: 118123609

PM Order #: 44084537

Priority: A **Sub Priority:**

Date Identified: 10/30/2019

Field Comments:

Comments

10/30/2019 12:50:49 PST [redacted]

REPLACE BROKEN TIE WIRE

10/31/2019 10:28:03 PST [redacted]

10/30/19 COMPLETED BY PAR CONTRACT CREW [redacted] REPLACED TIE WIRE

FDA		New	Priority	Comp
Anchor				
Broken/Damaged	Repair		E	
	Replace		E	
Corroded	Repair		E	
	Replace		E	
Missing	Install		F	
Soil/Eroded/Graded	Adjust		F	
	Replace		F	
Animal Mitigation				
Broken/Damaged	Replace		E	
Mitigation Missing	Install		E	
Bird Protection				
Bird Protection	Replace		E	
CB Pole				
Broken/Damaged	Replace		F	
Burnt	Replace		E	
Decayed/Rotten	Replace		F	
Booster/Regulator				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
Excessive Operation	Overhaul		E	
Leaks/Seeps/Weeps	Clean		E	
	Repair		E	
	Replace		E	
Capacitor				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
	Replace		E	
Leaks/Seeps/Weeps	Clean		B	
	Repair		E	
	Replace		E	
Climbing Space				
Obstructed	Adjust		F	

FDA		New	Priority	Comp
Conductor				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
	Replace		E	
Clearance Impaired	Adjust		E	
	Install CL Pole		E	
	RayChem		E	
Floater	Repair		E	
Idle Facilities	Remove		E	
Improper Connection	Adjust		E	
Overloaded	Test		E	
Sag/Clearance	Adjust		E	
	Replace		E	
	Install Spreader Bracket		E	
Connector				
Burnt	Replace		E	
Corroded	Repair		E	
	Replace		E	
Incorrectly Installed	Replace		E	
Temp Differential	Replace		E	
Crossarm				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
	Replace		E	
Decayed/Rotten	Repair		E	
	Replace		E	
Cutout				
Broken/Damaged	Repair		E	
	Replace		E	
Clearance Impaired	Adjust		E	
Flashed	Repair		E	
	Replace		E	
Decorative Streetlight				
Broken/Damaged	Replace		E	
Missing	Install		E	
Fault Indicators				
Broken/Damaged	Replace		E	
Ground				
Broken/Damaged	Repair		B	
	Replace		B	
Exposed	Repair		F	
Missing	Install		E	
Guy				
Broken/Damaged	Repair		E	
	Replace		E	
Clearance Impaired	Adjust		F	
Corroded	Repair		E	
	Replace		E	
Loose	Adjust		F	
Missing	Install		F	
Overgrown	Trim		E	
Strain/Abrasion	Adjust		F	
	Remove		F	
Guy Marker				
Missing	Install		F	
	Replace		F	

FDA		New	Priority	Comp
Hardware/Framing				
Bird Prot Required	Install		E	
Birdcage	Install		E	
Broken/Damaged	Repair		E	
	Replace		E	
Loose	Adjust		E	
Missing	Install		E	
High Sign				
Missing	Install		F	
Insulator				
Broken/Damaged	Replace		E	
Flashed	Replace		E	
Primary Squatter	Repair		E	
	Replace		E	
Secondary Squatter	Repair		E	
	Replace		E	
Jumper				
Burnt	Replace		E	
Clearance Impaired	Adjust		E	
	Replace		E	
LAPP Insulator				
Broken/Damaged	Replace		E	
Lightning Arrester				
Broken/Damaged	Repair		E	
	Replace		E	
Flashed	Repair		E	
	Replace		E	
Marking				
Broken/Damaged	Replace		F	
Missing	Install		F	
Molding				
Broken/Damaged	Repair		F	
	Replace		F	
Loose	Adjust		F	
Missing	Install		F	
OH Facility				
Bird Prot Required	Install		E	
Customer Related	Access		B	
	Appointment		B	
	Refusal		B	
Graffiti	Paint		E	
Idle Facilities	De-Energ		B	
	Remove		F	
	Transfer		F	
Limited Access	Inspect		B	
	Patrol		E	
	Remove		E	
Obstructed	Inspect		B	
	Remove		E	
	Replace		B	
Transmission Issue	Create LC		B	

FDA		New	Priority	Comp
Pole				
Broken/Damaged	Re-Frame		E	
	Repair		E	
	Replace		E	
	Pole Stub		E	
Burnt	Repair		E	
	Replace		E	
	Pole Stub		E	
Clearance Impaired	Repair		E	
	Replace		E	
Decayed/Rotten	Pole Top Repair		E	
	Repair		E	
	Replace		E	
	Pole Stub		E	
Idle Facilities	Remove		F	
Leaning	Adjust		E	
	Replace		E	
Overloaded	Replace		E	
	Test		E	
No Safe Access to Pole	Inspect		B	
Woodpecker Damage	Assessment		E	
Recloser/Sectionalizer				
Broken/Damaged	Repair		E	
	Replace		E	
Excessive Operation	Overhaul		E	
Flashed	Repair		E	
	Replace		E	
Leaks/Seeps/Weeps	Clean		E	
	Repair		E	
	Replace		E	
Riser/Pothead				
Broken/Damaged	Repair		E	
	Replace		F	
Installed in Error	Relocate		E	
Flashed	Repair		E	
	Replace		F	
ROAD				
No Safe Access to Pole	Repair		B	
RTVI				
Interference	Repair		E	
	Replace		E	
SCADA/PDAC				
Broken/Damaged	Repair		F	
	Replace		F	
Leaks/Seeps/Weeps	Repair		F	
	Replace		F	
	Test		B	
Steel Lattice Pole				
Guarding Missing	Install		E	
Pole Step				
Clearance Impaired	Remove		F	
Streetlight				
Broken/Damaged	Repair		E	
	Replace		E	
Missing	Install		E	
Steel Lattice Tower				
Broken/Damaged	Replace		E	
Switch				
Broken/Damaged	Repair		E	
	Replace		E	

EMERGENCY ONLY
Check Cause (Required)

☐	Animal	☐	Bird
☐	Equip Failed	☐	Fire
☐	Lightning	☐	Pole Rotten
☐	Third Party	☐	Tree Branch
☐	Tree Contact	☐	Tree Fell
☒	Unknown	☐	

All FDA's identified in field
Priority = Default Priority for B, E, G, & F-Regulatory FDA's
Comp = Check if completing FDA in Field

Printed By: [redacted] 12/16/2021

Notification #: 118123609

Electric Overhead Tag

Notification #: 118123609

PM Order #: 44084537

Priority: A **Sub Priority:**

Date Identified: 10/30/2019

FDA		New	Priority	Comp
Trans_Dist Pole				
Bonding Broken	Repair		E	
Tie Wire				
Broken/Damaged	Replace		E	X
Loose	Replace		E	
Transformer				
Broken/Damaged	Repair		E	
	Replace		F	
Corroded	Replace		E	
Flashed	Repair		E	
	Replace		E	
Idle Facilities	Remove		F	
No Common Neutral	Relocate		E	
Overloaded	Test		E	
Parallel	Replace		E	
Leaks/Seeps/Weeps	Clean		B	
	Repair		F	
	Replace		E	
Tree/Vine				
Clearance Impaired	Remove		E	
	Trim		E	
Decayed/Rotten	Install CL Pole		E	
Overgrown	Remove		E	
	Trim		E	
Tree Connect	Assessment		B	
	Install CL Pole		E	
Trip Saver				
Broken/Damaged	Repair		E	
	Replace		E	
Under-Arm Bus				
Broken/Damaged	Repair		F	

Electric Overhead Tag

Notification #: 118961974

PM Order #: 44855045

Priority: E **Sub Priority:**

Date Identified: 04/30/2020 **Date Required:** 10/30/2020

Identified in Field By:	[redacted]	Plat:	Q2604
Street Address:		Circuit:	10340-1101, GIRVAN
		SSD:	346147
City:	REDDING	Equipment #:	
Cross Street:		Pin #:	____________________
Division:	North Valley	Pole #:	____________________
Latitude:	[redacted]	OIS #:	____________________
Longitude:		SAP Func. Location:	ED.87-Q260400000.STRU.POLE
Description:	8/31-CONN_INCR_REPL - [redacted]	SAP Equipment:	101493984
		Accessibility Tier:	

Item Details

	Facility Type	Damage	Cause	Action
Item 1	CONN Connector	INCR Incorrectly Installed		REPL Replace
	☒ Completed ☐ Canceled			
Item 2	CONN Connector	INCR Incorrectly Installed		REPL Replace
	☒ Completed ☐ Canceled			

☐ Pole Test Sheet

User Status

Conductor/Operating Information		Field Identification		Field Condition (Exposure)		Field Condition (Accessibility)		Other	
Status	**Description**	**Status**	**Description**	**Status**	**Description**	**Status**	**Description**	**Status**	**Description**
PRI	Primary	INSP	Inspection	TER3	Tier3 Wildfire	BTKA	Bucket/Lift Truck Accessible	COMP	Completed
OH	Overhead			RESD	Residential Area			CPGD	Completed by PG&E - Division
				REMT	Remote Area				
				FMOB	Submitted from Mobile				

Job Estimates

Est. Total Hrs. to Complete: 5

Main Work Center: REDDING, Redding

Funded Repair Date:

Issued To

Est. Electric Crew Size: 00 WTC: 540, KAA_OH Genl CorrectMaint Tag

Gas Crew Size: 00 MAT: KAA, OH Genl CM Tag

Reviewed By: ______________________ Date of Field Review: ______________________

Completed or Canceled in Field By (LAN ID): [redacted] If No LAN ID Last Name, First Name: ______________

Complete or Cancel Date: 08/06/2021 Actual Hours: 6,00 *Check One: PG&E Crew ☐ T-Man ☐ Contractor ☐

*Check One: Completed ☒ Canceled ☐ Found Completed Upon Arrival ☐

Signature: ______________________________________

I verify that all maintenance on this notification is addressed (completed, canceled, or found completed upon arrival)

***Public Safety & Regulatory Reviewer: If notification was canceled, check one (required):**

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☐ **DUMM:** "Dummy" for order only
☐ **DUPL:** Duplicate EC for Same Location
☐ **EROR:** Created in Error (Desk Cancelation)
☐ **NCOA:** All Found Completed/Resolved on Arrival
☐ **NOCR:** No Compelling/Regulator Condition Exist
☐ **PROG:** Completed under another Program

Electric Overhead Tag

Notification #: 118961974

Priority: E **Sub Priority:**

PM Order #: 44855045

Date Identified: 04/30/2020

Date Required: 10/30/2020

List of Tasks on Notification

Completed Completed By: [redacted] Completion Date: 08/06/2021

Field Comments:

Comments

04/30/2020 07:32:55 PST INSPECTCPIC (INSPECTCPIC)

No tap rod on hot line clamps

04/10/2021 09:37:48 PST INSPECTCPIC (INSPECTCPIC)

Safety Reassessment

Inspected by: [redacted]

Field Submission Date/Time: Apr 10, 2021 at 09:31 AM

Suggested New Due Date: Apr 11, 2022

003-21. Condition needs to be addressed within the next 12 months

Comments: Do you see has not been fixed improper jumpers connections

also trees have grown around pool still 4 foot away from the energize

line but it would be hard to climb cannot take good photos of the pole

Additional Comments: Field Safety Assessment completed for Tier 2/3 EC

notifications that are not in 2021 work execution plan or scheduled

for detailed inspection

06/25/2021 17:07:58 PST [redacted].

44855045E PRINTED OUT TAG AND ATTACHMENTS FOR NOTIF 118961974 , SENT TO

REDDING M&C COORDINATOR [redacted]

07/22/2021 04:32:46 PST [redacted].

07/22/2021_Submitted by [redacted]_Update Order and

Notification Descriptions for HFTD 8/31 Population_WO0000001025772.

08/09/2021 08:18:30 PST [redacted].

[redacted] AND CREW COMPLETED 8/6/21. INSTALLED TAP GUARD. COMPLETED

TASK AND FINAL CONFIRMED CONSTRUCTION OPERATION.

FDA		New	Priority	Comp
Anchor				
Broken/Damaged	Repair		E	
	Replace		E	
Corroded	Repair		E	
	Replace		E	
Missing	Install		F	
Soil/Eroded/Graded	Adjust		F	
	Replace		F	
Animal Mitigation				
Broken/Damaged	Replace		E	
Mitigation Missing	Install		E	
Bird Protection				
Bird Protection	Replace		E	
CB Pole				
Broken/Damaged	Replace		F	
Burnt	Replace		E	
Decayed/Rotten	Replace		F	
Booster/Regulator				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
Excessive Operation	Overhaul		E	
Leaks/Seeps/Weeps	Clean		E	
	Repair		E	
	Replace		E	
Capacitor				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
	Replace		E	
Leaks/Seeps/Weeps	Clean		B	
	Repair		E	
	Replace		E	
Climbing Space				
Obstructed	Adjust		F	

FDA		New	Priority	Comp
Conductor				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
	Replace		E	
Clearance Impaired	Adjust		E	
	Install CL Pole		E	
	RayChem		E	
Floater	Repair		E	
Idle Facilities	Remove		E	
Improper Connection	Adjust		E	
Overloaded	Test		E	
Sag/Clearance	Adjust		E	
	Replace		E	
	Install Spreader Bracket		E	
Connector				
Burnt	Replace		E	
Corroded	Repair		E	
	Replace		E	
Incorrectly Installed	Replace		E	X
Temp Differential	Replace		E	
Crossarm				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
	Replace		E	
Decayed/Rotten	Repair		E	
	Replace		E	
Cutout				
Broken/Damaged	Repair		E	
	Replace		E	
Clearance Impaired	Adjust		E	
Flashed	Repair		E	
	Replace		E	
Decorative Streetlight				
Broken/Damaged	Replace		E	
Missing	Install		E	
Fault Indicators				
Broken/Damaged	Replace		E	
Ground				
Broken/Damaged	Repair		B	
	Replace		B	
Exposed	Repair		F	
Missing	Install		E	
Guy				
Broken/Damaged	Repair		E	
	Replace		E	
Clearance Impaired	Adjust		F	
Corroded	Repair		E	
	Replace		E	
Loose	Adjust		F	
Missing	Install		F	
Overgrown	Trim		E	
Strain/Abrasion	Adjust		F	
	Remove		F	
Guy Marker				
Missing	Install		F	
	Replace		F	

FDA		New	Priority	Comp
Hardware/Framing				
Bird Prot Required	Install		E	
Birdcage	Install		E	
Broken/Damaged	Repair		E	
	Replace		E	
Loose	Adjust		E	
Missing	Install		E	
High Sign				
Missing	Install		F	
Insulator				
Broken/Damaged	Replace		E	
Flashed	Replace		E	
Primary Squatter	Repair		E	
	Replace		E	
Secondary Squatter	Repair		E	
	Replace		E	
Jumper				
Burnt	Replace		E	
Clearance Impaired	Adjust		E	
	Replace		E	
LAPP Insulator				
Broken/Damaged	Replace		E	
Lightning Arrester				
Broken/Damaged	Repair		E	
	Replace		E	
Flashed	Repair		E	
	Replace		E	
Marking				
Broken/Damaged	Replace		F	
Missing	Install		F	
Molding				
Broken/Damaged	Repair		F	
	Replace		F	
Loose	Adjust		F	
Missing	Install		F	
OH Facility				
Bird Prot Required	Install		E	
Customer Related	Access		B	
	Appointment		B	
	Refusal		B	
Graffiti	Paint		E	
Idle Facilities	De-Energ		B	
	Remove		F	
	Transfer		F	
Limited Access	Inspect		B	
	Patrol		E	
	Remove		E	
Obstructed	Inspect		B	
	Remove		E	
	Replace		B	
Transmission Issue	Create LC		B	

FDA		New	Priority	Comp
Pole				
Broken/Damaged	Re-Frame		E	
	Repair		E	
	Replace		E	
	Pole Stub		E	
Burnt	Repair		E	
	Replace		E	
	Pole Stub		E	
Clearance Impaired	Repair		E	
	Replace		E	
Decayed/Rotten	Pole Top Repair		E	
	Repair		E	
	Replace		E	
	Pole Stub		E	
Idle Facilities	Remove		F	
Leaning	Adjust		E	
	Replace		E	
Overloaded	Replace		E	
	Test		E	
No Safe Access to Pole	Inspect		B	
Woodpecker Damage	Assessment		E	
Recloser/Sectionalizer				
Broken/Damaged	Repair		E	
	Replace		E	
Excessive Operation	Overhaul		E	
Flashed	Repair		E	
	Replace		E	
Leaks/Seeps/Weeps	Clean		E	
	Repair		E	
	Replace		E	
Riser/Pothead				
Broken/Damaged	Repair		E	
	Replace		F	
Installed in Error	Relocate		E	
Flashed	Repair		E	
	Replace		F	
ROAD				
No Safe Access to Pole	Repair		B	
RTVI				
Interference	Repair		E	
	Replace		E	
SCADA/PDAC				
Broken/Damaged	Repair		F	
	Replace		F	
Leaks/Seeps/Weeps	Repair		F	
	Replace		F	
	Test		B	
Steel Lattice Pole				
Guarding Missing	Install		E	
Pole Step				
Clearance Impaired	Remove		F	
Streetlight				
Broken/Damaged	Repair		E	
	Replace		E	
Missing	Install		E	
Steel Lattice Tower				
Broken/Damaged	Replace		E	
Switch				
Broken/Damaged	Repair		E	
	Replace		E	

EMERGENCY ONLY Check Cause (Required)			
☐	Animal	☐	Bird
☐	Equip Failed	☐	Fire
☐	Lightning	☐	Pole Rotten
☐	Third Party	☐	Tree Branch
☐	Tree Contact	☐	Tree Fell
☐	Unknown	☐	

All FDA's identified in field
Priority = Default Priority for B, E, G, & F-Regulatory FDA's
Comp = Check if completing FDA in Field

Electric Overhead Tag

Notification #: 118961974

Priority: E **Sub Priority:**

PM Order #: 44855045

Date Identified: 04/30/2020

Date Required: 10/30/2020

FDA		New	Priority	Comp
Trans_Dist Pole				
Bonding Broken	Repair		E	
Tie Wire				
Broken/Damaged	Replace		E	
Loose	Replace		E	
Transformer				
Broken/Damaged	Repair		E	
	Replace		F	
Corroded	Replace		E	
Flashed	Repair		E	
	Replace		E	
Idle Facilities	Remove		F	
No Common Neutral	Relocate		E	
Overloaded	Test		E	
Parallel	Replace		E	
Leaks/Seeps/Weeps	Clean		B	
	Repair		F	
	Replace		E	
Tree/Vine				
Clearance Impaired	Remove		E	
	Trim		E	
Decayed/Rotten	Install CL Pole		E	
Overgrown	Remove		E	
	Trim		E	
Tree Connect	Assessment		B	
	Install CL Pole		E	
Trip Saver				
Broken/Damaged	Repair		E	
	Replace		E	
Under-Arm Bus				
Broken/Damaged	Repair		F	

Electric Overhead Tag

Notification #: 119117143

PM Order #: 35257460

Priority: E **Sub Priority:**

Date Identified: 06/06/2020

Date Required: 06/06/2021

Identified in Field By: [redacted]
Street Address:

City: Reddimg
Cross Street: [redacted]
Division: North Valley
Latitude: [redacted]
Longitude:
Description: TREE_DECA_INPL - [redacted]d
[redacted]

Plat: Q2604
Circuit: 10340-1101, GIRVAN
SSD: 10779
Equipment #:
Pin #: ____________________
Pole #: ____________________
OIS #: ____________________
SAP Func. Location: ED.87-Q260400000.STRU.POLE
SAP Equipment: 101494005
Accessibility Tier:

Item Details

	Facility Type	Damage	Cause	Action
Item 3	TREE Tree/Vine ☒ Completed ☐ Canceled	DECA Decayed/Rotten		INPL Install CL Pole
Item 2	COND Conductor ☒ Completed ☐ Canceled	CLER Clearance Impaired		ADJU Adjust
Item 4	TREE Tree/Vine ☒ Completed ☐ Canceled	OVRG Overgrown		TRIM Trim

☐ Pole Test Sheet

User Status

Conductor/Operating Information		Field Identification		Field Condition (Exposure)		Field Condition (Accessibility)		Other	
Status	Description	Status	Description	Status	Description	Status	Description	Status	Description
SEC	Secondary	INSP	Inspection	FRAB	HFRA Within Both	BTKA	Bucket/Lift Truck Accessible	PROG	Internal Program Requiremen
CLR	Clearance Required			TER3	Tier3 Wildfire	CITY	City Moratorium	ESTR	Estimate Required
OH	Overhead			FMOB	Submitted from Mobile			GO	General Order
								COMP	Completed
								CPGD	Completed by PG&E - Division

Job Estimates

Est. Total Hrs. to Complete: 0
Main Work Center: REDDING, Redding
Funded Repair Date:

Issued To

Est. Electric Crew Size: 03 WTC: 311, 07D_Pole Replacement
Gas Crew Size: 00 MAT: 07D, Pole Repl

Reviewed By: ____________________ Date of Field Review: ____________________

Completed or Canceled in Field By (LAN ID): [redacted] If No LAN ID Last Name, First Name: ____________________

Complete or Cancel Date: 08/26/2021 Actual Hours: 18,00 *Check One: PG&E Crew ☐ T-Man ☐ Contractor ☐

*Check One: Completed ☒ Canceled ☐ Found Completed Upon Arrival ☐

Signature: ____________________

I verify that all maintenance on this notification is addressed (completed, canceled, or found completed upon arrival)

Electric Overhead Tag

Notification #: 119117143

PM Order #: 35257460

Priority: E **Sub Priority:**

Date Identified: 06/06/2020 **Date Required:** 06/06/2021

***Public Safety & Regulatory Reviewer: If notification was canceled, check one (required):**

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☐ **EROR:** Created in Error (Desk Cancelation)
☐ **NCOA:** All Found Completed/Resolved on Arrival
☐ **NOCR:** No Compelling/Regulator Condition Exist
☐ **PROG:** Completed under another Program

List of Tasks on Notification

Completed Completed By: [redacted] Completion Date: 08/26/2021

Field Comments:

Comments

06/06/2020 11:36:07 PST INSPECTCPIC (INSPECTCPIC)

- Location : 1

Secondary service attached to tree “Tree Attach” secondary service is rubbing hard against tree due to hard strain. Tree is dying. Need to install secondary pole. Small dirt road, only access in dry condition. Back yard machine preferably.

10/19/2020 09:14:22 PST [redacted]

Override from:

Elec Hrs=00014,

Override to:

Elec Hrs=00000,

secondary attatched to dead tree.

04/19/2021 06:32:50 PST INSPECTCPIC (INSPECTCPIC)

Safety Reassessment

Inspected by: P3C1

Field Submission Date/Time: Apr 19, 2021 at 06:32 AM

Suggested New Due Date: Apr 20, 2022

003-21. Condition needs to be addressed within the next 12 months

Comments: Why are you still on tree needs to install Clarence pool

Additional Comments: Field Safety Assessment completed for Tier 2/3 EC notifications that are not in 2021 work execution plan or scheduled for detailed inspection

06/10/2021 19:31:55 PST [redacted]

SAP ID: 103643934

06/17/2021 11:39:34 PST [redacted]

SENT TO [redacted] FOR ADER.

Electric Overhead Tag

Notification #: **119117143**

Priority: E **Sub Priority:**

PM Order #: **35257460**

Date Identified: 06/06/2020 **Date Required: 06/06/2021**

06/24/2021 13:10:10 PST [redacted]
CORRECTIONS MADE, ALL DOCUMENTS UPLOADED TO SAP AND ROUTED TO [redacted]
06/28/2021 13:21:14 PST [redacted]
35257460E Mapping Pre-Post Completed
07/22/2021 04:37:55 PST [redacted]
07/22/2021_Submitted by [redacted] Update Order and
Notification Descriptions for HFTD 8/31 Population_WO0000001025772.
07/30/2021 13:47:53 PST [redacted]
PG210245FY / 35257460E; SAC RMC JPD, INTENT, SKETCH AND LOAD CALCS SENT
TO UTILITY E-MAIL BOX; 45-DAY FOLLOW-UP. MAP ATTACHED TO ORDER. DS42
COMPLETE, AWAITING APPROVAL TO COMPLETE PC20.
07/31/2021 07:34:12 PST [redacted]
PG210245FY / 35257460E- SAC RMC JPD-JOINT POLE INTENT EARLY RELEASED TO
MEET COMPLIANCE REQUIREMENTS. PC20 COMPLETED, DOCUMENTS ATTACHED.

08/02/2021 17:59:33 PST [redacted]
35257460 FRESNO DESIGN CENTER DMD VERIFIED ALL REQUIRED TASKS ARE
COMPLETE. E-MAIL NOTIFICATION WAS SENT TO FRESNO DESIGN CENTER OMD ON
8/2/21 FOR ASSEBMLY OF THE CONSTRUCTION PACKAGE. OMD WILL CHANGE THE
USER STATUS TO UNSC SRDY AND COMPLETE THE PC25 TASK.
08/03/2021 05:46:58 PST [redacted]
35257460 E: Fresno RMC/OMD Prepared ‘ConPkgCompl’ (A69) and attached to
EDMS. No critical dependencies to be met. PC25 completed.
08/31/2021 14:43:54 PST [redacted]
ALL VEG WORK COMPLETED BY [redacted] ON 08/23/2021
09/23/2021 14:24:57 PST [redacted]
8/24/21 VEGETATION CREW COMPLETED TRIMMING/VEG CLEARING.
8/25/21 [redacted] AND ROKSTAD CONTRACT CREW COMPLETED POLE INSTALL.
8/26/21 PG&E ECF [redacted] COMPLETED SERVICE WORK.
10/22/2021 08:09:06 PST [redacted]
PG210245FY_35257460 E; SAC RMC JPD, SENT FORM 48 AND DRAFT FINAL TO PT;
45-DAY FOLLOW-UP. SCANNED AND ATTACHED F48 TO ORDER.
12/16/2021 06:27:56 PST [redacted]
From [redacted]
Sent: Thursday, December 16, 2021 6:26 AM
To: [redacted]
Cc: Billing <Billing@pge.com>
Subject: PG210245FY_F2 DF_R1_35257460 *APPROVAL NEEDED FOR 3.0*

FDA		New	Priority	Comp
Anchor				
Broken/Damaged	Repair		E	
	Replace		E	
Corroded	Repair		E	
	Replace		E	
Missing	Install		F	
Soil/Eroded/Graded	Adjust		F	
	Replace		F	
Animal Mitigation				
Broken/Damaged	Replace		E	
Mitigation Missing	Install		E	
Bird Protection				
Bird Protection	Replace		E	
CB Pole				
Broken/Damaged	Replace		F	
Burnt	Replace		E	
Decayed/Rotten	Replace		F	
Booster/Regulator				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
Excessive Operation	Overhaul		E	
Leaks/Seeps/Weeps	Clean		E	
	Repair		E	
	Replace		E	
Capacitor				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
	Replace		E	
Leaks/Seeps/Weeps	Clean		B	
	Repair		E	
	Replace		E	
Climbing Space				
Obstructed	Adjust		F	

FDA		New	Priority	Comp
Conductor				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
	Replace		E	
Clearance Impaired	Adjust		E	X
	Install CL Pole		E	
	RayChem		E	
Floater	Repair		E	
Idle Facilities	Remove		E	
Improper Connection	Adjust		E	
Overloaded	Test		E	
Sag/Clearance	Adjust		E	
	Replace		E	
	Install Spreader Bracket		E	
Connector				
Burnt	Replace		E	
Corroded	Repair		E	
	Replace		E	
Incorrectly Installed	Replace		E	
Temp Differential	Replace		E	
Crossarm				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
	Replace		E	
Decayed/Rotten	Repair		E	
	Replace		E	
Cutout				
Broken/Damaged	Repair		E	
	Replace		E	
Clearance Impaired	Adjust		E	
Flashed	Repair		E	
	Replace		E	
Decorative Streetlight				
Broken/Damaged	Replace		E	
Missing	Install		E	
Fault Indicators				
Broken/Damaged	Replace		E	
Ground				
Broken/Damaged	Repair		B	
	Replace		B	
Exposed	Repair		F	
Missing	Install		E	
Guy				
Broken/Damaged	Repair		E	
	Replace		E	
Clearance Impaired	Adjust		F	
Corroded	Repair		E	
	Replace		E	
Loose	Adjust		F	
Missing	Install		F	
Overgrown	Trim		E	
Strain/Abrasion	Adjust		F	
	Remove		F	
Guy Marker				
Missing	Install		F	
	Replace		F	

FDA		New	Priority	Comp
Hardware/Framing				
Bird Prot Required	Install		E	
Birdcage	Install		E	
Broken/Damaged	Repair		E	
	Replace		E	
Loose	Adjust		E	
Missing	Install		E	
High Sign				
Missing	Install		F	
Insulator				
Broken/Damaged	Replace		E	
Flashed	Replace		E	
Primary Squatter	Repair		E	
	Replace		E	
Secondary Squatter	Repair		E	
	Replace		E	
Jumper				
Burnt	Replace		E	
Clearance Impaired	Adjust		E	
	Replace		E	
LAPP Insulator				
Broken/Damaged	Replace		E	
Lightning Arrester				
Broken/Damaged	Repair		E	
	Replace		E	
Flashed	Repair		E	
	Replace		E	
Marking				
Broken/Damaged	Replace		F	
Missing	Install		F	
Molding				
Broken/Damaged	Repair		F	
	Replace		F	
Loose	Adjust		F	
Missing	Install		F	
OH Facility				
Bird Prot Required	Install		E	
Customer Related	Access		B	
	Appointment		B	
	Refusal		B	
Graffiti	Paint		E	
Idle Facilities	De-Energ		B	
	Remove		F	
	Transfer		F	
Limited Access	Inspect		B	
	Patrol		E	
	Remove		E	
Obstructed	Inspect		B	
	Remove		E	
	Replace		B	
Transmission Issue	Create LC		B	

FDA		New	Priority	Comp
Pole				
Broken/Damaged	Re-Frame		E	
	Repair		E	
	Replace		E	
	Pole Stub		E	
Burnt	Repair		E	
	Replace		E	
	Pole Stub		E	
Clearance Impaired	Repair		E	
	Replace		E	
Decayed/Rotten	Pole Top Repair		E	
	Repair		E	
	Replace		E	
	Pole Stub		E	
Idle Facilities	Remove		F	
Leaning	Adjust		E	
	Replace		E	
Overloaded	Replace		E	
	Test		E	
No Safe Access to Pole	Inspect		B	
Woodpecker Damage	Assessment		E	
Recloser/Sectionalizer				
Broken/Damaged	Repair		E	
	Replace		E	
Excessive Operation	Overhaul		E	
Flashed	Repair		E	
	Replace		E	
Leaks/Seeps/Weeps	Clean		E	
	Repair		E	
	Replace		E	
Riser/Pothead				
Broken/Damaged	Repair		E	
	Replace		F	
Installed in Error	Relocate		E	
Flashed	Repair		E	
	Replace		F	
ROAD				
No Safe Access to Pole	Repair		B	
RTVI				
Interference	Repair		E	
	Replace		E	
SCADA/PDAC				
Broken/Damaged	Repair		F	
	Replace		F	
Leaks/Seeps/Weeps	Repair		F	
	Replace		F	
	Test		B	
Steel Lattice Pole				
Guarding Missing	Install		E	
Pole Step				
Clearance Impaired	Remove		F	
Streetlight				
Broken/Damaged	Repair		E	
	Replace		E	
Missing	Install		E	
Steel Lattice Tower				
Broken/Damaged	Replace		E	
Switch				
Broken/Damaged	Repair		E	
	Replace		E	

EMERGENCY ONLY Check Cause (Required)			
☐	Animal	☐	Bird
☐	Equip Failed	☐	Fire
☐	Lightning	☐	Pole Rotten
☐	Third Party	☐	Tree Branch
☐	Tree Contact	☐	Tree Fell
☐	Unknown	☐	

All FDA's identified in field
Priority = Default Priority for B, E, G, & F-Regulatory FDA's
Comp = Check if completing FDA in Field

Electric Overhead Tag

Notification #: 119117143

Priority: E **Sub Priority:**

PM Order #: 35257460

Date Identified: 06/06/2020

Date Required: 06/06/2021

FDA		New	Priority	Comp
Trans_Dist Pole				
Bonding Broken	Repair		E	
Tie Wire				
Broken/Damaged	Replace		E	
Loose	Replace		E	
Transformer				
Broken/Damaged	Repair		E	
	Replace		F	
Corroded	Replace		E	
Flashed	Repair		E	
	Replace		E	
Idle Facilities	Remove		F	
No Common Neutral	Relocate		E	
Overloaded	Test		E	
Parallel	Replace		E	
Leaks/Seeps/Weeps	Clean		B	
	Repair		F	
	Replace		E	
Tree/Vine				
Clearance Impaired	Remove		E	
	Trim		E	
Decayed/Rotten	Install CL Pole		E	X
Overgrown	Remove		E	
	Trim		E	X
Tree Connect	Assessment		B	
	Install CL Pole		E	
Trip Saver				
Broken/Damaged	Repair		E	
	Replace		E	
Under-Arm Bus				
Broken/Damaged	Repair		F	

Electric Overhead Tag

Notification #: 121957559

PM Order #: 35282926

Priority: A **Sub Priority:**

Date Identified: 08/25/2021

Identified in Field By:	[redacted]	Plat:	Q2604
Street Address:		Circuit:	10340-1101, GIRVAN
		SSD:	10779
City:	REDDING	Equipment #:	
Cross Street:	[redacted]	Pin #:	
Division:	North Valley	Pole #:	
Latitude:	[redacted]	OIS #:	
Longitude:		SAP Func. Location:	ED.87-Q260400000.STRU.POLE
Description:	POLE_BURN_REPL - [redacted]	SAP Equipment:	101494005
		Accessibility Tier:	

Item Details

	Facility Type	Damage	Cause	Action
Item 1	POLE Pole	BURN Burnt	FIRE Fire	REPL Replace
	☒ Completed ☐ Canceled			
Item 2	COND Conductor	BURN Burnt	FIRE Fire	REPL Replace
	☒ Completed ☐ Canceled			
Item 3	TREE Tree/Vine	CLER Clearance Impaired	FIRE Fire	REMV Remove
	☒ Completed ☐ Canceled			

☒ Pole Test Sheet

User Status

Conductor/Operating Information		Field Identification		Field Condition (Exposure)		Field Condition (Accessibility)		Other	
Status	Description	Status	Description	Status	Description	Status	Description	Status	Description

Job Estimates / Issued To

Est. Total Hrs. to Complete: 44

Est. Electric Crew Size: 03

WTC: 501, 17B-EC - OH Capital Emergency

Main Work Center: REDDING, Redding

Gas Crew Size: 00

MAT: 17B, Repl Plnt Corr-E-OH

Funded Repair Date:

Reviewed By: ____________________ Date of Field Review: ____________________

Completed or Canceled in Field By (LAN ID): [redacted] If No LAN ID Last Name, First Name: ____________________

Complete or Cancel Date: 08/26/2021 Actual Hours: 24,00 *Check One: PG&E Crew ☐ T-Man ☒ Contractor ☐

*Check One: Completed ☒ Canceled ☐ Found Completed Upon Arrival ☐

Signature: ____________________

I verify that all maintenance on this notification is addressed (completed, canceled, or found completed upon arrival)

***Public Safety & Regulatory Reviewer: If notification was canceled, check one (required):**

☐ **CONV:** Converted to another Notif-Type
☐ **DUMM:** "Dummy" for order only
☐ **DUPL:** Duplicate EC for Same Location
☐ **EROR:** Created in Error (Desk Cancelation)
☐ **NCOA:** All Found Completed/Resolved on Arrival
☐ **NOCR:** No Compelling/Regulator Condition Exist
☐ **PROG:** Completed under another Program

List of Tasks on Notification

Electric Overhead Tag

Notification #: 121957559

PM Order #: 35282926

Priority: A **Sub Priority:**

Date Identified: 08/25/2021

Completed Completed By: [redacted] Completion Date: 08/26/2021

Field Comments:

Comments

08/25/2021 18:29:49 PST WMFASCPIC (WMFASCPIC)

Form Summary (non-saved Fields)

- Identified By Contractor : [redacted]
- Meter Number : [redacted]
- Operating Number :

REPLACE SINGLE PHASE TRANSFORMER POLE WITH 300' OF 1/0 TRIPLEX, HAS NEW CLEARENCE POLE, FIRE WRAPPED, WRAP IS CHARED, CAN TAKE WRAP OFF AND USE POLE OR ALSO REPLACE CLEARENCE POLE, TREES THAT BURNED AT BASE AT LEAST NEED TREE CREW TO INSPECT

Photos were taken

<SAFETY_INFO>

LINE & BUCK JUMPERS OPEN

</SAFETY_INFO>

08/26/2021 05:07:04 PST [redacted]

Confirmed both poles are located in Intermediate Loading Area

08/26/2021 13:54:18 PST [redacted]

35282926-Gas Est sup Approval on 8/26/2021

09/02/2021 08:18:11 PST [redacted]

COMPLETED 08/26/2021 BY [redacted]/PGE AND CREW.

09/02/2021 08:26:09 PST [redacted]

NOTIF#121957559 - NEW POLE, TX AND SERVICE INSTALLED

09/02/2021 08:36:26 PST [redacted]

COMPLETED EC TAGS AND UPLOADED TO SAP. COMPLETED TASKS AND CONFIRMED CONSTRUCTION OPERATIONS.

10/01/2021 11:00:59 PST [redacted]

From: [redacted]

Sent: Friday, October 1, 2021 11:00 AM

To: [redacted]

Cc: Pre-Construction 2020-21 <PreConstruction202021@pge.com>; Post-Construction 2020-21 <PostConstruction202021@pge.com> [redacted]

Subject: PG210415FY/ 35282926- REVISED OCALC NEEDED- LOC 2 -COMPLIANCE

DUE DATE 10/2

HI [redacted]

I am reviewing this post estimate to process today however it appears the crew redlined and installed a 55ft cl2 pole instead of a 50ft cl 2. Please upload a revised ocalc for LOC 2 for a 55ft cl 2 pole if possible today so that joint pole can meet our compliance date.

Thanks for your help.

[redacted]

Pacific Gas & Electric Company

Joint Pole Clerk-West Sac RMC

[redacted]

10/02/2021 15:27:08 PST [redacted]

PG210415FY/ 35282926 SAC RMC JPD; DRAFT FINAL, FORM 48 EMAILED TO [redacted] PT/_NORTH VALLEY_AND CC’D POST CONSTRUCTION BOX. 45 DAY FOLLOW UP. FORM 48 ATTACHED TO ORDER. EMAIL SENT TO OU ATTACHED TO ORDER.

From [redacted]

Sent: Saturday, October 2, 2021 3:26 PM

To [redacted]

Cc: Post-Construction 2020-21 <PostConstruction202021@pge.com>; Pre-Construction 2020-21 <PreConstruction202021@pge.com>

Subject: PG210415FY_F2_F2 DF_F48_R0_35282926_POST ESTIMATE

10/02/2021 15:37:34 PST [redacted]

From: [redacted]

Sent: Saturday, October 2, 2021 3:37 PM

To: [redacted]

Cc: Pre-Construction 2020-21 <PreConstruction202021@pge.com>; Post-Construction 2020-21 <PostConstruction202021@pge.com> [redacted]

Subject: FW: PG210415FY/ 35282926- REVISED OCALC NEEDED- LOC 2 - COMPLIANCE DUE DATE 10/2

[redacted]

Please SEE EMAIL below and provide a revised ocalc to send to the other utility to match with what is in the field for LOC 2. Once done I will send to AT&T for their records.

Thank you,

[redacted]

Electric Overhead Tag

Notification #: **121957559**

PM Order #: **35282926**

Priority: A **Sub Priority:**

Date Identified: 08/25/2021

Pacific Gas & Electric Company

Joint Pole Clerk-West Sac RMC

[redacted]

10/02/2021 18:10:47 PST [redacted]

PG210415FY/ 35282926 SAC RMC JPD SENT REVISED OCALC TO AT&T ALONG W/

FULL POST ESTIMATE PACKET; REVISED EMAIL ATTACHED TO ORDER.

12/01/2021 15:54:45 PST [redacted]

PG210415FY/35282926-JP SENT TO BILL

Form Summary (non-saved Fields)

- Identified By Contractor : [redacted]
- Meter Number : [redacted]
- Operating Number :

REPLACE SINGLE PHASE TRANSFORMER POLE WITH 300' OF 1/0 TRIPLEX, HAS NEW

CLEARENCE POLE, FIRE WRAPPED, WRAP IS CHARED, CAN TAKE WRAP OFF AND USE

POLE OR ALSO REPLACE CLEARENCE POLE, TREES THAT BURNED AT BASE AT LEAST

NEED TREE CREW TO INSPECT

Photos were taken

<SAFETY_INFO>

LINE & BUCK JUMPERS OPEN

</SAFETY_INFO>

08/26/2021 05:07:04 PST [redacted]

Confirmed both poles are located in Intermediate Loading Area

----

08/26/2021 13:54:18 PST [redacted]

35282926-Gas Est sup Approval on 8/26/2021

09/02/2021 08:18:11 PST [redacted]

COMPLETED 08/26/2021 BY [redacted]/PGE AND CREW.

09/02/2021 08:26:09 PST [redacted]

NOTIF#121957559 - NEW POLE, TX AND SERVICE INSTALLED

09/02/2021 08:36:26 PST [redacted]

COMPLETED EC TAGS AND UPLOADED TO SAP. COMPLETED TASKS AND CONFIRMED

CONSTRUCTION OPERATIONS.

Electric Overhead Tag

Notification #: 121957559

PM Order #: 35282926

Priority: A **Sub Priority:**

Date Identified: 08/25/2021

10/01/2021 11:00:59 PST [redacted]

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To: [redacted]

Cc: Pre-Construction 2020-21 <PreConstruction202021@pge.com>; Post-Construction 2020-21 <PostConstruction202021@pge.com> [redacted]

Subject: PG210415FY/ 35282926- REVISED OCALC NEEDED- LOC 2 -COMPLIANCE DUE DATE 10/2

HI [redacted]

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Pacific Gas & Electric Company

Joint Pole Clerk-West Sac RMC

[redacted]

10/02/2021 15:27:08 PST [redacted]

PG210415FY/ 35282926 SAC RMC JPD; DRAFT FINAL, FORM 48 EMAILED TO [redacted] PT/_NORTH VALLEY_AND CC'D POST CONSTRUCTION BOX. 45 DAY FOLLOW UP. FORM 48 ATTACHED TO ORDER. EMAIL SENT TO OU ATTACHED TO ORDER.

From [redacted]

Sent: Saturday, October 2, 2021 3:26 PM

To: [redacted]

Cc: Post-Construction 2020-21 <PostConstruction202021@pge.com>; Pre-Construction 2020-21 <PreConstruction202021@pge.com>

Subject: PG210415FY_F2_F2 DF_F48_R0_35282926_POST ESTIMATE

10/02/2021 15:37:34 PST [redacted]

From: [redacted]

Sent: Saturday, October 2, 2021 3:37 PM

To: [redacted]

Cc: Pre-Construction 2020-21 <PreConstruction202021@pge.com>; Post-

PG&E

Electric Overhead Tag

Notification #: **121957559**

PM Order #: **35282926**

Priority: A **Sub Priority:**

Date Identified: 08/25/2021

Construction 2020-21 <PostConstruction202021@pge.com>; [redacted]

Subject: FW: PG210415FY/ 35282926- REVISED OCALC NEEDED- LOC 2 - COMPLIANCE DUE DATE 10/2

[redacted]

Please SEE EMAIL below and provide a revised ocalc to send to the other utility to match with what is in the field for LOC 2. Once done I will send to AT&T for their records.

Thank you,

[redacted]

Pacific Gas & Electric Company

Joint Pole Clerk-West Sac RMC

[redacted]

10/02/2021 18:10:47 PST [redacted]

PG210415FY/ 35282926 SAC RMC JPD SENT REVISED OCALC TO AT&T ALONG W/ FULL POST ESTIMATE PACKET; REVISED EMAIL ATTACHED TO ORDER.

12/01/2021 15:54:45 PST [redacted]

PG210415FY/35282926-JP SENT TO BILL

FDA		New	Priority	Comp
Anchor				
Broken/Damaged	Repair		E	
	Replace		E	
Corroded	Repair		E	
	Replace		E	
Missing	Install		F	
Soil/Eroded/Graded	Adjust		F	
	Replace		F	
Animal Mitigation				
Broken/Damaged	Replace		E	
Mitigation Missing	Install		E	
Bird Protection				
Bird Protection	Replace		E	
CB Pole				
Broken/Damaged	Replace		F	
Burnt	Replace		E	
Decayed/Rotten	Replace		F	
Booster/Regulator				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
Excessive Operation	Overhaul		E	
Leaks/Seeps/Weeps	Clean		E	
	Repair		E	
	Replace		E	
Capacitor				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
	Replace		E	
Leaks/Seeps/Weeps	Clean		B	
	Repair		E	
	Replace		E	
Climbing Space				
Obstructed	Adjust		F	

FDA		New	Priority	Comp
Conductor				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
	Replace		E	X
Clearance Impaired	Adjust		E	
	Install CL Pole		E	
	RayChem		E	
Floater	Repair		E	
Idle Facilities	Remove		E	
Improper Connection	Adjust		E	
Overloaded	Test		E	
Sag/Clearance	Adjust		E	
	Replace		E	
	Install Spreader Bracket		E	
Connector				
Burnt	Replace		E	
Corroded	Repair		E	
	Replace		E	
Incorrectly Installed	Replace		E	
Temp Differential	Replace		E	
Crossarm				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
	Replace		E	
Decayed/Rotten	Repair		E	
	Replace		E	
Cutout				
Broken/Damaged	Repair		E	
	Replace		E	
Clearance Impaired	Adjust		E	
Flashed	Repair		E	
	Replace		E	
Decorative Streetlight				
Broken/Damaged	Replace		E	
Missing	Install		E	
Fault Indicators				
Broken/Damaged	Replace		E	
Ground				
Broken/Damaged	Repair		B	
	Replace		B	
Exposed	Repair		F	
Missing	Install		E	
Guy				
Broken/Damaged	Repair		E	
	Replace		E	
Clearance Impaired	Adjust		F	
Corroded	Repair		E	
	Replace		E	
Loose	Adjust		F	
Missing	Install		F	
Overgrown	Trim		E	
Strain/Abrasion	Adjust		F	
	Remove		F	
Guy Marker				
Missing	Install		F	
	Replace		F	

FDA		New	Priority	Comp
Hardware/Framing				
Bird Prot Required	Install		E	
Birdcage	Install		E	
Broken/Damaged	Repair		E	
	Replace		E	
Loose	Adjust		E	
Missing	Install		E	
High Sign				
Missing	Install		F	
Insulator				
Broken/Damaged	Replace		E	
Flashed	Replace		E	
Primary Squatter	Repair		E	
	Replace		E	
Secondary Squatter	Repair		E	
	Replace		E	
Jumper				
Burnt	Replace		E	
Clearance Impaired	Adjust		E	
	Replace		E	
LAPP Insulator				
Broken/Damaged	Replace		E	
Lightning Arrester				
Broken/Damaged	Repair		E	
	Replace		E	
Flashed	Repair		E	
	Replace		E	
Marking				
Broken/Damaged	Replace		F	
Missing	Install		F	
Molding				
Broken/Damaged	Repair		F	
	Replace		F	
Loose	Adjust		F	
Missing	Install		F	
OH Facility				
Bird Prot Required	Install		E	
Customer Related	Access		B	
	Appointment		B	
	Refusal		B	
Graffiti	Paint		E	
Idle Facilities	De-Energ		B	
	Remove		F	
	Transfer		F	
Limited Access	Inspect		B	
	Patrol		E	
	Remove		E	
Obstructed	Inspect		B	
	Remove		E	
	Replace		B	
Transmission Issue	Create LC		B	

FDA		New	Priority	Comp
Pole				
Broken/Damaged	Re-Frame		E	
	Repair		E	
	Replace		E	
	Pole Stub		E	
Burnt	Repair		E	
	Replace		E	X
	Pole Stub		E	
Clearance Impaired	Repair		E	
	Replace		E	
Decayed/Rotten	Pole Top Repair		E	
	Repair		E	
	Replace		E	
	Pole Stub		E	
Idle Facilities	Remove		F	
Leaning	Adjust		E	
	Replace		E	
Overloaded	Replace		E	
	Test		E	
No Safe Access to Pole	Inspect		B	
Woodpecker Damage	Assessment		E	
Recloser/Sectionalizer				
Broken/Damaged	Repair		E	
	Replace		E	
Excessive Operation	Overhaul		E	
Flashed	Repair		E	
	Replace		E	
Leaks/Seeps/Weeps	Clean		E	
	Repair		E	
	Replace		E	
Riser/Pothead				
Broken/Damaged	Repair		E	
	Replace		F	
Installed in Error	Relocate		E	
Flashed	Repair		E	
	Replace		F	
ROAD				
No Safe Access to Pole	Repair		B	
RTVI				
Interference	Repair		E	
	Replace		E	
SCADA/PDAC				
Broken/Damaged	Repair		F	
	Replace		F	
Leaks/Seeps/Weeps	Repair		F	
	Replace		F	
	Test		B	
Steel Lattice Pole				
Guarding Missing	Install		E	
Pole Step				
Clearance Impaired	Remove		F	
Streetlight				
Broken/Damaged	Repair		E	
	Replace		E	
Missing	Install		E	
Steel Lattice Tower				
Broken/Damaged	Replace		E	
Switch				
Broken/Damaged	Repair		E	
	Replace		E	

EMERGENCY ONLY
Check Cause (Required)

☐	Animal	☐	Bird
☐	Equip Failed	☒	Fire
☐	Lightning	☐	Pole Rotten
☐	Third Party	☐	Tree Branch
☐	Tree Contact	☐	Tree Fell
☐	Unknown	☐	

All FDA's identified in field
Priority = Default Priority for B, E, G, & F-Regulatory FDA's
Comp = Check if completing FDA in Field

Electric Overhead Tag

Notification #: 121957559

PM Order #: 35282926

Priority: A **Sub Priority:**

Date Identified: 08/25/2021

FDA		New	Priority	Comp
Trans_Dist Pole				
Bonding Broken	Repair		E	
Tie Wire				
Broken/Damaged	Replace		E	
Loose	Replace		E	
Transformer				
Broken/Damaged	Repair		E	
	Replace		F	
Corroded	Replace		E	
Flashed	Repair		E	
	Replace		E	
Idle Facilities	Remove		F	
No Common Neutral	Relocate		E	
Overloaded	Test		E	
Parallel	Replace		E	
Leaks/Seeps/Weeps	Clean		B	
	Repair		F	
	Replace		E	
Tree/Vine				
Clearance Impaired	Remove		E	X
	Trim		E	
Decayed/Rotten	Install CL Pole		E	
Overgrown	Remove		E	
	Trim		E	
Tree Connect	Assessment		B	
	Install CL Pole		E	
Trip Saver				
Broken/Damaged	Repair		E	
	Replace		E	
Under-Arm Bus				
Broken/Damaged	Repair		F	

Electric Overhead Tag

Notification #: **121957710**

PM Order #: **35282981**

Priority: A **Sub Priority:**

Date Identified: 08/25/2021

Identified in Field By: [redacted]
Street Address:

City: REDDING
Cross Street: [redacted]
Division: North Valley
Latitude: [redacted]
Longitude:
Description: POLE_BURN_REPL - [redacted]

Plat: Q2604
Circuit: 10340-1101, GIRVAN
SSD: 10779
Equipment #:
Pin #: ____________________
Pole #: ____________________
OIS #: ____________________
SAP Func. Location: ED.87-Q260400000.STRU.POLE
SAP Equipment: 101494007
Accessibility Tier:

Item Details

	Facility Type	Damage	Cause	Action
Item 1	POLE Pole	BURN Burnt	FIRE Fire	REPL Replace

☒ Completed ☐ Canceled

☒ Pole Test Sheet

User Status

Conductor/Operating Information		Field Identification		Field Condition (Exposure)		Field Condition (Accessibility)		Other	
Status	Description	Status	Description	Status	Description	Status	Description	Status	Description

Job Estimates — Issued To

Est. Total Hrs. to Complete: 27
Main Work Center: REDDING, Redding
Funded Repair Date:

Est. Electric Crew Size: 03
Gas Crew Size: 00

WTC: 501, 17B-EC - OH Capital Emergency
MAT: 17B, Repl Plnt Corr-E-OH

Reviewed By: ______________________________
Date of Field Review: ______________________________

Completed or Canceled in Field By (LAN ID): [redacted]
If No LAN ID Last Name, First Name: ______________________________

Complete or Cancel Date: 08/26/2021 Actual Hours: 12,00
*Check One: PG&E Crew ☐ T-Man ☒ Contractor ☐

*Check One: Completed ☒ Canceled ☐ Found Completed Upon Arrival ☐

Signature: ______________________________
I verify that all maintenance on this notification is addressed (completed, canceled, or found completed upon arrival)

***Public Safety & Regulatory Reviewer: If notification was canceled, check one (required):**

☐ **CONV:** Converted to another Notif-Type
☐ **EROR:** Created in Error (Desk Cancelation)
☐ **PROG:** Completed under another Program
☐ **DUMM:** "Dummy" for order only
☐ **NCOA:** All Found Completed/Resolved on Arrival
☐ **DUPL:** Duplicate EC for Same Location
☐ **NOCR:** No Compelling/Regulator Condition Exist

List of Tasks on Notification

Completed Completed By: [redacted] Completion Date: 08/26/2021

Electric Overhead Tag

Notification #: 121957710

PM Order #: 35282981

Priority: A **Sub Priority:**

Date Identified: 08/25/2021

Field Comments:

Comments

08/25/2021 18:39:55 PST WMFASCPIC (WMFASCPIC)

Form Summary (non-saved Fields)

- Identified By Contractor : [redacted]
- Meter Number [redacted]
- Operating Number :

REPLACE SINGLE PHASE LINE AND BUCK POLE, NO TRUCK AXS, NEED BUGGY

Photos were taken

<SAFETY_INFO>

OUTAGE

</SAFETY_INFO>

09/02/2021 13:12:10 PST [redacted]

COMPLETED 08/26/2021 BY [redacted] AND CREW.

INSTALLED NEW POLE.

09/02/2021 14:21:13 PST [redacted]

COMPLETED TAG AND UPLOADED TO SAP. COMPLETED TASKS AND WILL FINAL CONFIRM/DC05 ONCE TIME IS CHARGED AND ESTMATE IS IN.

10/20/2021 09:48:50 PST [redacted]

10/20/2021 [redacted] E2E Order Management: Urgent 1A/1B order cleanup effort. Moving status of orders to FICL. Orders are pending cancellation and need to be moved into the correct status for reporting purposes. Req by [redacted]

Form Summary (non-saved Fields)

- Identified By Contractor : [redacted]
- Meter Number : [redacted]
- Operating Number :

REPLACE SINGLE PHASE LINE AND BUCK POLE, NO TRUCK AXS, NEED BUGGY

Photos were taken

<SAFETY_INFO>

OUTAGE

</SAFETY_INFO>

09/02/2021 13:12:10 PST [redacted]

COMPLETED 08/26/2021 BY [redacted] AND CREW.

INSTALLED NEW POLE.

09/02/2021 14:21:13 PST [redacted]

COMPLETED TAG AND UPLOADED TO SAP. COMPLETED TASKS AND WILL FINAL CONFIRM/DC05 ONCE TIME IS CHARGED AND ESTMATE IS IN.

10/20/2021 09:48:50 PST [redacted]

10/20/2021 SMO5 E2E Order Management: Urgent 1A/1B order cleanup effort. Moving status of orders to FICL. Orders are pending cancellation and need to be moved into the correct status for reporting purposes. Req by [redacted]

FDA		New	Priority	Comp
Anchor				
Broken/Damaged	Repair		E	
	Replace		E	
Corroded	Repair		E	
	Replace		E	
Missing	Install		F	
Soil/Eroded/Graded	Adjust		F	
	Replace		F	
Animal Mitigation				
Broken/Damaged	Replace		E	
Mitigation Missing	Install		E	
Bird Protection				
Bird Protection	Replace		E	
CB Pole				
Broken/Damaged	Replace		F	
Burnt	Replace		E	
Decayed/Rotten	Replace		F	
Booster/Regulator				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
Excessive Operation	Overhaul		E	
Leaks/Seeps/Weeps	Clean		E	
	Repair		E	
	Replace		E	
Capacitor				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
	Replace		E	
Leaks/Seeps/Weeps	Clean		B	
	Repair		E	
	Replace		E	
Climbing Space				
Obstructed	Adjust		F	

FDA		New	Priority	Comp
Conductor				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
	Replace		E	
Clearance Impaired	Adjust		E	
	Install CL Pole		E	
	RayChem		E	
Floater	Repair		E	
Idle Facilities	Remove		E	
Improper Connection	Adjust		E	
Overloaded	Test		E	
Sag/Clearance	Adjust		E	
	Replace		E	
	Install Spreader Bracket		E	
Connector				
Burnt	Replace		E	
Corroded	Repair		E	
	Replace		E	
Incorrectly Installed	Replace		E	
Temp Differential	Replace		E	
Crossarm				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
	Replace		E	
Decayed/Rotten	Repair		E	
	Replace		E	
Cutout				
Broken/Damaged	Repair		E	
	Replace		E	
Clearance Impaired	Adjust		E	
Flashed	Repair		E	
	Replace		E	
Decorative Streetlight				
Broken/Damaged	Replace		E	
Missing	Install		E	
Fault Indicators				
Broken/Damaged	Replace		E	
Ground				
Broken/Damaged	Repair		B	
	Replace		B	
Exposed	Repair		F	
Missing	Install		E	
Guy				
Broken/Damaged	Repair		E	
	Replace		E	
Clearance Impaired	Adjust		F	
Corroded	Repair		E	
	Replace		E	
Loose	Adjust		F	
Missing	Install		F	
Overgrown	Trim		E	
Strain/Abrasion	Adjust		F	
	Remove		F	
Guy Marker				
Missing	Install		F	
	Replace		F	

FDA		New	Priority	Comp
Hardware/Framing				
Bird Prot Required	Install		E	
Birdcage	Install		E	
Broken/Damaged	Repair		E	
	Replace		E	
Loose	Adjust		E	
Missing	Install		E	
High Sign				
Missing	Install		F	
Insulator				
Broken/Damaged	Replace		E	
Flashed	Replace		E	
Primary Squatter	Repair		E	
	Replace		E	
Secondary Squatter	Repair		E	
	Replace		E	
Jumper				
Burnt	Replace		E	
Clearance Impaired	Adjust		E	
	Replace		E	
LAPP Insulator				
Broken/Damaged	Replace		E	
Lightning Arrester				
Broken/Damaged	Repair		E	
	Replace		E	
Flashed	Repair		E	
	Replace		E	
Marking				
Broken/Damaged	Replace		F	
Missing	Install		F	
Molding				
Broken/Damaged	Repair		F	
	Replace		F	
Loose	Adjust		F	
Missing	Install		F	
OH Facility				
Bird Prot Required	Install		E	
Customer Related	Access		B	
	Appointment		B	
	Refusal		B	
Graffiti	Paint		E	
Idle Facilities	De-Energ		B	
	Remove		F	
	Transfer		F	
Limited Access	Inspect		B	
	Patrol		E	
	Remove		E	
Obstructed	Inspect		B	
	Remove		E	
	Replace		B	
Transmission Issue	Create LC		B	

FDA		New	Priority	Comp
Pole				
Broken/Damaged	Re-Frame		E	
	Repair		E	
	Replace		E	
	Pole Stub		E	
Burnt	Repair		E	
	Replace		E	X
	Pole Stub		E	
Clearance Impaired	Repair		E	
	Replace		E	
Decayed/Rotten	Pole Top Repair		E	
	Repair		E	
	Replace		E	
	Pole Stub		E	
Idle Facilities	Remove		F	
Leaning	Adjust		E	
	Replace		E	
Overloaded	Replace		E	
	Test		E	
No Safe Access to Pole	Inspect		B	
Woodpecker Damage	Assessment		E	
Recloser/Sectionalizer				
Broken/Damaged	Repair		E	
	Replace		E	
Excessive Operation	Overhaul		E	
Flashed	Repair		E	
	Replace		E	
Leaks/Seeps/Weeps	Clean		E	
	Repair		E	
	Replace		E	
Riser/Pothead				
Broken/Damaged	Repair		E	
	Replace		F	
Installed in Error	Relocate		E	
Flashed	Repair		E	
	Replace		F	
ROAD				
No Safe Access to Pole	Repair		B	
RTVI				
Interference	Repair		E	
	Replace		E	
SCADA/PDAC				
Broken/Damaged	Repair		F	
	Replace		F	
Leaks/Seeps/Weeps	Repair		F	
	Replace		F	
	Test		B	
Steel Lattice Pole				
Guarding Missing	Install		E	
Pole Step				
Clearance Impaired	Remove		F	
Streetlight				
Broken/Damaged	Repair		E	
	Replace		E	
Missing	Install		E	
Steel Lattice Tower				
Broken/Damaged	Replace		E	
Switch				
Broken/Damaged	Repair		E	
	Replace		E	

EMERGENCY ONLY Check Cause (Required)	
[ ] Animal	[ ] Bird
[ ] Equip Failed	[x] Fire
[ ] Lightning	[ ] Pole Rotten
[ ] Third Party	[ ] Tree Branch
[ ] Tree Contact	[ ] Tree Fell
[ ] Unknown	[ ]

All FDA's identified in field
Priority = Default Priority for B, E, G, & F-Regulatory FDA's
Comp = Check if completing FDA in Field

Printed By: [redacted] 12/16/2021

Notification #: 121957710

Electric Overhead Tag

Notification #: 121957710

PM Order #: 35282981

Priority: A **Sub Priority:**

Date Identified: 08/25/2021

FDA		New	Priority	Comp
Trans_Dist Pole				
Bonding Broken	Repair		E	
Tie Wire				
Broken/Damaged	Replace		E	
Loose	Replace		E	
Transformer				
Broken/Damaged	Repair		E	
	Replace		F	
Corroded	Replace		E	
Flashed	Repair		E	
	Replace		E	
Idle Facilities	Remove		F	
No Common Neutral	Relocate		E	
Overloaded	Test		E	
Parallel	Replace		E	
Leaks/Seeps/Weeps	Clean		B	
	Repair		F	
	Replace		E	
Tree/Vine				
Clearance Impaired	Remove		E	
	Trim		E	
Decayed/Rotten	Install CL Pole		E	
Overgrown	Remove		E	
	Trim		E	
Tree Connect	Assessment		B	
	Install CL Pole		E	
Trip Saver				
Broken/Damaged	Repair		E	
	Replace		E	
Under-Arm Bus				
Broken/Damaged	Repair		F	

Electric Overhead Tag

Notification #: 121957712

PM Order #: 44955417

Priority: A **Sub Priority:**

Date Identified: 08/25/2021

Identified in Field By: [redacted]
Street Address:

City: REDDING
Cross Street: [redacted]
Division: North Valley
Latitude: [redacted]
Longitude:
Description: JUMP_BURN_REPL - [redacted]

Plat: Q2604
Circuit: 10340-1101, GIRVAN
SSD: 10779
Equipment #:
Pin #: ____________________
Pole #: ____________________
OIS #: ____________________
SAP Func. Location: ED.87-Q260400000.STRU.POLE
SAP Equipment: 101493982
Accessibility Tier: IT3 INACCESSIBLE TIER 3

Item Details

	Facility Type	Damage	Cause	Action
Item 1	JUMP Jumper	BURN Burnt	FIRE Fire	REPL Replace

☒ Completed ☐ Canceled

☐ Pole Test Sheet

User Status

Conductor/Operating Information		Field Identification		Field Condition (Exposure)		Field Condition (Accessibility)		Other	
Status	Description	Status	Description	Status	Description	Status	Description	Status	Description

Job Estimates — Issued To

Est. Total Hrs. to Complete: 4

Est. Electric Crew Size: 03 WTC: 550, BHB-EC - OH Exp Emergency

Main Work Center: REDDING, Redding

Gas Crew Size: 00 MAT: BHB, CM-E OH

Funded Repair Date:

Reviewed By: ____________________ Date of Field Review: ____________________

Completed or Canceled in Field By (LAN ID): [redacted] If No LAN ID Last Name, First Name: ____________________

Complete or Cancel Date: 08/26/2021 Actual Hours: __________ *Check One: PG&E Crew ☐ T-Man ☒ Contractor ☐

*Check One: Completed ☒ Canceled ☐ Found Completed Upon Arrival ☐

Signature: ____

I verify that all maintenance on this notification is addressed (completed, canceled, or found completed upon arrival)

***Public Safety & Regulatory Reviewer: If notification was canceled, check one (required):**

☐ **CONV:** Converted to another Notif-Type
☐ **DUMM:** "Dummy" for order only
☐ **DUPL:** Duplicate EC for Same Location
☐ **EROR:** Created in Error (Desk Cancelation)
☐ **NCOA:** All Found Completed/Resolved on Arrival
☐ **NOCR:** No Compelling/Regulator Condition Exist
☐ **PROG:** Completed under another Program

List of Tasks on Notification

Completed Completed By: [redacted] Completion Date: 08/26/2021

Electric Overhead Tag

Notification #: 121957712

PM Order #: 44955417

Priority: A **Sub Priority:**

Date Identified: 08/25/2021

Field Comments:

Comments

08/25/2021 18:49:26 PST WMFASCPIC (WMFASCPIC)

Form Summary (non-saved Fields)

- Identified By Contractor : [redacted]
- Meter Number : [redacted]
- Operating Number :

REPLACE LINE AND BUCK JUMPERS 1 NORTH OF FUSES [redacted]

Photos were taken

09/01/2021 07:44:38 PST [redacted]

COMPLETED 08/26/2021 BY [redacted] AND CREW.

NEW JUMPERS INSTALLED

09/01/2021 08:14:35 PST [redacted]

COMPLETED NOTIF AND UPOADED TO SAP. COMPLETED TASKS AND CONFIRMED CONSTRUCTION OPS.

Form Summary (non-saved Fields)

- Identified By Contractor : [redacted]
- Meter Number : [redacted]
- Operating Number :

REPLACE LINE AND BUCK JUMPERS 1 NORTH OF FUSES [redacted]

Photos were taken

09/01/2021 07:44:38 PST [redacted]

COMPLETED 08/26/2021 BY [redacted] AND CREW.

NEW JUMPERS INSTALLED

09/01/2021 08:14:35 PST [redacted]

COMPLETED NOTIF AND UPOADED TO SAP. COMPLETED TASKS AND CONFIRMED CONSTRUCTION OPS.

FDA		New	Priority	Comp
Anchor				
Broken/Damaged	Repair		E	
	Replace		E	
Corroded	Repair		E	
	Replace		E	
Missing	Install		F	
Soil/Eroded/Graded	Adjust		F	
	Replace		F	
Animal Mitigation				
Broken/Damaged	Replace		E	
Mitigation Missing	Install		E	
Bird Protection				
Bird Protection	Replace		E	
CB Pole				
Broken/Damaged	Replace		F	
Burnt	Replace		E	
Decayed/Rotten	Replace		F	
Booster/Regulator				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
Excessive Operation	Overhaul		E	
Leaks/Seeps/Weeps	Clean		E	
	Repair		E	
	Replace		E	
Capacitor				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
	Replace		E	
Leaks/Seeps/Weeps	Clean		B	
	Repair		E	
	Replace		E	
Climbing Space				
Obstructed	Adjust		F	

EMERGENCY ONLY Check Cause (Required)			
☐	Animal	☐	Bird
☐	Equip Failed	☒	Fire
☐	Lightning	☐	Pole Rotten
☐	Third Party	☐	Tree Branch
☐	Tree Contact	☐	Tree Fell
☐	Unknown	☐	

FDA		New	Priority	Comp
Conductor				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
	Replace		E	
Clearance Impaired	Adjust		E	
	Install CL Pole		E	
	RayChem		E	
Floater	Repair		E	
Idle Facilities	Remove		E	
Improper Connection	Adjust		E	
Overloaded	Test		E	
Sag/Clearance	Adjust		E	
	Replace		E	
	Install Spreader Bracket		E	
Connector				
Burnt	Replace		E	
Corroded	Repair		E	
	Replace		E	
Incorrectly Installed	Replace		E	
Temp Differential	Replace		E	
Crossarm				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
	Replace		E	
Decayed/Rotten	Repair		E	
	Replace		E	
Cutout				
Broken/Damaged	Repair		E	
	Replace		E	
Clearance Impaired	Adjust		E	
Flashed	Repair		E	
	Replace		E	
Decorative Streetlight				
Broken/Damaged	Replace		E	
Missing	Install		E	
Fault Indicators				
Broken/Damaged	Replace		E	
Ground				
Broken/Damaged	Repair		B	
	Replace		B	
Exposed	Repair		F	
Missing	Install		E	
Guy				
Broken/Damaged	Repair		E	
	Replace		E	
Clearance Impaired	Adjust		F	
Corroded	Repair		E	
	Replace		E	
Loose	Adjust		F	
Missing	Install		F	
Overgrown	Trim		E	
Strain/Abrasion	Adjust		F	
	Remove		F	
Guy Marker				
Missing	Install		F	
	Replace		F	

FDA		New	Priority	Comp
Hardware/Framing				
Bird Prot Required	Install		E	
Birdcage	Install		E	
Broken/Damaged	Repair		E	
	Replace		E	
Loose	Adjust		E	
Missing	Install		E	
High Sign				
Missing	Install		F	
Insulator				
Broken/Damaged	Replace		E	
Flashed	Replace		E	
Primary Squatter	Repair		E	
	Replace		E	
Secondary Squatter	Repair		E	
	Replace		E	
Jumper				
Burnt	Replace		E	X
Clearance Impaired	Adjust		E	
	Replace		E	
LAPP Insulator				
Broken/Damaged	Replace		E	
Lightning Arrester				
Broken/Damaged	Repair		E	
	Replace		E	
Flashed	Repair		E	
	Replace		E	
Marking				
Broken/Damaged	Replace		F	
Missing	Install		F	
Molding				
Broken/Damaged	Repair		F	
	Replace		F	
Loose	Adjust		F	
Missing	Install		F	
OH Facility				
Bird Prot Required	Install		E	
Customer Related	Access		B	
	Appointment		B	
	Refusal		B	
Graffiti	Paint		E	
Idle Facilities	De-Energ		B	
	Remove		F	
	Transfer		F	
Limited Access	Inspect		B	
	Patrol		E	
	Remove		E	
Obstructed	Inspect		B	
	Remove		E	
	Replace		B	
Transmission Issue	Create LC		B	

FDA		New	Priority	Comp
Pole				
Broken/Damaged	Re-Frame		E	
	Repair		E	
	Replace		E	
	Pole Stub		E	
Burnt	Repair		E	
	Replace		E	
	Pole Stub		E	
Clearance Impaired	Repair		E	
	Replace		E	
Decayed/Rotten	Pole Top Repair		E	
	Repair		E	
	Replace		E	
	Pole Stub		E	
Idle Facilities	Remove		F	
Leaning	Adjust		E	
	Replace		E	
Overloaded	Replace		E	
	Test		E	
No Safe Access to Pole	Inspect		B	
Woodpecker Damage	Assessment		E	
Recloser/Sectionalizer				
Broken/Damaged	Repair		E	
	Replace		E	
Excessive Operation	Overhaul		E	
Flashed	Repair		E	
	Replace		E	
Leaks/Seeps/Weeps	Clean		E	
	Repair		E	
	Replace		E	
Riser/Pothead				
Broken/Damaged	Repair		E	
	Replace		F	
Installed in Error	Relocate		E	
Flashed	Repair		E	
	Replace		F	
ROAD				
No Safe Access to Pole	Repair		B	
RTVI				
Interference	Repair		E	
	Replace		E	
SCADA/PDAC				
Broken/Damaged	Repair		F	
	Replace		F	
Leaks/Seeps/Weeps	Repair		F	
	Replace		F	
	Test		B	
Steel Lattice Pole				
Guarding Missing	Install		E	
Pole Step				
Clearance Impaired	Remove		F	
Streetlight				
Broken/Damaged	Repair		E	
	Replace		E	
Missing	Install		E	
Steel Lattice Tower				
Broken/Damaged	Replace		E	
Switch				
Broken/Damaged	Repair		E	
	Replace		E	

All FDA's identified in field
Priority = Default Priority for B, E, G, & F-Regulatory FDA's
Comp = Check if completing FDA in Field

Electric Overhead Tag

Notification #: **121957712**

PM Order #: **44955417**

Priority: A **Sub Priority:**

Date Identified: 08/25/2021

FDA		New	Priority	Comp
Trans_Dist Pole				
Bonding Broken	Repair		E	
Tie Wire				
Broken/Damaged	Replace		E	
Loose	Replace		E	
Transformer				
Broken/Damaged	Repair		E	
	Replace		F	
Corroded	Replace		E	
Flashed	Repair		E	
	Replace		E	
Idle Facilities	Remove		F	
No Common Neutral	Relocate		E	
Overloaded	Test		E	
Parallel	Replace		E	
Leaks/Seeps/Weeps	Clean		B	
	Repair		F	
	Replace		E	
Tree/Vine				
Clearance Impaired	Remove		E	
	Trim		E	
Decayed/Rotten	Install CL Pole		E	
Overgrown	Remove		E	
	Trim		E	
Tree Connect	Assessment		B	
	Install CL Pole		E	
Trip Saver				
Broken/Damaged	Repair		E	
	Replace		E	
Under-Arm Bus				
Broken/Damaged	Repair		F	

Electric Overhead Tag

Notification #: 121957713

PM Order #: 44955418

Priority: A **Sub Priority:**

Date Identified: 08/25/2021

Identified in Field By:	[redacted]	Plat:	Q2604
Street Address:		Circuit:	10340-1101, GIRVAN
		SSD:	10779
City:	REDDING	Equipment #:	
Cross Street:	[redacted]	Pin #:	____________________
Division:	North Valley	Pole #:	____________________
Latitude:	[redacted]	OIS #:	____________________
Longitude:		SAP Func. Location:	ED.87-Q260400000.STRU.POLE
Description:	GRND_BROK_REPL - [redacted]	SAP Equipment:	103922501
		Accessibility Tier:	

Item Details

	Facility Type	Damage	Cause	Action
Item 1	GRND Ground	BROK Broken/Damaged	FIRE Fire	REPL Replace

☒ Completed ☐ Canceled

☐ Pole Test Sheet

User Status

Conductor/Operating Information		Field Identification		Field Condition (Exposure)		Field Condition (Accessibility)		Other	
Status	Description	Status	Description	Status	Description	Status	Description	Status	Description

Job Estimates — Issued To

Est. Total Hrs. to Complete: 2

Est. Electric Crew Size: 01 WTC: 550, BHB-EC - OH Exp Emergency

Main Work Center: REDDING, Redding

Gas Crew Size: 00 MAT: BHB, CM-E OH

Funded Repair Date:

Reviewed By: ____________________ Date of Field Review: ____________________

Completed or Canceled in Field By (LAN ID): [redacted] If No LAN ID Last Name, First Name: ____________________

Complete or Cancel Date: 08/26/2021 Actual Hours: __________ *Check One: PG&E Crew ☐ T-Man ☒ Contractor ☐

*Check One: Completed ☒ Canceled ☐ Found Completed Upon Arrival ☐

Signature: ____________________

I verify that all maintenance on this notification is addressed (completed, canceled, or found completed upon arrival)

***Public Safety & Regulatory Reviewer: If notification was canceled, check one (required):**

☐ **CONV:** Converted to another Notif-Type ☐ **DUMM:** "Dummy" for order only ☐ **DUPL:** Duplicate EC for Same Location

☐ **EROR:** Created in Error (Desk Cancelation) ☐ **NCOA:** All Found Completed/Resolved on Arrival ☐ **NOCR:** No Compelling/Regulator Condition Exist

☐ **PROG:** Completed under another Program

List of Tasks on Notification

Completed Completed By: [redacted] Completion Date: 08/26/2021

Electric Overhead Tag

Notification #: 121957713

PM Order #: 44955418

Priority: A **Sub Priority:**

Date Identified: 08/25/2021

Field Comments:

Comments

08/25/2021 18:55:17 PST WMFASCPIC (WMFASCPIC)

Form Summary (non-saved Fields)

- Identified By Contractor : [redacted]
- Meter Number : [redacted]
- Operating Number :

REPLACE GROUND ASYMBLY AND PT 4

Photos were taken

<SAFETY_INFO>

STILL ENERGIZED

</SAFETY_INFO>

09/01/2021 07:48:49 PST [redacted]

COMPLETED 08/26/2021 BY [redacted] AND CREW.

INSTALLED NEW GROUND RUN

09/01/2021 08:11:26 PST [redacted]

COMPLETED NOTIF AND ATTACHED TO SAP.

COMPLETED TASKS AND CONFIRMED CONSTUCTION OPS.

Form Summary (non-saved Fields)

- Identified By Contractor [redacted]
- Meter Number [redacted]
- Operating Number :

REPLACE GROUND ASYMBLY AND PT 4

Photos were taken

<SAFETY_INFO>

STILL ENERGIZED

</SAFETY_INFO>

09/01/2021 07:48:49 PST [redacted]

COMPLETED 08/26/2021 BY [redacted] AND CREW.

INSTALLED NEW GROUND RUN

09/01/2021 08:11:26 PST [redacted]

COMPLETED NOTIF AND ATTACHED TO SAP.

COMPLETED TASKS AND CONFIRMED CONSTUCTION OPS.

FDA		New	Priority	Comp
Anchor				
Broken/Damaged	Repair		E	
	Replace		E	
Corroded	Repair		E	
	Replace		E	
Missing	Install		F	
Soil/Eroded/Graded	Adjust		F	
	Replace		F	
Animal Mitigation				
Broken/Damaged	Replace		E	
Mitigation Missing	Install		E	
Bird Protection				
Bird Protection	Replace		E	
CB Pole				
Broken/Damaged	Replace		F	
Burnt	Replace		E	
Decayed/Rotten	Replace		F	
Booster/Regulator				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
Excessive Operation	Overhaul		E	
Leaks/Seeps/Weeps	Clean		E	
	Repair		E	
	Replace		E	
Capacitor				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
	Replace		E	
Leaks/Seeps/Weeps	Clean		B	
	Repair		E	
	Replace		E	
Climbing Space				
Obstructed	Adjust		F	

FDA		New	Priority	Comp
Conductor				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
	Replace		E	
Clearance Impaired	Adjust		E	
	Install CL Pole		E	
	RayChem		E	
Floater	Repair		E	
Idle Facilities	Remove		E	
Improper Connection	Adjust		E	
Overloaded	Test		E	
Sag/Clearance	Adjust		E	
	Replace		E	
	Install Spreader Bracket		E	
Connector				
Burnt	Replace		E	
Corroded	Repair		E	
	Replace		E	
Incorrectly Installed	Replace		E	
Temp Differential	Replace		E	
Crossarm				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
	Replace		E	
Decayed/Rotten	Repair		E	
	Replace		E	
Cutout				
Broken/Damaged	Repair		E	
	Replace		E	
Clearance Impaired	Adjust		E	
Flashed	Repair		E	
	Replace		E	
Decorative Streetlight				
Broken/Damaged	Replace		E	
Missing	Install		E	
Fault Indicators				
Broken/Damaged	Replace		E	
Ground				
Broken/Damaged	Repair		B	
	Replace		B	X
Exposed	Repair		F	
Missing	Install		E	
Guy				
Broken/Damaged	Repair		E	
	Replace		E	
Clearance Impaired	Adjust		F	
Corroded	Repair		E	
	Replace		E	
Loose	Adjust		F	
Missing	Install		F	
Overgrown	Trim		E	
Strain/Abrasion	Adjust		F	
	Remove		F	
Guy Marker				
Missing	Install		F	
	Replace		F	

FDA		New	Priority	Comp
Hardware/Framing				
Bird Prot Required	Install		E	
Birdcage	Install		E	
Broken/Damaged	Repair		E	
	Replace		E	
Loose	Adjust		E	
Missing	Install		E	
High Sign				
Missing	Install		F	
Insulator				
Broken/Damaged	Replace		E	
Flashed	Replace		E	
Primary Squatter	Repair		E	
	Replace		E	
Secondary Squatter	Repair		E	
	Replace		E	
Jumper				
Burnt	Replace		E	
Clearance Impaired	Adjust		E	
	Replace		E	
LAPP Insulator				
Broken/Damaged	Replace		E	
Lightning Arrester				
Broken/Damaged	Repair		E	
	Replace		E	
Flashed	Repair		E	
	Replace		E	
Marking				
Broken/Damaged	Replace		F	
Missing	Install		F	
Molding				
Broken/Damaged	Repair		F	
	Replace		F	
Loose	Adjust		F	
Missing	Install		F	
OH Facility				
Bird Prot Required	Install		E	
Customer Related	Access		B	
	Appointment		B	
	Refusal		B	
Graffiti	Paint		E	
Idle Facilities	De-Energ		B	
	Remove		F	
	Transfer		F	
Limited Access	Inspect		B	
	Patrol		E	
	Remove		E	
Obstructed	Inspect		B	
	Remove		E	
	Replace		B	
Transmission Issue	Create LC		B	

FDA		New	Priority	Comp
Pole				
Broken/Damaged	Re-Frame		E	
	Repair		E	
	Replace		E	
	Pole Stub		E	
Burnt	Repair		E	
	Replace		E	
	Pole Stub		E	
Clearance Impaired	Repair		E	
	Replace		E	
Decayed/Rotten	Pole Top Repair		E	
	Repair		E	
	Replace		E	
	Pole Stub		E	
Idle Facilities	Remove		F	
Leaning	Adjust		E	
	Replace		E	
Overloaded	Replace		E	
	Test		E	
No Safe Access to Pole	Inspect		B	
Woodpecker Damage	Assessment		E	
Recloser/Sectionalizer				
Broken/Damaged	Repair		E	
	Replace		E	
Excessive Operation	Overhaul		E	
Flashed	Repair		E	
	Replace		E	
Leaks/Seeps/Weeps	Clean		E	
	Repair		E	
	Replace		E	
Riser/Pothead				
Broken/Damaged	Repair		E	
	Replace		F	
Installed in Error	Relocate		E	
Flashed	Repair		E	
	Replace		F	
ROAD				
No Safe Access to Pole	Repair		B	
RTVI				
Interference	Repair		E	
	Replace		E	
SCADA/PDAC				
Broken/Damaged	Repair		F	
	Replace		F	
Leaks/Seeps/Weeps	Repair		F	
	Replace		F	
	Test		B	
Steel Lattice Pole				
Guarding Missing	Install		E	
Pole Step				
Clearance Impaired	Remove		F	
Streetlight				
Broken/Damaged	Repair		E	
	Replace		E	
Missing	Install		E	
Steel Lattice Tower				
Broken/Damaged	Replace		E	
Switch				
Broken/Damaged	Repair		E	
	Replace		E	

EMERGENCY ONLY Check Cause (Required)			
☐	Animal	☐	Bird
☐	Equip Failed	☒	Fire
☐	Lightning	☐	Pole Rotten
☐	Third Party	☐	Tree Branch
☐	Tree Contact	☐	Tree Fell
☐	Unknown	☐	

All FDA's identified in field
Priority = Default Priority for B, E, G, & F-Regulatory FDA's
Comp = Check if completing FDA in Field

Electric Overhead Tag

Notification #: 121957713

PM Order #: 44955418

Priority: A **Sub Priority:**

Date Identified: 08/25/2021

FDA		New	Priority	Comp
Trans_Dist Pole				
Bonding Broken	Repair		E	
Tie Wire				
Broken/Damaged	Replace		E	
Loose	Replace		E	
Transformer				
Broken/Damaged	Repair		E	
	Replace		F	
Corroded	Replace		E	
Flashed	Repair		E	
	Replace		E	
Idle Facilities	Remove		F	
No Common Neutral	Relocate		E	
Overloaded	Test		E	
Parallel	Replace		E	
Leaks/Seeps/Weeps	Clean		B	
	Repair		F	
	Replace		E	
Tree/Vine				
Clearance Impaired	Remove		E	
	Trim		E	
Decayed/Rotten	Install CL Pole		E	
Overgrown	Remove		E	
	Trim		E	
Tree Connect	Assessment		B	
	Install CL Pole		E	
Trip Saver				
Broken/Damaged	Repair		E	
	Replace		E	
Under-Arm Bus				
Broken/Damaged	Repair		F	

Electric Overhead Tag

Notification #: 121958005

PM Order #: 35282926

Priority: A **Sub Priority:**

Date Identified: 08/25/2021

Identified in Field By:	[redacted]	Plat:	Q2604
Street Address:		Circuit:	10340-1101, GIRVAN
		SSD:	10779
City:	REDDING	Equipment #:	
Cross Street:	[redacted]	Pin #:	____________________
Division:	North Valley	Pole #:	____________________
Latitude:	[redacted]	OIS #:	____________________
Longitude:		SAP Func. Location:	ED.87-Q260400000.STRU.POLE
Description:	POLE_BURN_REPL - [redacted]	SAP Equipment:	101494007
		Accessibility Tier:	

Item Details

	Facility Type	Damage	Cause	Action
Item 1	POLE Pole	BURN Burnt	FIRE Fire	REPL Replace
	☒ Completed ☐ Canceled			
Item 2	COND Conductor	BURN Burnt	FIRE Fire	REPL Replace
	☒ Completed ☐ Canceled			
Item 3	TREE Tree/Vine	CLER Clearance Impaired	FIRE Fire	REMV Remove
	☒ Completed ☐ Canceled			

☒ Pole Test Sheet

User Status

Conductor/Operating Information		Field Identification		Field Condition (Exposure)		Field Condition (Accessibility)		Other	
Status	Description	Status	Description	Status	Description	Status	Description	Status	Description

Job Estimates — Issued To

Est. Total Hrs. to Complete: 44

Main Work Center: REDDING, Redding

Funded Repair Date:

Est. Electric Crew Size: 03

Gas Crew Size: 00

WTC: 501, 17B-EC - OH Capital Emergency

MAT: 17B, Repl Plnt Corr-E-OH

Reviewed By: ______________________ Date of Field Review: ______________________

Completed or Canceled in Field By (LAN ID): [redacted] If No LAN ID Last Name, First Name: ______________________

Complete or Cancel Date: 08/26/2021 Actual Hours: 24,00 *Check One: PG&E Crew ☐ T-Man ☒ Contractor ☐

*Check One: Completed ☒ Canceled ☐ Found Completed Upon Arrival ☐

Signature: ____

I verify that all maintenance on this notification is addressed (completed, canceled, or found completed upon arrival)

***Public Safety & Regulatory Reviewer: If notification was canceled, check one (required):**

☐ **CONV:** Converted to another Notif-Type ☐ **DUMM:** "Dummy" for order only ☐ **DUPL:** Duplicate EC for Same Location

☐ **EROR:** Created in Error (Desk Cancelation) ☐ **NCOA:** All Found Completed/Resolved on Arrival ☐ **NOCR:** No Compelling/Regulator Condition Exist

☐ **PROG:** Completed under another Program

List of Tasks on Notification

Electric Overhead Tag

Notification #: **121958005**

PM Order #: **35282926**

Priority: **A** **Sub Priority:**

Date Identified: **08/25/2021**

Completed | Completed By: [redacted] | Completion Date: 08/26/2021

Field Comments:

Comments

09/02/2021 08:20:47 PST [redacted].

COMPLETED 08/26/2021 BY [redacted] AND CREW.

NEW POLE INSTALLED.

FDA		New	Priority	Comp
Anchor				
Broken/Damaged	Repair		E	
	Replace		E	
Corroded	Repair		E	
	Replace		E	
Missing	Install		F	
Soil/Eroded/Graded	Adjust		F	
	Replace		F	
Animal Mitigation				
Broken/Damaged	Replace		E	
Mitigation Missing	Install		E	
Bird Protection				
Bird Protection	Replace		E	
CB Pole				
Broken/Damaged	Replace		F	
Burnt	Replace		E	
Decayed/Rotten	Replace		F	
Booster/Regulator				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
Excessive Operation	Overhaul		E	
Leaks/Seeps/Weeps	Clean		E	
	Repair		E	
	Replace		E	
Capacitor				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
	Replace		E	
Leaks/Seeps/Weeps	Clean		B	
	Repair		E	
	Replace		E	
Climbing Space				
Obstructed	Adjust		F	

FDA		New	Priority	Comp
Conductor				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
	Replace		E	X
Clearance Impaired	Adjust		E	
	Install CL Pole		E	
	RayChem		E	
Floater	Repair		E	
Idle Facilities	Remove		E	
Improper Connection	Adjust		E	
Overloaded	Test		E	
Sag/Clearance	Adjust		E	
	Replace		E	
	Install Spreader Bracket		E	
Connector				
Burnt	Replace		E	
Corroded	Repair		E	
	Replace		E	
Incorrectly Installed	Replace		E	
Temp Differential	Replace		E	
Crossarm				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
	Replace		E	
Decayed/Rotten	Repair		E	
	Replace		E	
Cutout				
Broken/Damaged	Repair		E	
	Replace		E	
Clearance Impaired	Adjust		E	
Flashed	Repair		E	
	Replace		E	
Decorative Streetlight				
Broken/Damaged	Replace		E	
Missing	Install		E	
Fault Indicators				
Broken/Damaged	Replace		E	
Ground				
Broken/Damaged	Repair		B	
	Replace		B	
Exposed	Repair		F	
Missing	Install		E	
Guy				
Broken/Damaged	Repair		E	
	Replace		E	
Clearance Impaired	Adjust		F	
Corroded	Repair		E	
	Replace		E	
Loose	Adjust		F	
Missing	Install		F	
Overgrown	Trim		E	
Strain/Abrasion	Adjust		F	
	Remove		F	
Guy Marker				
Missing	Install		F	
	Replace		F	

FDA		New	Priority	Comp
Hardware/Framing				
Bird Prot Required	Install		E	
Birdcage	Install		E	
Broken/Damaged	Repair		E	
	Replace		E	
Loose	Adjust		E	
Missing	Install		E	
High Sign				
Missing	Install		F	
Insulator				
Broken/Damaged	Replace		E	
Flashed	Replace		E	
Primary Squatter	Repair		E	
	Replace		E	
Secondary Squatter	Repair		E	
	Replace		E	
Jumper				
Burnt	Replace		E	
Clearance Impaired	Adjust		E	
	Replace		E	
LAPP Insulator				
Broken/Damaged	Replace		E	
Lightning Arrester				
Broken/Damaged	Repair		E	
	Replace		E	
Flashed	Repair		E	
	Replace		E	
Marking				
Broken/Damaged	Replace		F	
Missing	Install		F	
Molding				
Broken/Damaged	Repair		F	
	Replace		F	
Loose	Adjust		F	
Missing	Install		F	
OH Facility				
Bird Prot Required	Install		E	
Customer Related	Access		B	
	Appointment		B	
	Refusal		B	
Graffiti	Paint		E	
Idle Facilities	De-Energ		B	
	Remove		F	
	Transfer		F	
Limited Access	Inspect		B	
	Patrol		E	
	Remove		E	
Obstructed	Inspect		B	
	Remove		E	
	Replace		B	
Transmission Issue	Create LC		B	

FDA		New	Priority	Comp
Pole				
Broken/Damaged	Re-Frame		E	
	Repair		E	
	Replace		E	
	Pole Stub		E	
Burnt	Repair		E	
	Replace		E	X
	Pole Stub		E	
Clearance Impaired	Repair		E	
	Replace		E	
Decayed/Rotten	Pole Top Repair		E	
	Repair		E	
	Replace		E	
	Pole Stub		E	
Idle Facilities	Remove		F	
Leaning	Adjust		E	
	Replace		E	
Overloaded	Replace		E	
	Test		E	
No Safe Access to Pole	Inspect		B	
Woodpecker Damage	Assessment		E	
Recloser/Sectionalizer				
Broken/Damaged	Repair		E	
	Replace		E	
Excessive Operation	Overhaul		E	
Flashed	Repair		E	
	Replace		E	
Leaks/Seeps/Weeps	Clean		E	
	Repair		E	
	Replace		E	
Riser/Pothead				
Broken/Damaged	Repair		E	
	Replace		F	
Installed in Error	Relocate		E	
Flashed	Repair		E	
	Replace		F	
ROAD				
No Safe Access to Pole	Repair		B	
RTVI				
Interference	Repair		E	
	Replace		E	
SCADA/PDAC				
Broken/Damaged	Repair		F	
	Replace		F	
Leaks/Seeps/Weeps	Repair		F	
	Replace		F	
	Test		B	
Steel Lattice Pole				
Guarding Missing	Install		E	
Pole Step				
Clearance Impaired	Remove		F	
Streetlight				
Broken/Damaged	Repair		E	
	Replace		E	
Missing	Install		E	
Steel Lattice Tower				
Broken/Damaged	Replace		E	
Switch				
Broken/Damaged	Repair		E	
	Replace		E	

EMERGENCY ONLY Check Cause (Required)			
☐	Animal	☐	Bird
☐	Equip Failed	☒	Fire
☐	Lightning	☐	Pole Rotten
☐	Third Party	☐	Tree Branch
☐	Tree Contact	☐	Tree Fell
☐	Unknown	☐	

All FDA's identified in field
Priority = Default Priority for B, E, G, & F-Regulatory FDA's
Comp = Check if completing FDA in Field

Electric Overhead Tag

Notification #: 121958005

PM Order #: 35282926

Priority: A **Sub Priority:**

Date Identified: 08/25/2021

FDA		New	Priority	Comp
Trans_Dist Pole				
Bonding Broken	Repair		E	
Tie Wire				
Broken/Damaged	Replace		E	
Loose	Replace		E	
Transformer				
Broken/Damaged	Repair		E	
	Replace		F	
Corroded	Replace		E	
Flashed	Repair		E	
	Replace		E	
Idle Facilities	Remove		F	
No Common Neutral	Relocate		E	
Overloaded	Test		E	
Parallel	Replace		E	
Leaks/Seeps/Weeps	Clean		B	
	Repair		F	
	Replace		E	
Tree/Vine				
Clearance Impaired	Remove		E	X
	Trim		E	
Decayed/Rotten	Install CL Pole		E	
Overgrown	Remove		E	
	Trim		E	
Tree Connect	Assessment		B	
	Install CL Pole		E	
Trip Saver				
Broken/Damaged	Repair		E	
	Replace		E	
Under-Arm Bus				
Broken/Damaged	Repair		F	

Electric Overhead Tag

Notification #: 116805838

Priority: E **Sub Priority:** FS

PM Order #: 35154332

Date Identified: 03/21/2019

Date Required: 09/18/2019

Identified in Field By: [redacted]
Street Address:

City: REDDING
Cross Street:
Division: North Valley
Latitude: [redacted]
Longitude:
Description: POLE_BROK_REPL - 3E/O [redacted]

Plat: Q2604
Circuit: 10340-1101, GIRVAN
SSD: 346147
Equipment #:
Pin #: ____________________
Pole #: ____________________
OIS #: ____________________
SAP Func. Location: ED.87-Q260400000.STRU.POLE
SAP Equipment: 101493982
Accessibility Tier: IT3 INACCESSIBLE TIER 3

Item Details

	Facility Type	Damage	Cause	Action
Item 3	POLE Pole	BROK Broken/Damaged		REPL Replace
	☐ Completed ☐ Canceled			
Item 2	LAPP LAPP Insulator	BROK Broken/Damaged		REPL Replace
	☐ Completed ☐ Canceled			

☐ Pole Test Sheet

User Status

Conductor/Operating Information		Field Identification		Field Condition (Exposure)		Field Condition (Accessibility)		Other	
Status	Description	Status	Description	Status	Description	Status	Description	Status	Description
PRI	Primary			TER3	Tier3 Wildfire	REAR	Rear Easement	PRTO	WSIP Pronto
JPOL	Joint Pole			REMT	Remote Area			ESTR	Estimate Required
OH	Overhead			FMOB	Submitted from Mobile				

Job Estimates — Issued To

Est. Total Hrs. to Complete: 14
Est. Electric Crew Size: 03
WTC: 311, 07D_Pole Replacement

Main Work Center: REDDING, Redding
Gas Crew Size: 00
MAT: 07D, Pole Repl

Funded Repair Date:

Reviewed By: ______________________________ Date of Field Review: ______________________________

Completed or Canceled in Field By (LAN ID): ☐☐☐☐ If No LAN ID Last Name, First Name: ______________________________

Complete or Cancel Date: ____________ Actual Hours: ________ *Check One: PG&E Crew ☐ T-Man ☐ Contractor ☐

*Check One: Completed ☐ Canceled ☐ Found Completed Upon Arrival ☐

Signature: ____

I verify that all maintenance on this notification is addressed (completed, canceled, or found completed upon arrival)

***Public Safety & Regulatory Reviewer: If notification was canceled, check one (required):**

☐ **CONV:** Converted to another Notif-Type
☐ **EROR:** Created in Error (Desk Cancelation)
☐ **PROG:** Completed under another Program
☐ **DUMM:** "Dummy" for order only
☐ **NCOA:** All Found Completed/Resolved on Arrival
☐ **DUPL:** Duplicate EC for Same Location
☐ **NOCR:** No Compelling/Regulator Condition Exist

List of Tasks on Notification

Electric Overhead Tag

Notification #: 116805838

PM Order #: 35154332

Priority: E **Sub Priority:** FS

Date Identified: 03/21/2019 **Date Required:** 09/18/2019

Reviewed Completed By: [redacted] Completion Date: 08/14/2019

Field Comments:

Comments

03/21/2019 13:20:57 PST INSPECTCPIC (INSPECTCPIC)

- Location : WSIP

Lapp insulators, 3 phase construction. May be bucket truck accessible from driveway.

04/24/2019 10:26:37 PST [redacted]

Override from:

Elec Hrs=00006,

Override to:

Elec Hrs=00014,

05/10/2019 11:41:46 PST [redacted] Mass updated to reflect resourse assignment.

06/03/2019 15:33:11 PST [redacted]

Resource assignment change from CONT to T300 per agreement

06/21/2019 12:42:06 PST [redacted]

REVW task added to notif to track EC hardening project team review of Tier 2/3 notifs; REVW task will be completed upon completion of review for potential hardening project. Contact [redacted] for questions about this review process and hardening projects.. [redacted] 061319

WO0000004333794

08/17/2019 11:50:17 PST [redacted]

08142019: Requested b [redacted] Notif released by EC Optimization Review Team on 8/14/2019, confirming that this work can be executed on an individual tag basis and released to normal work flow.

WO0000004361584

02/18/2020 07:34:31 PST [redacted]

35154332-E: Package pulled for fielding. Estimator not yet assigned.

03/02/2020 07:37:46 PST [redacted]

35154332-E: Fielded by [redacted] on 2/25/20

35154332-E: Verified "R" in Resp for Ord Mgmt

32514332-E: Starting Ocalc and EES on 3/2/20

03/02/2020 10:08:07 PST [redacted]

35154332-E: EES Completed

03/02/2020 10:29:50 PST [redacted]

35154332-E: NEW JPA PG200359FY FOR JOB, JPA TASKS ACTIVATED. UPLOADED FIELD NOTES & PICS DOCUMENT FOR SUBMISSION WITH NEW JPA INTENT TO OU PER URGENT TIER 2/3 GUIDELINES, SUBJECT POLE LOCATION 1 IDENTIFIED IN THE DOCUMENTS UPLOADED UNDER DOC A29 DO-FIELENOTES.

03/04/2020 07:58:51 PST [redacted]

35154332-E: MET COMPLETED

03/09/2020 10:08:28 PST [redacted]

PM submitted to 07D SAC RMC for ADE Review

04/29/2020 16:24:47 PST CONSTRCTCPIC (CONSTRCTCPIC)

Safety Reassessment

Inspected By: [redacted]

004. Low Safety/Reliability Impact

Comments: Lapp insulators

Additional Comments: Field Safety Assessment completed for Tier 2/3 EC notifications that are not in 2020 work execution plan or sch

08/21/2020 10:31:37 PST [redacted]

PM submitted for EES approval.

08/24/2020 06:54:29 PST [redacted]

PM# 35154332 [redacted] & [redacted] completed.

08/31/2020 09:19:31 PST [redacted]

PG200359FY/ 35154332 E; SAC RMC JPD, INTENT, SKETCH, PHOTOS AND LOAD CALCS SENT TO PT/NORTH VALLEY/; 15-DAY FOLLOW-UP. MAP ATTACHED TO ORDER. DS42 COMPLETE, PC20 IN PROCESS.

-DPP6

09/01/2020 14:39:10 PST [redacted]

35154332-E FRESNO DESIGN CENTER - DMD REVEWED PER DAILY PC25 REPORT. JP SENT TO UTILITY PER JPA DATABASE. FOLLOW-UP PC20 TASKS. ORDER USER STATUS CHANGED TO PEND FROM UNSC AND PC25 TASK CHANGED TO BLANK FROM IN PROCESS.

09/02/2020 05:41:33 PST [redacted]

35154332 FRESNO DESIGN CENTER DMD REVIEW, JOB NOT READY FOR RELEASE DUE TO JP IN PROCESS

12/30/2020 15:42:08 PST [redacted]

35154332E Mapping Pre-Post Completed

04/10/2021 09:00:27 PST INSPECTCPIC (INSPECTCPIC)

Safety Reassessment

Inspected by: [redacted]

Electric Overhead Tag

Notification #: 116805838

Priority: E **Sub Priority:** FS

PM Order #: 35154332

Date Identified: 03/21/2019

Date Required: 09/18/2019

Field Submission Date/Time: Apr 9, 2021 at 11:31 AM
Suggested New Due Date: Apr 10, 2022
003-21. Condition needs to be addressed within the next 12 months
Comments: Pole his shell cracking and showing where insulators are
busted jumpers are made with one bolts
Additional Comments: Field Safety Assessment completed for Tier 2/3 EC
notifications that are not in 2021 work execution plan or scheduled
for detailed inspection
06/22/2021 07:15:26 PST [redacted]
strike team job
35154332 e fresno design center dmd moved user status to pend pc25 blank
emailed joint pole desk to advise once form 2 & 48 are attached in sap
06/24/2021 09:39:10 PST [redacted]
35154332 e fresno design center dmd sent 2nd email to joint pole desk &
supervisor [redacted] ccd job owner [redacted] & dmd supervisor [redacted] to advise once
form 2 & 48 are attached in sap
06/25/2021 06:05:50 PST [redacted]
PG200359FY / 35154332
SAC RMC JPD, APPROVED INTENT NOT RECEIVED FROM OUTSIDE UTILITY. UPLOADED
PRE-CONSTRUCTION FORM 2 AND PRE-CONSTRUCTION FORM 48 TO SAP DOCS.
VERIFIED DS42 AND PC20 TASKS COMPLETE.
06/25/2021 06:17:12 PST [redacted]
35154332 e FRESNO DESIGN CENTER DMD VERIFIED ALL REQUIRED TASKS ARE
COMPLETE. E-MAIL NOTIFICATION WAS SENT TO FRESNO DESIGN CENTER OMD ON
6/25/2021 FOR ASSEBMLY OF THE CONSTRUCTION PACKAGE. OMD WILL CHANGE THE
USER STATUS TO UNSC SRDY AND COMPLETE THE PC25 TASK.
06/25/2021 06:35:03 PST [redacted]
35154332.E. Photo file too large to attach. Fresno RMC/OMD Prepared
'ConPkgCompl' (A69) and attached to EDMS. There are no critical
dependencies to be met. PC25 completed

FDA		New	Priority	Comp
Anchor				
Broken/Damaged	Repair		E	
	Replace		E	
Corroded	Repair		E	
	Replace		E	
Missing	Install		F	
Soil/Eroded/Graded	Adjust		F	
	Replace		F	
Animal Mitigation				
Broken/Damaged	Replace		E	
Mitigation Missing	Install		E	
Bird Protection				
Bird Protection	Replace		E	
CB Pole				
Broken/Damaged	Replace		F	
Burnt	Replace		E	
Decayed/Rotten	Replace		F	
Booster/Regulator				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
Excessive Operation	Overhaul		E	
Leaks/Seeps/Weeps	Clean		E	
	Repair		E	
	Replace		E	
Capacitor				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
	Replace		E	
Leaks/Seeps/Weeps	Clean		B	
	Repair		E	
	Replace		E	
Climbing Space				
Obstructed	Adjust		F	

FDA		New	Priority	Comp
Conductor				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
	Replace		E	
Clearance Impaired	Adjust		E	
	Install CL Pole		E	
	RayChem		E	
Floater	Repair		E	
Idle Facilities	Remove		E	
Improper Connection	Adjust		E	
Overloaded	Test		E	
Sag/Clearance	Adjust		E	
	Replace		E	
	Install Spreader Bracket		E	
Connector				
Burnt	Replace		E	
Corroded	Repair		E	
	Replace		E	
Incorrectly Installed	Replace		E	
Temp Differential	Replace		E	
Crossarm				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
	Replace		E	
Decayed/Rotten	Repair		E	
	Replace		E	
Cutout				
Broken/Damaged	Repair		E	
	Replace		E	
Clearance Impaired	Adjust		E	
Flashed	Repair		E	
	Replace		E	
Decorative Streetlight				
Broken/Damaged	Replace		E	
Missing	Install		E	
Fault Indicators				
Broken/Damaged	Replace		E	
Ground				
Broken/Damaged	Repair		B	
	Replace		B	
Exposed	Repair		F	
Missing	Install		E	
Guy				
Broken/Damaged	Repair		E	
	Replace		E	
Clearance Impaired	Adjust		F	
Corroded	Repair		E	
	Replace		E	
Loose	Adjust		F	
Missing	Install		F	
Overgrown	Trim		E	
Strain/Abrasion	Adjust		F	
	Remove		F	
Guy Marker				
Missing	Install		F	
	Replace		F	

FDA		New	Priority	Comp
Hardware/Framing				
Bird Prot Required	Install		E	
Birdcage	Install		E	
Broken/Damaged	Repair		E	
	Replace		E	
Loose	Adjust		E	
Missing	Install		E	
High Sign				
Missing	Install		F	
Insulator				
Broken/Damaged	Replace		E	
Flashed	Replace		E	
Primary Squatter	Repair		E	
	Replace		E	
Secondary Squatter	Repair		E	
	Replace		E	
Jumper				
Burnt	Replace		E	
Clearance Impaired	Adjust		E	
	Replace		E	
LAPP Insulator				
Broken/Damaged	Replace	X	E	
Lightning Arrester				
Broken/Damaged	Repair		E	
	Replace		E	
Flashed	Repair		E	
	Replace		E	
Marking				
Broken/Damaged	Replace		F	
Missing	Install		F	
Molding				
Broken/Damaged	Repair		F	
	Replace		F	
Loose	Adjust		F	
Missing	Install		F	
OH Facility				
Bird Prot Required	Install		E	
Customer Related	Access		B	
	Appointment		B	
	Refusal		B	
Graffiti	Paint		E	
Idle Facilities	De-Energ		B	
	Remove		F	
	Transfer		F	
Limited Access	Inspect		B	
	Patrol		E	
	Remove		E	
Obstructed	Inspect		B	
	Remove		E	
	Replace		B	
Transmission Issue	Create LC		B	

FDA		New	Priority	Comp
Pole				
Broken/Damaged	Re-Frame		E	
	Repair		E	
	Replace	X	E	
	Pole Stub		E	
Burnt	Repair		E	
	Replace		E	
	Pole Stub		E	
Clearance Impaired	Repair		E	
	Replace		E	
Decayed/Rotten	Pole Top Repair		E	
	Repair		E	
	Replace		E	
	Pole Stub		E	
Idle Facilities	Remove		F	
Leaning	Adjust		E	
	Replace		E	
Overloaded	Replace		E	
	Test		E	
No Safe Access to Pole	Inspect		B	
Woodpecker Damage	Assessment		E	
Recloser/Sectionalizer				
Broken/Damaged	Repair		E	
	Replace		E	
Excessive Operation	Overhaul		E	
Flashed	Repair		E	
	Replace		E	
Leaks/Seeps/Weeps	Clean		E	
	Repair		E	
	Replace		E	
Riser/Pothead				
Broken/Damaged	Repair		E	
	Replace		F	
Installed in Error	Relocate		E	
Flashed	Repair		E	
	Replace		F	
ROAD				
No Safe Access to Pole	Repair		B	
RTVI				
Interference	Repair		E	
	Replace		E	
SCADA/PDAC				
Broken/Damaged	Repair		F	
	Replace		F	
Leaks/Seeps/Weeps	Repair		F	
	Replace		F	
	Test		B	
Steel Lattice Pole				
Guarding Missing	Install		E	
Pole Step				
Clearance Impaired	Remove		F	
Streetlight				
Broken/Damaged	Repair		E	
	Replace		E	
Missing	Install		E	
Steel Lattice Tower				
Broken/Damaged	Replace		E	
Switch				
Broken/Damaged	Repair		E	
	Replace		E	

EMERGENCY ONLY Check Cause (Required)			
☐	Animal	☐	Bird
☐	Equip Failed	☐	Fire
☐	Lightning	☐	Pole Rotten
☐	Third Party	☐	Tree Branch
☐	Tree Contact	☐	Tree Fell
☐	Unknown	☐	

All FDA's identified in field
Priority = Default Priority for B, E, G, & F-Regulatory FDA's
Comp = Check if completing FDA in Field

Electric Overhead Tag

Notification #: 116805838

PM Order #: 35154332

Priority: E **Sub Priority:** FS

Date Identified: 03/21/2019

Date Required: 09/18/2019

FDA		New	Priority	Comp
Trans_Dist Pole				
Bonding Broken	Repair		E	
Tie Wire				
Broken/Damaged	Replace		E	
Loose	Replace		E	
Transformer				
Broken/Damaged	Repair		E	
	Replace		F	
Corroded	Replace		E	
Flashed	Repair		E	
	Replace		E	
Idle Facilities	Remove		F	
No Common Neutral	Relocate		E	
Overloaded	Test		E	
Parallel	Replace		E	
Leaks/Seeps/Weeps	Clean		B	
	Repair		F	
	Replace		E	
Tree/Vine				
Clearance Impaired	Remove		E	
	Trim		E	
Decayed/Rotten	Install CL Pole		E	
Overgrown	Remove		E	
	Trim		E	
Tree Connect	Assessment		B	
	Install CL Pole		E	
Trip Saver				
Broken/Damaged	Repair		E	
	Replace		E	
Under-Arm Bus				
Broken/Damaged	Repair		F	

Electric Overhead Tag

Notification #: **118959903**

Priority: **F** **Sub Priority:** **F**

PM Order #:

Date Identified: **04/29/2020** **Date Required:** **04/29/2025**

Identified in Field By:	[redacted]	Plat:	Q2604
Street Address:		Circuit:	10340-1101, GIRVAN
		SSD:	10779
City:	Redding	Equipment #:	
Cross Street:		Pin #:	____________________
Division:	North Valley	Pole #:	____________________
Latitude:	[redacted]	OIS #:	____________________
Longitude:		SAP Func. Location:	ED.87-Q260400000.STRU.POLE
Description:	HISN_MISS_INST - [redacted]	SAP Equipment:	101494005
		Accessibility Tier:	

Item Details

	Facility Type	Damage	Cause	Action
Item 1	HISN High Sign	MISS Missing		INST Install

☐ Completed ☐ Canceled

☐ Pole Test Sheet

User Status

Conductor/Operating Information		Field Identification		Field Condition (Exposure)		Field Condition (Accessibility)		Other	
Status	Description	Status	Description	Status	Description	Status	Description	Status	Description
PRI	Primary	INSP	Inspection	TER3	Tier3 Wildfire			MINR	Minor Work
JPOL	Joint Pole			REMT	Remote Area			GO	General Order
OH	Overhead			FMOB	Submitted from Mobile				

Job Estimates — Issued To

Est. Total Hrs. to Complete: 2

Est. Electric Crew Size: 02

WTC: 540, KAA_OH Genl CorrectMaint Tag

Main Work Center: REDDING, Redding

Gas Crew Size: 00

MAT:

Funded Repair Date:

Reviewed By: ______________________________ Date of Field Review: ______________________________

Completed or Canceled in Field By (LAN ID): ☐☐☐☐ If No LAN ID Last Name, First Name: ______________________________

Complete or Cancel Date: ______________ Actual Hours: __________ *Check One: PG&E Crew ☐ T-Man ☐ Contractor ☐

*Check One: Completed ☐ Canceled ☐ Found Completed Upon Arrival ☐

Signature: ____

I verify that all maintenance on this notification is addressed (completed, canceled, or found completed upon arrival)

***Public Safety & Regulatory Reviewer: If notification was canceled, check one (required):**

☐ **CONV:** Converted to another Notif-Type
☐ **EROR:** Created in Error (Desk Cancelation)
☐ **PROG:** Completed under another Program
☐ **DUMM:** "Dummy" for order only
☐ **NCOA:** All Found Completed/Resolved on Arrival
☐ **DUPL:** Duplicate EC for Same Location
☐ **NOCR:** No Compelling/Regulator Condition Exist

List of Tasks on Notification

Electric Overhead Tag

Notification #: 118959903

PM Order #:

Priority: F **Sub Priority:** F

Date Identified: 04/29/2020 **Date Required:** 04/29/2025

Field Comments:

Comments

04/29/2020 12:33:04 PST INSPECTCPIC (INSPECTCPIC)

Missing high signs

04/10/2021 09:00:26 PST INSPECTCPIC (INSPECTCPIC)

Safety Reassessment

Inspected by: [redacted]

Field Submission Date/Time: Apr 9, 2021 at 11:50 AM

Suggested New Due Date: Apr 10, 2022

003-21. Condition needs to be addressed within the next 12 months

Comments: High voltage size on both sides the pole missing need to be replaced

Additional Comments: Field Safety Assessment completed for Tier 2/3 EC notifications that are not in 2021 work execution plan or scheduled for detailed inspection

04/15/2021 07:57:36 PST INSPECTCPIC (INSPECTCPIC)

Safety Reassessment

Inspected by: [redacted]

Field Submission Date/Time: Apr 15, 2021 at 07:49 AM

Suggested New Due Date: Apr 16, 2022

003-21. Condition needs to be addressed within the next 12 months

Comments: Triplexes steel attached to the tree tree is leaning pretty heavily also wire is rubbing on tree

Additional Comments: Field Safety Assessment completed for Tier 2/3 EC notifications that are not in 2021 work execution plan or scheduled for detailed inspection

FDA		New	Priority	Comp
Anchor				
Broken/Damaged	Repair		E	
	Replace		E	
Corroded	Repair		E	
	Replace		E	
Missing	Install		F	
Soil/Eroded/Graded	Adjust		F	
	Replace		F	
Animal Mitigation				
Broken/Damaged	Replace		E	
Mitigation Missing	Install		E	
Bird Protection				
Bird Protection	Replace		E	
CB Pole				
Broken/Damaged	Replace		F	
Burnt	Replace		E	
Decayed/Rotten	Replace		F	
Booster/Regulator				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
Excessive Operation	Overhaul		E	
Leaks/Seeps/Weeps	Clean		E	
	Repair		E	
	Replace		E	
Capacitor				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
	Replace		E	
Leaks/Seeps/Weeps	Clean		B	
	Repair		E	
	Replace		E	
Climbing Space				
Obstructed	Adjust		F	

FDA		New	Priority	Comp
Conductor				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
	Replace		E	
Clearance Impaired	Adjust		E	
	Install CL Pole		E	
	RayChem		E	
Floater	Repair		E	
Idle Facilities	Remove		E	
Improper Connection	Adjust		E	
Overloaded	Test		E	
Sag/Clearance	Adjust		E	
	Replace		E	
	Install Spreader Bracket		E	
Connector				
Burnt	Replace		E	
Corroded	Repair		E	
	Replace		E	
Incorrectly Installed	Replace		E	
Temp Differential	Replace		E	
Crossarm				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
	Replace		E	
Decayed/Rotten	Repair		E	
	Replace		E	
Cutout				
Broken/Damaged	Repair		E	
	Replace		E	
Clearance Impaired	Adjust		E	
Flashed	Repair		E	
	Replace		E	
Decorative Streetlight				
Broken/Damaged	Replace		E	
Missing	Install		E	
Fault Indicators				
Broken/Damaged	Replace		E	
Ground				
Broken/Damaged	Repair		B	
	Replace		B	
Exposed	Repair		F	
Missing	Install		E	
Guy				
Broken/Damaged	Repair		E	
	Replace		E	
Clearance Impaired	Adjust		F	
Corroded	Repair		E	
	Replace		E	
Loose	Adjust		F	
Missing	Install		F	
Overgrown	Trim		E	
Strain/Abrasion	Adjust		F	
	Remove		F	
Guy Marker				
Missing	Install		F	
	Replace		F	

FDA		New	Priority	Comp
Hardware/Framing				
Bird Prot Required	Install		E	
Birdcage	Install		E	
Broken/Damaged	Repair		E	
	Replace		E	
Loose	Adjust		E	
Missing	Install		E	
High Sign				
Missing	Install	X	F	
Insulator				
Broken/Damaged	Replace		E	
Flashed	Replace		E	
Primary Squatter	Repair		E	
	Replace		E	
Secondary Squatter	Repair		E	
	Replace		E	
Jumper				
Burnt	Replace		E	
Clearance Impaired	Adjust		E	
	Replace		E	
LAPP Insulator				
Broken/Damaged	Replace		E	
Lightning Arrester				
Broken/Damaged	Repair		E	
	Replace		E	
Flashed	Repair		E	
	Replace		E	
Marking				
Broken/Damaged	Replace		F	
Missing	Install		F	
Molding				
Broken/Damaged	Repair		F	
	Replace		F	
Loose	Adjust		F	
Missing	Install		F	
OH Facility				
Bird Prot Required	Install		E	
Customer Related	Access		B	
	Appointment		B	
	Refusal		B	
Graffiti	Paint		E	
Idle Facilities	De-Energ		B	
	Remove		F	
	Transfer		F	
Limited Access	Inspect		B	
	Patrol		E	
	Remove		E	
Obstructed	Inspect		B	
	Remove		E	
	Replace		B	
Transmission Issue	Create LC		B	

FDA		New	Priority	Comp
Pole				
Broken/Damaged	Re-Frame		E	
	Repair		E	
	Replace		E	
	Pole Stub		E	
Burnt	Repair		E	
	Replace		E	
	Pole Stub		E	
Clearance Impaired	Repair		E	
	Replace		E	
Decayed/Rotten	Pole Top Repair		E	
	Repair		E	
	Replace		E	
	Pole Stub		E	
Idle Facilities	Remove		F	
Leaning	Adjust		E	
	Replace		E	
Overloaded	Replace		E	
	Test		E	
No Safe Access to Pole	Inspect		B	
Woodpecker Damage	Assessment		E	
Recloser/Sectionalizer				
Broken/Damaged	Repair		E	
	Replace		E	
Excessive Operation	Overhaul		E	
Flashed	Repair		E	
	Replace		E	
Leaks/Seeps/Weeps	Clean		E	
	Repair		E	
	Replace		E	
Riser/Pothead				
Broken/Damaged	Repair		E	
	Replace		F	
Installed in Error	Relocate		E	
Flashed	Repair		E	
	Replace		F	
ROAD				
No Safe Access to Pole	Repair		B	
RTVI				
Interference	Repair		E	
	Replace		E	
SCADA/PDAC				
Broken/Damaged	Repair		F	
	Replace		F	
Leaks/Seeps/Weeps	Repair		F	
	Replace		F	
	Test		B	
Steel Lattice Pole				
Guarding Missing	Install		E	
Pole Step				
Clearance Impaired	Remove		F	
Streetlight				
Broken/Damaged	Repair		E	
	Replace		E	
Missing	Install		E	
Steel Lattice Tower				
Broken/Damaged	Replace		E	
Switch				
Broken/Damaged	Repair		E	
	Replace		E	

EMERGENCY ONLY
Check Cause (Required)

☐	Animal	☐	Bird
☐	Equip Failed	☐	Fire
☐	Lightning	☐	Pole Rotten
☐	Third Party	☐	Tree Branch
☐	Tree Contact	☐	Tree Fell
☐	Unknown	☐	

All FDA's identified in field
Priority = Default Priority for B, E, G, & F-Regulatory FDA's
Comp = Check if completing FDA in Field

Electric Overhead Tag

Notification #: 118959903

PM Order #:

Priority: F **Sub Priority:** F

Date Identified: 04/29/2020 **Date Required:** 04/29/2025

FDA		New	Priority	Comp
Trans_Dist Pole				
Bonding Broken	Repair		E	
Tie Wire				
Broken/Damaged	Replace		E	
Loose	Replace		E	
Transformer				
Broken/Damaged	Repair		E	
	Replace		F	
Corroded	Replace		E	
Flashed	Repair		E	
	Replace		E	
Idle Facilities	Remove		F	
No Common Neutral	Relocate		E	
Overloaded	Test		E	
Parallel	Replace		E	
Leaks/Seeps/Weeps	Clean		B	
	Repair		F	
	Replace		E	
Tree/Vine				
Clearance Impaired	Remove		E	
	Trim		E	
Decayed/Rotten	Install CL Pole		E	
Overgrown	Remove		E	
	Trim		E	
Tree Connect	Assessment		B	
	Install CL Pole		E	
Trip Saver				
Broken/Damaged	Repair		E	
	Replace		E	
Under-Arm Bus				
Broken/Damaged	Repair		F	

Electric Overhead Tag

Notification #: **118960094**

PM Order #:

Priority: **F** **Sub Priority:** **F**

Date Identified: **04/29/2020** **Date Required:** **04/29/2025**

Identified in Field By: [redacted]
Street Address:

City: Redding
Cross Street:
Division: North Valley
Latitude: [redacted]
Longitude:
Description: HISN_MISS_INST - [redacted]

Plat: Q2604
Circuit: 10340-1101, GIRVAN
SSD: 10779
Equipment #:
Pin #: ___________________
Pole #: ___________________
OIS #: ___________________
SAP Func. Location: ED.87-Q260400000.STRU.POLE
SAP Equipment: 101494018
Accessibility Tier:

Item Details

	Facility Type	Damage	Cause	Action
Item 1	HISN High Sign	MISS Missing		INST Install

☐ Completed ☐ Canceled

☐ Pole Test Sheet

User Status

Conductor/Operating Information		Field Identification		Field Condition (Exposure)		Field Condition (Accessibility)		Other	
Status	Description	Status	Description	Status	Description	Status	Description	Status	Description
PRI	Primary	INSP	Inspection	FIRE	Extreme Fire Risk Area			MINR	Minor Work
OH	Overhead			TER3	Tier3 Wildfire			GO	General Order
				REMT	Remote Area				
				FMOB	Submitted from Mobile				

Job Estimates

Issued To

Est. Total Hrs. to Complete: 2
Est. Electric Crew Size: 02
WTC: 540, KAA_OH Genl CorrectMaint Tag
Main Work Center: REDDING, Redding
Gas Crew Size: 00
MAT:
Funded Repair Date:

Reviewed By: ______________________________ Date of Field Review: ______________________________

Completed or Canceled in Field By (LAN ID): ☐☐☐☐ If No LAN ID Last Name, First Name: ____________________

Complete or Cancel Date: ____________ Actual Hours: ________ *Check One: PG&E Crew ☐ T-Man ☐ Contractor ☐

*Check One: Completed ☐ Canceled ☐ Found Completed Upon Arrival ☐

Signature: ____

I verify that all maintenance on this notification is addressed (completed, canceled, or found completed upon arrival)

***Public Safety & Regulatory Reviewer: If notification was canceled, check one (required):**

☐ **CONV:** Converted to another Notif-Type
☐ **DUMM:** "Dummy" for order only
☐ **DUPL:** Duplicate EC for Same Location
☐ **EROR:** Created in Error (Desk Cancelation)
☐ **NCOA:** All Found Completed/Resolved on Arrival
☐ **NOCR:** No Compelling/Regulator Condition Exist
☐ **PROG:** Completed under another Program

List of Tasks on Notification

Electric Overhead Tag

Notification #: 118960094

Priority: F **Sub Priority:** F

PM Order #:

Date Identified: 04/29/2020

Date Required: 04/29/2025

Field Comments:

Comments

04/29/2020 13:14:22 PST INSPECTCPIC (INSPECTCPIC)

No high signs

04/10/2021 09:00:26 PST INSPECTCPIC (INSPECTCPIC)

Safety Reassessment

Inspected by: [redacted]

Field Submission Date/Time: Apr 9, 2021 at 12:03 PM

Suggested New Due Date: Apr 10, 2022

003-21. Condition needs to be addressed within the next 12 months

Comments: Hi signs missing on pool

Additional Comments: Field Safety Assessment completed for Tier 2/3 EC notifications that are not in 2021 work execution plan or scheduled for detailed inspection

FDA		New	Priority	Comp
Anchor				
Broken/Damaged	Repair		E	
	Replace		E	
Corroded	Repair		E	
	Replace		E	
Missing	Install		F	
Soil/Eroded/Graded	Adjust		F	
	Replace		F	
Animal Mitigation				
Broken/Damaged	Replace		E	
Mitigation Missing	Install		E	
Bird Protection				
Bird Protection	Replace		E	
CB Pole				
Broken/Damaged	Replace		F	
Burnt	Replace		E	
Decayed/Rotten	Replace		F	
Booster/Regulator				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
Excessive Operation	Overhaul		E	
Leaks/Seeps/Weeps	Clean		E	
	Repair		E	
	Replace		E	
Capacitor				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
	Replace		E	
Leaks/Seeps/Weeps	Clean		B	
	Repair		E	
	Replace		E	
Climbing Space				
Obstructed	Adjust		F	

FDA		New	Priority	Comp
Conductor				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
	Replace		E	
Clearance Impaired	Adjust		E	
	Install CL Pole		E	
	RayChem		E	
Floater	Repair		E	
Idle Facilities	Remove		E	
Improper Connection	Adjust		E	
Overloaded	Test		E	
Sag/Clearance	Adjust		E	
	Replace		E	
	Install Spreader Bracket		E	
Connector				
Burnt	Replace		E	
Corroded	Repair		E	
	Replace		E	
Incorrectly Installed	Replace		E	
Temp Differential	Replace		E	
Crossarm				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
	Replace		E	
Decayed/Rotten	Repair		E	
	Replace		E	
Cutout				
Broken/Damaged	Repair		E	
	Replace		E	
Clearance Impaired	Adjust		E	
Flashed	Repair		E	
	Replace		E	
Decorative Streetlight				
Broken/Damaged	Replace		E	
Missing	Install		E	
Fault Indicators				
Broken/Damaged	Replace		E	
Ground				
Broken/Damaged	Repair		B	
	Replace		B	
Exposed	Repair		F	
Missing	Install		E	
Guy				
Broken/Damaged	Repair		E	
	Replace		E	
Clearance Impaired	Adjust		F	
Corroded	Repair		E	
	Replace		E	
Loose	Adjust		F	
Missing	Install		F	
Overgrown	Trim		E	
Strain/Abrasion	Adjust		F	
	Remove		F	
Guy Marker				
Missing	Install		F	
	Replace		F	

FDA		New	Priority	Comp
Hardware/Framing				
Bird Prot Required	Install		E	
Birdcage	Install		E	
Broken/Damaged	Repair		E	
	Replace		E	
Loose	Adjust		E	
Missing	Install		E	
High Sign				
Missing	Install	X	F	
Insulator				
Broken/Damaged	Replace		E	
Flashed	Replace		E	
Primary Squatter	Repair		E	
	Replace		E	
Secondary Squatter	Repair		E	
	Replace		E	
Jumper				
Burnt	Replace		E	
Clearance Impaired	Adjust		E	
	Replace		E	
LAPP Insulator				
Broken/Damaged	Replace		E	
Lightning Arrester				
Broken/Damaged	Repair		E	
	Replace		E	
Flashed	Repair		E	
	Replace		E	
Marking				
Broken/Damaged	Replace		F	
Missing	Install		F	
Molding				
Broken/Damaged	Repair		F	
	Replace		F	
Loose	Adjust		F	
Missing	Install		F	
OH Facility				
Bird Prot Required	Install		E	
Customer Related	Access		B	
	Appointment		B	
	Refusal		B	
Graffiti	Paint		E	
Idle Facilities	De-Energ		B	
	Remove		F	
	Transfer		F	
Limited Access	Inspect		B	
	Patrol		E	
	Remove		E	
Obstructed	Inspect		B	
	Remove		E	
	Replace		B	
Transmission Issue	Create LC		B	

FDA		New	Priority	Comp
Pole				
Broken/Damaged	Re-Frame		E	
	Repair		E	
	Replace		E	
	Pole Stub		E	
Burnt	Repair		E	
	Replace		E	
	Pole Stub		E	
Clearance Impaired	Repair		E	
	Replace		E	
Decayed/Rotten	Pole Top Repair		E	
	Repair		E	
	Replace		E	
	Pole Stub		E	
Idle Facilities	Remove		F	
Leaning	Adjust		E	
	Replace		E	
Overloaded	Replace		E	
	Test		E	
No Safe Access to Pole	Inspect		B	
Woodpecker Damage	Assessment		E	
Recloser/Sectionalizer				
Broken/Damaged	Repair		E	
	Replace		E	
Excessive Operation	Overhaul		E	
Flashed	Repair		E	
	Replace		E	
Leaks/Seeps/Weeps	Clean		E	
	Repair		E	
	Replace		E	
Riser/Pothead				
Broken/Damaged	Repair		E	
	Replace		F	
Installed in Error	Relocate		E	
Flashed	Repair		E	
	Replace		F	
ROAD				
No Safe Access to Pole	Repair		B	
RTVI				
Interference	Repair		E	
	Replace		E	
SCADA/PDAC				
Broken/Damaged	Repair		F	
	Replace		F	
Leaks/Seeps/Weeps	Repair		F	
	Replace		F	
	Test		B	
Steel Lattice Pole				
Guarding Missing	Install		E	
Pole Step				
Clearance Impaired	Remove		F	
Streetlight				
Broken/Damaged	Repair		E	
	Replace		E	
Missing	Install		E	
Steel Lattice Tower				
Broken/Damaged	Replace		E	
Switch				
Broken/Damaged	Repair		E	
	Replace		E	

EMERGENCY ONLY Check Cause (Required)			
☐	Animal	☐	Bird
☐	Equip Failed	☐	Fire
☐	Lightning	☐	Pole Rotten
☐	Third Party	☐	Tree Branch
☐	Tree Contact	☐	Tree Fell
☐	Unknown	☐	

All FDA's identified in field
Priority = Default Priority for B, E, G, & F-Regulatory FDA's
Comp = Check if completing FDA in Field

Electric Overhead Tag

Notification #: 118960094

PM Order #:

Priority: F **Sub Priority:** F

Date Identified: 04/29/2020 **Date Required:** 04/29/2025

FDA		New	Priority	Comp
Trans_Dist Pole				
Bonding Broken	Repair		E	
Tie Wire				
Broken/Damaged	Replace		E	
Loose	Replace		E	
Transformer				
Broken/Damaged	Repair		E	
	Replace		F	
Corroded	Replace		E	
Flashed	Repair		E	
	Replace		E	
Idle Facilities	Remove		F	
No Common Neutral	Relocate		E	
Overloaded	Test		E	
Parallel	Replace		E	
Leaks/Seeps/Weeps	Clean		B	
	Repair		F	
	Replace		E	
Tree/Vine				
Clearance Impaired	Remove		E	
	Trim		E	
Decayed/Rotten	Install CL Pole		E	
Overgrown	Remove		E	
	Trim		E	
Tree Connect	Assessment		B	
	Install CL Pole		E	
Trip Saver				
Broken/Damaged	Repair		E	
	Replace		E	
Under-Arm Bus				
Broken/Damaged	Repair		F	

Electric Overhead Tag

Notification #: 118960151

Priority: E **Sub Priority:**

PM Order #:

Date Identified: 04/29/2020

Date Required: 10/29/2020

Identified in Field By: [redacted]
Street Address:

City: Redding
Cross Street:
Division: North Valley
Latitude: [redacted]
Longitude:
Description: POLE_DECA_REPL - [redacted]

Plat: Q2604
Circuit: 10340-1101, GIRVAN
SSD: 10779
Equipment #:
Pin #: ____________________
Pole #: ____________________
OIS #: ____________________
SAP Func. Location: ED.87-Q260400000.STRU.POLE
SAP Equipment: 103146889
Accessibility Tier:

Item Details

	Facility Type	Damage	Cause	Action
Item 1	POLE Pole	DECA Decayed/Rotten		REPL Replace

☐ Completed ☐ Canceled

☒ Pole Test Sheet

User Status

Conductor/Operating Information		Field Identification		Field Condition (Exposure)		Field Condition (Accessibility)		Other	
Status	Description	Status	Description	Status	Description	Status	Description	Status	Description
PRI	Primary	INSP	Inspection	FIRE	Extreme Fire Risk Area	BTKA	Bucket/Lift Truck Accessible	ESTR	Estimate Required
OH	Overhead			TER3	Tier3 Wildfire	USA	USA required		
				REMT	Remote Area				
				FMOB	Submitted from Mobile				

Job Estimates — Issued To

Est. Total Hrs. to Complete: 14
Est. Electric Crew Size: 03
WTC: 311, 07D_Pole Replacement
Main Work Center: REDDING, Redding
Gas Crew Size: 00
MAT:
Funded Repair Date:

Reviewed By: ______________________ Date of Field Review: ______________________

Completed or Canceled in Field By (LAN ID): ☐☐☐☐ If No LAN ID Last Name, First Name: ______________________

Complete or Cancel Date: ____________ Actual Hours: __________ *Check One: PG&E Crew ☐ T-Man ☐ Contractor ☐

*Check One: Completed ☐ Canceled ☐ Found Completed Upon Arrival ☐

Signature: ____

I verify that all maintenance on this notification is addressed (completed, canceled, or found completed upon arrival)

***Public Safety & Regulatory Reviewer: If notification was canceled, check one (required):**

☐ **CONV:** Converted to another Notif-Type
☐ **DUMM:** "Dummy" for order only
☐ **DUPL:** Duplicate EC for Same Location
☐ **EROR:** Created in Error (Desk Cancelation)
☐ **NCOA:** All Found Completed/Resolved on Arrival
☐ **NOCR:** No Compelling/Regulator Condition Exist
☐ **PROG:** Completed under another Program

List of Tasks on Notification

Electric Overhead Tag

Notification #: 118960151

PM Order #:

Priority: E **Sub Priority:**

Date Identified: 04/29/2020 **Date Required:** 10/29/2020

Field Comments:

Comments

04/29/2020 13:23:36 PST INSPECTCPIC (INSPECTCPIC)

Pole is Shell rock decaying with multiple woodpecker holes DOUGLAS FIR

07/13/2020 12:00:05 PST [redacted]

* 07/13/2020 12:00:05 PST [redacted]

POLE IS SHELLROT

04/10/2021 09:00:29 PST INSPECTCPIC (INSPECTCPIC)

Safety Reassessment

Inspected by [redacted]

Field Submission Date/Time: Apr 9, 2021 at 12:15 PM

Suggested New Due Date: Apr 10, 2022

003-21. Condition needs to be addressed within the next 12 months

Comments: Numerous woodpecker holes pool needs to be replaced existing

EC

Additional Comments: Field Safety Assessment completed for Tier 2/3 EC

notifications that are not in 2021 work execution plan or scheduled

for detailed inspection

FDA		New	Priority	Comp
Anchor				
Broken/Damaged	Repair		E	
	Replace		E	
Corroded	Repair		E	
	Replace		E	
Missing	Install		F	
Soil/Eroded/Graded	Adjust		F	
	Replace		F	
Animal Mitigation				
Broken/Damaged	Replace		E	
Mitigation Missing	Install		E	
Bird Protection				
Bird Protection	Replace		E	
CB Pole				
Broken/Damaged	Replace		F	
Burnt	Replace		E	
Decayed/Rotten	Replace		F	
Booster/Regulator				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
Excessive Operation	Overhaul		E	
Leaks/Seeps/Weeps	Clean		E	
	Repair		E	
	Replace		E	
Capacitor				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
	Replace		E	
Leaks/Seeps/Weeps	Clean		B	
	Repair		E	
	Replace		E	
Climbing Space				
Obstructed	Adjust		F	

FDA		New	Priority	Comp
Conductor				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
	Replace		E	
Clearance Impaired	Adjust		E	
	Install CL Pole		E	
	RayChem		E	
Floater	Repair		E	
Idle Facilities	Remove		E	
Improper Connection	Adjust		E	
Overloaded	Test		E	
Sag/Clearance	Adjust		E	
	Replace		E	
	Install Spreader Bracket		E	
Connector				
Burnt	Replace		E	
Corroded	Repair		E	
	Replace		E	
Incorrectly Installed	Replace		E	
Temp Differential	Replace		E	
Crossarm				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
	Replace		E	
Decayed/Rotten	Repair		E	
	Replace		E	
Cutout				
Broken/Damaged	Repair		E	
	Replace		E	
Clearance Impaired	Adjust		E	
Flashed	Repair		E	
	Replace		E	
Decorative Streetlight				
Broken/Damaged	Replace		E	
Missing	Install		E	
Fault Indicators				
Broken/Damaged	Replace		E	
Ground				
Broken/Damaged	Repair		B	
	Replace		B	
Exposed	Repair		F	
Missing	Install		E	
Guy				
Broken/Damaged	Repair		E	
	Replace		E	
Clearance Impaired	Adjust		F	
Corroded	Repair		E	
	Replace		E	
Loose	Adjust		F	
Missing	Install		F	
Overgrown	Trim		E	
Strain/Abrasion	Adjust		F	
	Remove		F	
Guy Marker				
Missing	Install		F	
	Replace		F	

FDA		New	Priority	Comp
Hardware/Framing				
Bird Prot Required	Install		E	
Birdcage	Install		E	
Broken/Damaged	Repair		E	
	Replace		E	
Loose	Adjust		E	
Missing	Install		E	
High Sign				
Missing	Install		F	
Insulator				
Broken/Damaged	Replace		E	
Flashed	Replace		E	
Primary Squatter	Repair		E	
	Replace		E	
Secondary Squatter	Repair		E	
	Replace		E	
Jumper				
Burnt	Replace		E	
Clearance Impaired	Adjust		E	
	Replace		E	
LAPP Insulator				
Broken/Damaged	Replace		E	
Lightning Arrester				
Broken/Damaged	Repair		E	
	Replace		E	
Flashed	Repair		E	
	Replace		E	
Marking				
Broken/Damaged	Replace		F	
Missing	Install		F	
Molding				
Broken/Damaged	Repair		F	
	Replace		F	
Loose	Adjust		F	
Missing	Install		F	
OH Facility				
Bird Prot Required	Install		E	
Customer Related	Access		B	
	Appointment		B	
	Refusal		B	
Graffiti	Paint		E	
Idle Facilities	De-Energ		B	
	Remove		F	
	Transfer		F	
Limited Access	Inspect		B	
	Patrol		E	
	Remove		E	
Obstructed	Inspect		B	
	Remove		E	
	Replace		B	
Transmission Issue	Create LC		B	

FDA		New	Priority	Comp
Pole				
Broken/Damaged	Re-Frame		E	
	Repair		E	
	Replace		E	
	Pole Stub		E	
Burnt	Repair		E	
	Replace		E	
	Pole Stub		E	
Clearance Impaired	Repair		E	
	Replace		E	
Decayed/Rotten	Pole Top Repair		E	
	Repair		E	
	Replace	X	E	
	Pole Stub		E	
Idle Facilities	Remove		F	
Leaning	Adjust		E	
	Replace		E	
Overloaded	Replace		E	
	Test		E	
No Safe Access to Pole	Inspect		B	
Woodpecker Damage	Assessment		E	
Recloser/Sectionalizer				
Broken/Damaged	Repair		E	
	Replace		E	
Excessive Operation	Overhaul		E	
Flashed	Repair		E	
	Replace		E	
Leaks/Seeps/Weeps	Clean		E	
	Repair		E	
	Replace		E	
Riser/Pothead				
Broken/Damaged	Repair		E	
	Replace		F	
Installed in Error	Relocate		E	
Flashed	Repair		E	
	Replace		F	
ROAD				
No Safe Access to Pole	Repair		B	
RTVI				
Interference	Repair		E	
	Replace		E	
SCADA/PDAC				
Broken/Damaged	Repair		F	
	Replace		F	
Leaks/Seeps/Weeps	Repair		F	
	Replace		F	
	Test		B	
Steel Lattice Pole				
Guarding Missing	Install		E	
Pole Step				
Clearance Impaired	Remove		F	
Streetlight				
Broken/Damaged	Repair		E	
	Replace		E	
Missing	Install		E	
Steel Lattice Tower				
Broken/Damaged	Replace		E	
Switch				
Broken/Damaged	Repair		E	
	Replace		E	

EMERGENCY ONLY
Check Cause (Required)

☐	Animal	☐	Bird
☐	Equip Failed	☐	Fire
☐	Lightning	☐	Pole Rotten
☐	Third Party	☐	Tree Branch
☐	Tree Contact	☐	Tree Fell
☐	Unknown	☐	

All FDA's identified in field
Priority = Default Priority for B, E, G, & F-Regulatory FDA's
Comp = Check if completing FDA in Field

Printed By: [redacted] 12/16/2021

Notification #: 118960151

Electric Overhead Tag

Notification #: 118960151

PM Order #:

Priority: E **Sub Priority:**

Date Identified: 04/29/2020 **Date Required:** 10/29/2020

FDA		New	Priority	Comp
Trans_Dist Pole				
Bonding Broken	Repair		E	
Tie Wire				
Broken/Damaged	Replace		E	
Loose	Replace		E	
Transformer				
Broken/Damaged	Repair		E	
	Replace		F	
Corroded	Replace		E	
Flashed	Repair		E	
	Replace		E	
Idle Facilities	Remove		F	
No Common Neutral	Relocate		E	
Overloaded	Test		E	
Parallel	Replace		E	
Leaks/Seeps/Weeps	Clean		B	
	Repair		F	
	Replace		E	
Tree/Vine				
Clearance Impaired	Remove		E	
	Trim		E	
Decayed/Rotten	Install CL Pole		E	
Overgrown	Remove		E	
	Trim		E	
Tree Connect	Assessment		B	
	Install CL Pole		E	
Trip Saver				
Broken/Damaged	Repair		E	
	Replace		E	
Under-Arm Bus				
Broken/Damaged	Repair		F	

Electric Overhead Tag

Notification #: 120786027

PM Order #:

Priority: E **Sub Priority:**

Date Identified: 04/09/2021 **Date Required: 10/09/2021**

Identified in Field By: [redacted]
Street Address:

City: Redding
Cross Street:
Division: North Valley
Latitude: [redacted]
Longitude:
Description: POLE_BROK_REPL - [redacted]

Plat: Q2604
Circuit: 10340-1101, GIRVAN
SSD: 346147
Equipment #:
Pin #: ______________
Pole #: ______________
OIS #: ______________
SAP Func. Location: ED.87-Q260400000.STRU.POLE
SAP Equipment: 101494001
Accessibility Tier:

Item Details

	Facility Type	Damage	Cause	Action
Item 2	POLE Pole	BROK Broken/Damaged		REPL Replace

☐ Completed ☐ Canceled

☐ Pole Test Sheet

User Status

Conductor/Operating Information		Field Identification		Field Condition (Exposure)		Field Condition (Accessibility)		Other	
Status	**Description**	**Status**	**Description**	**Status**	**Description**	**Status**	**Description**	**Status**	**Description**
PRI	Primary	INSP	Inspection	TER3	Tier3 Wildfire	BTKA	Bucket/Lift Truck Accessible	ESTR	Estimate Required
CLR	Clearance Required			RESD	Residential Area				
JPOL	Joint Pole			REMT	Remote Area				
OH	Overhead			FMOB	Submitted from Mobile				

Job Estimates — Issued To

Est. Total Hrs. to Complete: 15
Est. Electric Crew Size: 03
WTC: 311, 07D_Pole Replacement

Main Work Center: REDDING, Redding
Gas Crew Size: 00
MAT:

Funded Repair Date:

Reviewed By: ______________________ Date of Field Review: ______________________

Completed or Canceled in Field By (LAN ID): ☐☐☐☐ If No LAN ID Last Name, First Name: ______________________

Complete or Cancel Date: ____________ Actual Hours: ____________ *Check One: PG&E Crew ☐ T-Man ☐ Contractor ☐

*Check One: Completed ☐ Canceled ☐ Found Completed Upon Arrival ☐

Signature: ____

I verify that all maintenance on this notification is addressed (completed, canceled, or found completed upon arrival)

***Public Safety & Regulatory Reviewer: If notification was canceled, check one (required):**

☐ **CONV:** Converted to another Notif-Type
☐ **EROR:** Created in Error (Desk Cancelation)
☐ **PROG:** Completed under another Program
☐ **DUMM:** "Dummy" for order only
☐ **NCOA:** All Found Completed/Resolved on Arrival
☐ **DUPL:** Duplicate EC for Same Location
☐ **NOCR:** No Compelling/Regulator Condition Exist

List of Tasks on Notification

Electric Overhead Tag

Notification #: 120786027

PM Order #:

Priority: E **Sub Priority:**

Date Identified: 04/09/2021 **Date Required:** 10/09/2021

Field Comments:

Comments

04/10/2021 09:00:29 PST INSPECTCPIC (INSPECTCPIC)

Multiple woodpecker holes need to be filled in

04/11/2021 04:13:04 PST BCH_WMCHKLST (BCH_WMCHKLST)

Notification triggered from Inspection Lot#[140001050486] & ref

#[inspectchecklist-P3C1-2021-04-09T18:38:08Z]

04/12/2021 10:39:47 PST [redacted]

Override from:

Elec Hrs=00006,

Override to:

Elec Hrs=00015,

Multiple 4" woodpecker holes

FDA		New	Priority	Comp
Anchor				
Broken/Damaged	Repair		E	
	Replace		E	
Corroded	Repair		E	
	Replace		E	
Missing	Install		F	
Soil/Eroded/Graded	Adjust		F	
	Replace		F	
Animal Mitigation				
Broken/Damaged	Replace		E	
Mitigation Missing	Install		E	
Bird Protection				
Bird Protection	Replace		E	
CB Pole				
Broken/Damaged	Replace		F	
Burnt	Replace		E	
Decayed/Rotten	Replace		F	
Booster/Regulator				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
Excessive Operation	Overhaul		E	
Leaks/Seeps/Weeps	Clean		E	
	Repair		E	
	Replace		E	
Capacitor				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
	Replace		E	
Leaks/Seeps/Weeps	Clean		B	
	Repair		E	
	Replace		E	
Climbing Space				
Obstructed	Adjust		F	

FDA		New	Priority	Comp
Conductor				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
	Replace		E	
Clearance Impaired	Adjust		E	
	Install CL Pole		E	
	RayChem		E	
Floater	Repair		E	
Idle Facilities	Remove		E	
Improper Connection	Adjust		E	
Overloaded	Test		E	
Sag/Clearance	Adjust		E	
	Replace		E	
	Install Spreader Bracket		E	
Connector				
Burnt	Replace		E	
Corroded	Repair		E	
	Replace		E	
Incorrectly Installed	Replace		E	
Temp Differential	Replace		E	
Crossarm				
Broken/Damaged	Repair		E	
	Replace		E	
Burnt	Repair		E	
	Replace		E	
Decayed/Rotten	Repair		E	
	Replace		E	
Cutout				
Broken/Damaged	Repair		E	
	Replace		E	
Clearance Impaired	Adjust		E	
Flashed	Repair		E	
	Replace		E	
Decorative Streetlight				
Broken/Damaged	Replace		E	
Missing	Install		E	
Fault Indicators				
Broken/Damaged	Replace		E	
Ground				
Broken/Damaged	Repair		B	
	Replace		B	
Exposed	Repair		F	
Missing	Install		E	
Guy				
Broken/Damaged	Repair		E	
	Replace		E	
Clearance Impaired	Adjust		F	
Corroded	Repair		E	
	Replace		E	
Loose	Adjust		F	
Missing	Install		F	
Overgrown	Trim		E	
Strain/Abrasion	Adjust		F	
	Remove		F	
Guy Marker				
Missing	Install		F	
	Replace		F	

FDA		New	Priority	Comp
Hardware/Framing				
Bird Prot Required	Install		E	
Birdcage	Install		E	
Broken/Damaged	Repair		E	
	Replace		E	
Loose	Adjust		E	
Missing	Install		E	
High Sign				
Missing	Install		F	
Insulator				
Broken/Damaged	Replace		E	
Flashed	Replace		E	
Primary Squatter	Repair		E	
	Replace		E	
Secondary Squatter	Repair		E	
	Replace		E	
Jumper				
Burnt	Replace		E	
Clearance Impaired	Adjust		E	
	Replace		E	
LAPP Insulator				
Broken/Damaged	Replace		E	
Lightning Arrester				
Broken/Damaged	Repair		E	
	Replace		E	
Flashed	Repair		E	
	Replace		E	
Marking				
Broken/Damaged	Replace		F	
Missing	Install		F	
Molding				
Broken/Damaged	Repair		F	
	Replace		F	
Loose	Adjust		F	
Missing	Install		F	
OH Facility				
Bird Prot Required	Install		E	
Customer Related	Access		B	
	Appointment		B	
	Refusal		B	
Graffiti	Paint		E	
Idle Facilities	De-Energ		B	
	Remove		F	
	Transfer		F	
Limited Access	Inspect		B	
	Patrol		E	
	Remove		E	
Obstructed	Inspect		B	
	Remove		E	
	Replace		B	
Transmission Issue	Create LC		B	

FDA		New	Priority	Comp
Pole				
Broken/Damaged	Re-Frame		E	
	Repair		E	
	Replace	X	E	
	Pole Stub		E	
Burnt	Repair		E	
	Replace		E	
	Pole Stub		E	
Clearance Impaired	Repair		E	
	Replace		E	
Decayed/Rotten	Pole Top Repair		E	
	Repair		E	
	Replace		E	
	Pole Stub		E	
Idle Facilities	Remove		F	
Leaning	Adjust		E	
	Replace		E	
Overloaded	Replace		E	
	Test		E	
No Safe Access to Pole	Inspect		B	
Woodpecker Damage	Assessment		E	
Recloser/Sectionalizer				
Broken/Damaged	Repair		E	
	Replace		E	
Excessive Operation	Overhaul		E	
Flashed	Repair		E	
	Replace		E	
Leaks/Seeps/Weeps	Clean		E	
	Repair		E	
	Replace		E	
Riser/Pothead				
Broken/Damaged	Repair		E	
	Replace		F	
Installed in Error	Relocate		E	
Flashed	Repair		E	
	Replace		F	
ROAD				
No Safe Access to Pole	Repair		B	
RTVI				
Interference	Repair		E	
	Replace		E	
SCADA/PDAC				
Broken/Damaged	Repair		F	
	Replace		F	
Leaks/Seeps/Weeps	Repair		F	
	Replace		F	
	Test		B	
Steel Lattice Pole				
Guarding Missing	Install		E	
Pole Step				
Clearance Impaired	Remove		F	
Streetlight				
Broken/Damaged	Repair		E	
	Replace		E	
Missing	Install		E	
Steel Lattice Tower				
Broken/Damaged	Replace		E	
Switch				
Broken/Damaged	Repair		E	
	Replace		E	

EMERGENCY ONLY
Check Cause (Required)

☐	Animal	☐	Bird
☐	Equip Failed	☐	Fire
☐	Lightning	☐	Pole Rotten
☐	Third Party	☐	Tree Branch
☐	Tree Contact	☐	Tree Fell
☐	Unknown	☐	

All FDA's identified in field
Priority = Default Priority for B, E, G, & F-Regulatory FDA's
Comp = Check if completing FDA in Field

Electric Overhead Tag

Notification #: 120786027

PM Order #:

Priority: E **Sub Priority:**

Date Identified: 04/09/2021 **Date Required:** 10/09/2021

FDA		New	Priority	Comp
Trans_Dist Pole				
Bonding Broken	Repair		E	
Tie Wire				
Broken/Damaged	Replace		E	
Loose	Replace		E	
Transformer				
Broken/Damaged	Repair		E	
	Replace		F	
Corroded	Replace		E	
Flashed	Repair		E	
	Replace		E	
Idle Facilities	Remove		F	
No Common Neutral	Relocate		E	
Overloaded	Test		E	
Parallel	Replace		E	
Leaks/Seeps/Weeps	Clean		B	
	Repair		F	
	Replace		E	
Tree/Vine				
Clearance Impaired	Remove		E	
	Trim		E	
Decayed/Rotten	Install CL Pole		E	
Overgrown	Remove		E	
	Trim		E	
Tree Connect	Assessment		B	
	Install CL Pole		E	
Trip Saver				
Broken/Damaged	Repair		E	
	Replace		E	
Under-Arm Bus				
Broken/Damaged	Repair		F	

Contractor Name	Contractor ISN ID	Employee Name	Employee ISN ID	Job Site Number	Project Name	Training Name	Status	Score	Training Date	Expiration Date	Contractor Account Completed In
Rokstad Power, Inc.	400-219254	[redacted]	ISN-06597070	JS-44777	SAFE-1503WBT, Fire Danger Precautions	SAFE-1503WBT, Fire Danger Precautions	Pass	5	6/28/21	6/28/22	Rokstad Power, Inc.
Rokstad Power, Inc.	400-219254		ISN-06369599	JS-44777	SAFE-1503WBT, Fire Danger Precautions	SAFE-1503WBT, Fire Danger Precautions	Pass	5	3/10/21	3/10/22	Rokstad Power, Inc.
Rokstad Power, Inc.	400-219254		ISN-06133170	JS-44777	SAFE-1503WBT, Fire Danger Precautions	SAFE-1503WBT, Fire Danger Precautions	Pass	5	8/19/21	8/19/22	Rokstad Power, Inc.
Rokstad Power, Inc.	400-219254		ISN-06133170	JS-44777	SAFE-1503WBT, Fire Danger Precautions	SAFE-1503WBT, Fire Danger Precautions	Expired	5	9/16/20	9/16/21	Rokstad Power, Inc.
Rokstad Power, Inc.	400-219254		ISN-05894989	JS-44777	SAFE-1503WBT, Fire Danger Precautions	SAFE-1503WBT, Fire Danger Precautions	Expired	N/A	4/4/20	4/4/21	
Rokstad Power, Inc.	400-219254		ISN-06133179	JS-44777	SAFE-1503WBT, Fire Danger Precautions	SAFE-1503WBT, Fire Danger Precautions	Expired	5	9/16/20	9/16/21	Rokstad Power, Inc.

Section 2.0 - Electric Transmission and Distribution Overhead

2.01 Scope

These rules shall apply to all personnel engaged in overhead electric Transmission or Distribution work.

2.02 Energized High-Voltage Conductors or Apparatus - Journeyman Lineman

Journeymen Lineman working on, near and including above energized lines or equipment of over 600 volts shall be assisted by another journeyman lineman or hot apprentice, one to one, on the same pole, a suitable aerial insulated platform, structure or location. It is also permissible for the work to be performed by one journeyman lineman/hot apprentice on the pole and one journeyman lineman/hot apprentice in a suitable aerial insulated platform. (Two separate poles or structures may be considered one for the purpose of this rule if both men can step to the other pole or structure without descending to the ground to render immediate assistance.)

During the time work is being done on, near, or above energized conductors or parts of equipment connected to high-voltage systems, a Journeyman Lineman, or Hot Apprentice shall be in close proximity at each work location.

(a) Act primarily as an observer for the purpose of preventing an incident or accident, and

(b) Render immediate assistance in the event of an incident/accident.

Foreman. While live line work is in progress, the foreman’s sole responsibility shall be to observe activities from the ground.

2.03 Energized Low-Voltage Conductors or Apparatus

No employee shall touch any exposed conductor or apparatus energized at less than 250 volts, phase to ground, unless suitable personal protective equipment such as approved rated insulated gloves or tools are used. For voltages of 250 volts to 600 volts the use of approved rated insulated gloves is mandatory. Leather gloves are not considered an approved insulating device.

2.04 Use of Cell Phones or Other Electronic Devices

The use of non-job-related electronic devices (e.g. Cell Phones, Radios, Bluetooth speakers, mp3 players etc.) or any other device which may cause distraction or disrupt safe communication shall not be used while energized work is being performed.

2.05 Working Distance

The following table lists the minimum working distance from energized conductors or apparatus, which are not properly covered with approved protective equipment. This includes extended reach, falling, and material or equipment whether insulated or not.

Nominal voltage in kilovolts	Distance: Phase to ground exposure	Distance Phase to Phase exposure
0.05 to .300	Avoid contact	Avoid contact
.301 to 1.0	1'9" (0.33m)	1'9" (0.33)
1.1 to 15.0	2'-2" (0.65m)	2'-3" (0.68m)
15.1 to 36.0	2'-7" (0.77m)	3'-0" (0.89m)
36.1 to 46.0	2'-10" (0.84m)	3'-3' (0.98m)
46.1 to 72.5	3'-4" (1.00m)	4'-0" (1.20m)
72.6 to 121.0	3'-9" (1.13m)	4'-8" (1.42m)
121.1 to 145.0	4'-4" (1.30m)	5'-5" (1.62m)
145.1 to 169.0	4'-10" (1.46m)	6'-5" (1.92m)
169.1 to 242.0	6-8" (2.01m)	10'-2" (3.08m)
242.1 to 362.0	11-3" (3.41m)	18'-2" (5.52m)
362.1 to 550.0	16.8" (5.07m)	27'-1" (8.24m)
550.1 to 800.0	22.7" (6.88m)	37'-5" (11.38m)

Altitude	Correction Factor
3,000' (900m)	1.00
4,000' (1,200m)	1.02
5,000' (1,500m)	1.05
6,000' (1,800m)	1.08
7,000' (2,100m)	1.11
8,000' (2,400m)	1.14
9,000' (2,700m)	1.17
10,000' (3,000m)	1.20
12,000' (3,600m)	1.25
14,000' (4,200m)	1.30
16,000' (4,800m)	1.35
18,000' (5,400m)	1.39
20,000' (6,000m)	1.44

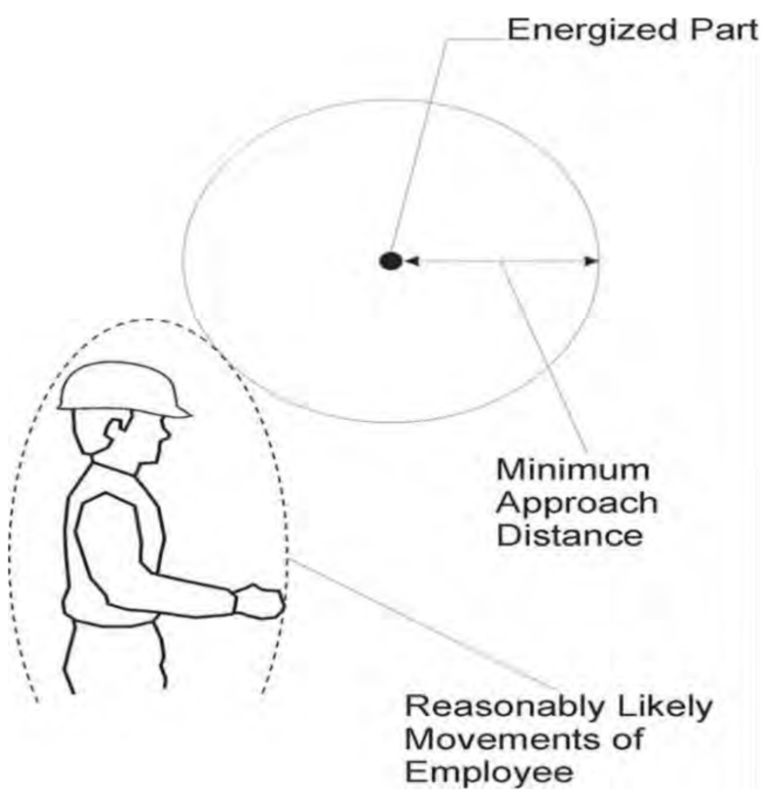
NOTE: Applicable minimum approach distance may vary based on customer transient overvoltage (TOV) studies. If TOV studies are available refer to the minimum approach distances provided by the customer.

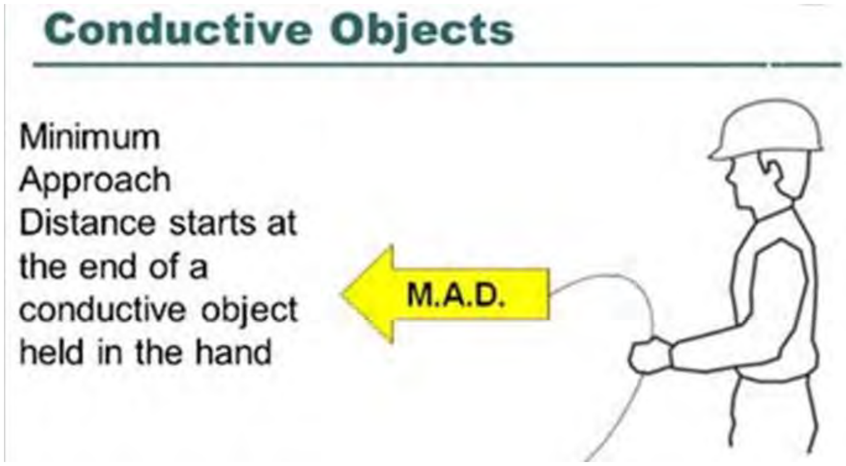
(a) When operated by a Non- Qualified Person, mobile cranes, hoists and derricks shall be positioned, equipped, protected, and/or operated so that no part comes closer to energized power lines than indicated in the below table:

TABLE A—MINIMUM CLEARANCE DISTANCES

Voltage (nominal, kV, alternating current)	Minimum clearance distance (feet)
up to 50	10
over 50 to 200	15
over 200 to 350	20
over 350 to 500	25
over 500 to 750	35
over 750 to 1,000	45
over 1,000	(as established by the utility owner/operator or registered professional engineer who is a qualified person with respect to electrical power transmission and distribution).

Note 1: The value that follows "to" is up to and includes that value. For example, over 50 to 200 means up to and including 200kV.





(b) Nothing in this rule shall prohibit working on conductors or apparatus energized up to 21,000 volts, normal phase to phase, with approved protective equipment.

(c) The above safe working distance does not apply to energized conductors or apparatus protected by a suitable barrier or properly covered with approved protective devices. However, intentional contact shall not be made with protective covering, except for installation or removal.

2.06 Pole-Mounted Apparatus

(a) All cutouts and disconnects shall be operated with a fuse or switch stick or approved telescoping live-line tool. When using these tools in conjunction with a load break tool the use of a telescoping device extended in excess of 15’ is prohibited.

(b) Contact with energized transformer, capacitor, regulator or oil switch cases, bond wires, hardware supporting primary voltage insulation and other apparatus shall be avoided except when tested and grounded or worked upon with approved devices.

(c) Overhead Terminations of underground cables (Potheads) shall not be transferred while energized.

2.07 De-Energizing, Grounding, and Bonding Lines and Equipment for Employee Protection

De-Energizing Lines and Equipment

(a) This section applies to the deenergizing of transmission and distribution lines and equipment for the purpose of protecting employees.

(b) General: Each utility system may operate with specific rules and procedures regarding clearance of their facilities, employees shall follow the operating procedures of the individual customer and/or utility.

(c) Deenergizing Lines and Equipment:

(1) The employee in charge shall make a request of the system operator to deenergize the particular section of line or equipment. The employee in charge is responsible for the clearance.

(2) Open Disconnecting Means: The employee in charge shall ensure all air switches, disconnectors,

Rubber Glove Work Methods, 50 V to 21 kV

SUMMARY

This utility procedure provides rules and practices for all rubber glove work involving voltages from 50 volts (V) to 21 kilovolts (kV) nominal phase-to-phase. Care and inspection criteria for associated insulating protective equipment are also included.

Level of Use: Informational Use

TARGET AUDIENCE

All electric personnel, who perform rubber glove work, or who, by the nature of their classification or supervisory responsibilities, are required to have a thorough understanding of rubber glove work methods and insulating protective equipment and tools.

SAFETY

Failure to follow the procedures outlined in this document when working on equipment energized at 50 V to 21 kV can lead to serious injury or death.

Making simultaneous contact with an exposed energized conductor or apparatus and a grounded or neutral conductor, or an adjacent phase (i.e., getting in series), can lead to serious injury or death.

BEFORE YOU START

- DO NOT HAND-CLEAN OR WIPE insulators that are in contact with, or supporting, energized lines, as detailed in TD-1257M, "Insulator Cleaning Manual."

- DO NOT CARRY conductive objects that are long enough to contact energized conductors into the level of such conductors, unless suitable means are taken to prevent contact.

- DO NOT USE conductive portable ladders or measuring tapes, ropes, or similar measuring devices, when working on or near exposed energized conductors and equipment.

- Only employees who have successfully completed the Company’s rubber glove training may use rubber glove work methods, for the voltage being worked.

- Rubber sleeves are available for employees to use as an option, in conjunction with rubber gloves and approved protectors.

- Always WEAR rubber gloves and approved protectors when working on or near exposed energized parts within the contact area. This applies to work on exposed live parts or near enough to them to expose the employee to any hazard.

Rubber Glove Work Methods, 50 V to 21 kV

Before You Start (continued)

- ALWAYS WEAR rubber gloves, and approved protectors when installing and removing meters; the rubber gloves worn must be suitable for the voltage class they are to be exposed to.

- The person-in-charge (PIC) must ENSURE that a tailboard briefing is conducted, as described in Utility Procedure TD 2024P-01, "Tailboard Briefings for Electric Operations," Code of Safe Practices (CSP), Section 1, General Rules, Rule 1, "Tailboard Briefings" and TD-2355M, "Electric Maintenance and Construction Manual," Section T-1, "Tailboard Briefing."

- Rubber glove work in the overhead (OH) that changes the configuration of the electric system (such as adding, removing, or relocating numbered equipment, changing conductor size, or changing fuse size), requires an Application for Work (AFW) submitted to the appropriate center, with an attached circuit map change sheet (CMCS), per TD-2700P-03, "Clearances and Non-Tests," Section 17.

- Two-person OH rubber glove crews must USE the Outage Management Tool (OMT) to notify the appropriate control center prior to, and after, two-person rubber glove work methods are taking place on primary voltages. SEE Utility Bulletin TD-2700B-004, "Outage Management Tool (OMT) Requirements for Rubber Glove Work" for guidance on utilizing OMT for this task.

- OH rubber glove crews larger than two-person who are required to, or who elect to, notify the control center prior to, and after, rubber glove work methods taking place on primary voltages must USE OMT to do so. SEE Utility Bulletin TD-2700B-004, "Outage Management Tool (OMT) Requirements for Rubber Glove Work" for guidance on utilizing OMT for this task.

- Employees must BE familiar with the requirements and procedures described in the following documents:

  - TD-2355M, "Electric Maintenance and Construction Manual, "Chapter 1: Overhead Transmission and Distribution"

  - Utility Procedure TD-1002P-06, "Temporary Pole-Mounted Work Platforms"

  - CSP, Section 4, "Electric Transmission and Distribution Overhead"

  - *Pacific Gas and Electric Company Safety & Performance Fundamentals Handbook*

  - Appendix A, "Human Performance Error Prevention Tools"

  - Appendix B, "Requirements for Making Temporary Jumpers in the Field"

  - Appendix C, "Energized Re-conductor Decision Matrix, Best Practices, and Q&A"

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4 Minimum Crew Compliment/Crew Requirements for Rubber Glove Work........15
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PROCEDURE STEPS

1 Arc-Flash Hazard Control and Flame-Resistant (FR) Clothing

1.1 PERFORM an arc assessment of all work areas before working on or near exposed electrical equipment or conductors energized at more than 50V. The arc assessment must include the following elements, per SAFE-1001S, "Safety and Health Program Standard:"

1. IDENTIFY sources of potential arc-flash hazards.
2. EVALUATE sources of potential arc-flash hazards.
3. IDENTIFY, SELECT, AND IMPLEMENT controls to these hazards, such as the following:
    - Engineering controls
    - Administrative controls
    - Personal protective equipment (PPE), such as flame-resistant (FR) clothing and apparel
4. EVALUATE implemented controls.

1.2 WEAR FR clothing as required, in conjunction with using approved insulating protective equipment. SEE SH&C Procedure 237, "Arc-Flash Hazard Control Procedure" (currently under revision) and Utility Procedure TD-2509P-01 "Flame Resistant (FR) Clothing Procedures."

1.3 Rubber Glove FR Clothing Protection Level Exception List – The exception list identifies circuits with sections of line protected directly by the substation circuit breaker up to the first protective device where arc flash incident energy exceeds 8 calories per cm^2 due to longer relay clearing times at the substation circuit breaker.

1. Before performing rubber glove work methods on line sections protected directly by the substation circuit breaker, CHECK the Rubber Glove Exception list.

   a. IF the circuit to be worked is on the Rubber Glove Exception list,

      THEN USE one of the following PPE options:

      - Double layer FR protection level, if work is performed using rubber glove work methods.
      - Single layer FR protection level, if work is performed using hot stick work methods.
      - Single layer FR protection level, if work is performed de-energized and grounded.

   b. Before performing rubber glove work methods, it is the employees' responsibility to identify if the section of line to be worked is on the Rubber Glove Exception list, **as this list will change periodically**.

      - The exception circuits list will be updated quarterly at a minimum, and more frequently, when system conditions change.

2 Basic Rubber Glove Principles

2.1 Insulate and Isolate

Employees are **insulated** when they wear appropriately tested and rated, approved rubber gloves with approved protectors. Employees are **isolated** when they use an approved (tested and rated) insulated aerial device with bucket liner(s) and pan(s), or an insulated temporary work platform with an insulated fall-arrest anchor point. SEE Section 4 on Page 15 for specific crew compliment requirements and exceptions for performing rubber glove work methods with either **insulate**, or **insulate and isolate**, for the voltage being worked.

1. Rubber glove work methods involving voltages from 50 V to 5 kV involve the principle of **insulate only** when worked directly from a pole, tower, or structure. This work can be performed from an approved aerial device (insulated or non-insulated), or from an insulated temporary work platform.

2.1 (continued)

a. Employees must NOT MAKE contact with conductors or apparatus energized between 50 V and 5 kV, unless insulated from the conductor or apparatus, i.e., wearing appropriately tested and rated, approved rubber gloves with approved protectors.

b. Rubber glove work methods involving the principle of **insulate** can also be applied to underground (UG) equipment (e.g., pad-mount/sub-surface) up to 600 V.

2. Rubber glove work methods involving voltages from 5,001 V to 21 kV must involve the principles of both **insulate and isolate.**

a. An approved (tested and rated) insulated aerial device, or insulated temporary work platform with an insulated fall-arrest anchor point, must be used in conjunction with appropriately tested and rated approved rubber gloves with approved protectors.

b. Employees must NOT MAKE contact with conductors or apparatus energized between 5,001 V and 21 kV, unless insulated from the conductor or apparatus and isolated from any path to ground.

c. DO NOT PERFORM rubber glove work methods on voltages from 5,001 V to 21 kV, while working directly from the pole, tower, or structure.

3. Two-person rubber glove crews must USE the principles of both **insulate and isolate** when applying rubber glove work methods involving voltages from 601 V to 21 kV.

2.2 Minimum Approach Distance (MAD)

1. MAINTAIN the MAD (SEE Table 1 below) from energized conductors or apparatus that are **not** properly covered with approved insulating protective equipment or suitable barriers.

2. PREVENT all conductive objects from encroaching into the MAD, AND WEAR suitable clothing for the activity being performed.

Table 1. Minimum Approach Distance for Voltage

Nominal Voltage ***(phase-to-phase)***	**Phase-to-Ground Exposure/ Phase-to-Phase Exposure** ***(inches)***
50 V – 300 V	Avoid contact
301 V – 600 V	13”
601 V – 15 kV	27”
15.1 kV – 23 kV	30”

2.2 (continued)

NOTE

The MAD requirement **does not** prohibit employees from working on conductors or apparatus energized from 50 V to 21 kV nominal phase-to-phase using approved rubber glove work methods.

3. DO NOT MAKE intentional contact with the insulating protective equipment, except when installing or removing them with rubber gloves and approved protectors.

2.3 Contact Area (Voltages from 601 V to 21 kV, Nominal Phase-to-Phase)

1. The contact area is defined as the area where any part of the body or a conductive object can be brought closer than thirty (30) inches to energized conductors on voltages from 601 V to 21 kV, regardless of the use of approved insulating protective equipment (SEE Figure 1 below).

Figure 1. Contact Area When Using the Rubber Glove Work Method 601 V – 21 kV

2. The principle of contact area only applies when the worker’s intention is to perform rubber glove work within the MAD of a primary voltage.

   a. Employees must PUT ON Class 2 rubber gloves with approved protectors **before** entering the contact area (SEE Figure 1 above).

   b. Employees must LEAVE the contact area **before** removing rubber gloves (SEE Figure 1 above).

2.3 (continued)

3. IF all exposed energized conductors and apparatus are covered with approved insulating protective equipment, AND the intent is to perform work that does not require rubber glove work methods within the contact area (e.g., changing a transformer, installing high voltage signs or cutouts),

   THEN the employees must DO the following:

   a. LEAVE the contact area.

   b. DECLARE a change from rubber glove work methods to non-rubber glove work methods **before** re-entering the contact area in regular, non-insulated work gloves.

   c. CONTINUE to work **up to, but not touching**, the insulating protective equipment previously installed on the energized conductors and apparatus.

4. The principle of contact area, as described in this section, **does not** apply to rubber glove work methods performed on exposed energized equipment operating at 600 V or less.

   a. Before breaching the applicable MAD for exposed energized equipment operating at 600 V or less, PUT ON appropriately rated rubber gloves and approved protectors for the voltage being worked.

2.4 Second Point of Contact (Voltages from 5,001 V to 21 kV, Nominal Phase-to-Phase)

> **WARNING**
>
> Identifying and guarding against the second point of contact is a major safety factor in planning rubber glove work. No electrical accident can occur without a second point of contact. The severity of an electrical accident is related directly to the conductivity of the path-to-ground or to another phase.

1. There must be a first point of contact before a second point of contact can exist, such as when an employee is in contact with an energized source, with an object of different potential within immediate reach.

2. The second point of contact is the point at which current (amperage) leaves the body in the event that inadvertent contact is made with exposed energized conductors or apparatus and an unprotected part of the body.

Rubber Glove Work Methods, 50 V to 21 kV

2.4 (continued)

3. IDENTIFY second point(s) of contact by asking the following questions:

   a. Are there one or more objects of different potential within immediate reaching distance of the object I am working on?

   b. Are the objects of different potential, within immediate reaching distance of the object I am working on, adequately covered with approved insulating protective equipment?

4. COVER all second points of contact within immediate reaching distance with approved insulated protective equipment to prevent both workers and energized conductors from contacting objects of different potential.

2.5 Second Point of Contact (Voltages from 50 V to 5,000 V)

1. When the work is being performed directly from a pole, tower, structure, or non-insulated approved aerial device, the principle of second point of contact, as described in this section, does not directly apply to the employee performing rubber glove work methods on exposed energized equipment operating at 5,000 V or less.

   a. The second point of contact is always present (i.e., the employee is already the path to ground in these situations) and is an inherent part of working directly from a pole, tower, structure, or non-insulated approved aerial device. Preventing the first point of contact is the main concern in order to avoid current (amperage) from traveling through the employee’s body.

3 Addressing Energized Conductors or Apparatus (All Voltages)

3.1 Applying Insulating Protective Equipment

1. When working on or near energized conductors, employees must USE insulating protective equipment to cover all the energized conductors, grounded conductors, or guy wires in the work area that could come into contact with any parts of their bodies or any aerial device they may be working from.

   a. Only the portion of the conductor or apparatus on which employees are working may remain uncovered.

   b. Securely ATTACH insulating protective equipment in a manner that will prevent the cover from falling off.

2. TAKE the following precautions when applying or removing approved insulating protective equipment:

   a. COVER the nearest and lowest conductors first.

Rubber Glove Work Methods, 50 V to 21 kV

3.1 (continued)

b. REMOVE the protective equipment in reverse order that it was installed when the job is completed.

c. APPLY/REMOVE the protective equipment from a position below the conductor, whenever possible.

3. Always USE approved insulating protective equipment within its design application and voltage rating.

4. Always USE approved insulating protective equipment on adjacent conductors where there is a possibility of simultaneous contact by the employee, tools, or equipment.

5. CONSIDER the proximity of exposed secondary conductors (600 V or less) to the work area when working above them.

   IF a possible hazard exists,

   THEN INSTALL approved insulating protective equipment to mitigate the hazard.

6. USE approved insulating protective equipment (rubber gloves, line-hose [snakes], blankets, pole guards, etc.) to insulate employees from direct contact with energized conductors and equipment.

7. To protect against accidental contact while working on energized conductors, COVER hardware, crossarms, and apparatus with approved insulating protective equipment.

8. COVER all associated hardware in the immediate work area with approved insulating protective equipment to prevent both workers and energized conductors from contacting grounded surfaces.

9. Employees must NOT CONTACT energized conductors or insulating protective equipment with any parts of their bodies, except their hands, when they are wearing rubber gloves and approved protectors.

WARNING

Weather-proof conductors used on all voltages, 600 V insulated conductors used on voltages above 600 V, all tree wire, and animal/bird guards are considered to be non-insulated.

10. When climbing to access the top level of a double circuit configuration, always COVER the lower circuit with approved insulating protective equipment.

   - DO NOT MAKE contact with the approved insulating protective equipment.

3.1 (continued)

11. When working with an energized line-hose, or energized insulated temporary jumper that could be laid on top of, or come into contact with a crossarm, pole, or structure, PLACE approved insulating protective equipment between the two items.

12. Always USE an aerial lift to perform aerial work on streamline-constructed metal poles.

3.2 Connecting and Disconnecting Jumpers

1. Employees must ADHERE to the following steps when connecting or disconnecting jumpers to energize or de-energize equipment.

    - When connecting de-energized equipment or lines to an energized circuit by means of a conducting wire or device, FIRST ATTACH the wire to the de-energized equipment or line.

    - When disconnecting equipment or lines from an energized circuit by means of a conducting wire or device, REMOVE the source end first.

    - When lines or equipment are connected to or disconnected from energized circuits, KEEP loose conductors away from exposed energized or grounded conductors and apparatus, or uninsulated parts of the body.

2. Adherence to these guidelines will ensure that employees are:

    - Handling de-energized jumpers, for as long as possible, when making or separating connections with energized equipment or lines.

    - Keeping control of loose conductors, which helps to prevent an inadvertent arc flash.

3.3 Working on or Adjusting an **Open** Device (Switches, Solid Blades, Line Recloser, etc.)

1. When working on or adjusting an open device (switches, solid blades, line recloser, etc.) and there is a possibility that a parallel condition can be created between the two circuits, USE one of the following three options:

    a. **Option 1:** MOVE the normal open point to another existing device.

        - The Electric Control Center directs switching to close the device to be worked on or adjusted and opens another existing device, thereby separating the parallel.

        - Once the device to be worked on or adjusted is in the closed position, FOLLOW the steps in Section 3.4, “Working on or Adjusting a Closed Device” on Page 11.

3.3 (continued)

b. **Option 2:** ESTABLISH a temporary open point on either side of the device to be worked on.

- The PIC DETERMINES the location AND COMMUNICATES with the Electric Control Center to request a temporary open point (jumpers or temporary “flying bells”) be established on either side of the device to be worked on.

- Establishing this temporary open point (i.e., jumpers or flying bells) prevents the circuits from being paralleled during operation of the device.

c. **Option 3:** USE hot stick procedures to perform the work.

- Using hot stick procedures to work on or make adjustments to a distribution field device (including while circuits are in parallel) is allowed.

3.4 Working on or Adjusting a **Closed** Device (Switches, Solid Blades, Line Recloser, etc.)

1. CONTACT the Electric Control Center before starting work.
2. USE proper rubber glove work methods for the voltage being worked.
3. COVER all second points of contact and adjacent conductors where there is a possibility of simultaneous contact by the employee, tools, or equipment.
4. VERIFY that the device is closed.
5. TAKE a load reading to properly determine what size approved hot jumper to install.
6. BYPASS the device by installing approved hot jumpers.
7. ADJUST the device as needed, AND VERIFY proper operation by opening and closing the device.
8. VERIFY that the device is in the closed position and locked, where applicable.
9. REMOVE approved hot jumpers from the closed device.
10. NOTIFY the Electric Control Center that the work is completed.

3.5 Testing/Taking Secondary Voltage Readings on a Conventional Transformer

1. ONLY TEST OR TAKE secondary voltage readings on conventional transformers.

2. Applying insulating protective devices to the transformer bushing is not required, if a two- or three-person rubber glove crew performs the following steps (all steps performed from an elevated position must be carried out from an approved aerial device):

   a. CHECK that transformer fuses are open.

   b. TEST to ensure transformer secondary lugs are de-energized (while wearing Class 2 rubber gloves).

   c. REMOVE the two hot legs from the secondary lugs (while wearing Class 2 rubber gloves).

   d. CHECK the secondary neutral landed (while wearing Class 2 rubber gloves).

   e. VERIFY the transformer voltage on the nameplate (re-verification).

   f. CLOSE the fuses, energizing the transformer using an approved hot stick.

   g. TEST the secondary voltage from a position at or below the level of the secondary lugs (while wearing Class 2 rubber gloves).

   h. RE-OPEN the fuses using an approved hot stick.

   i. RECONNECT the secondary leads (while wearing Class 2 rubber gloves).

   j. CLOSE fuses, re-energizing the transformer with an approved hot stick.

   k. VERIFY the transformer secondary voltage at the service drop or meter jaws.

3.6 No Load Removal/Opening or Installation/Closing of Jumpers on Section of Circuit Using Rubber Glove Work Methods

1. Employees may USE rubber glove work methods to remove/open or install/close jumpers **without** using a load pick-up or dropping device, **only if** all the following conditions are met:

3.6 (continued)

a. The PIC can VISUALLY VERIFY all open point(s) in the line, including, but not limited to:

- Open disconnects
- Open cutouts
- Open flying bells
- Open jumpers
- Open switches
- End-of-line (EOL)

b. The PIC CONFIRMS a walk-down has been performed to verify that there is no equipment connected and/or closed in the section of wire to be energized/de-energized. This inspection includes, but is not limited to, the following equipment:

- Grounds on line
- Connected capacitor banks
- Hard-tapped risers
- Lightning arrestors (connected to source side jumpers)
- Potential transformers offline (visual open)
- Primary metering offline (visual open)
- Connected transformers (self-protected [SP] transformers, boosters, regulator, etc.)

c. The PIC has confirmed that all equipment has visual opens.

d. The PIC has verified the line has no grounds and is ready for service.

3.7 Rubber Glove Work Methods Inside Substations

1. Rubber glove work methods are allowed inside the substation fence on distribution line equipment and busses, provided personnel are properly trained/qualified and approved work methods and materials are utilized.

- For distribution line equipment located in the yard at 21 kV and below, SEE examples outlined in **GREEN** in Figure 2 and in Table 2 on Page 14.
- For substation equipment and busses energized at 5,000 V and below, SEE examples outlined in **YELLOW** in Figure 2 and in Table 2 on Page 14.

3.7 (continued)

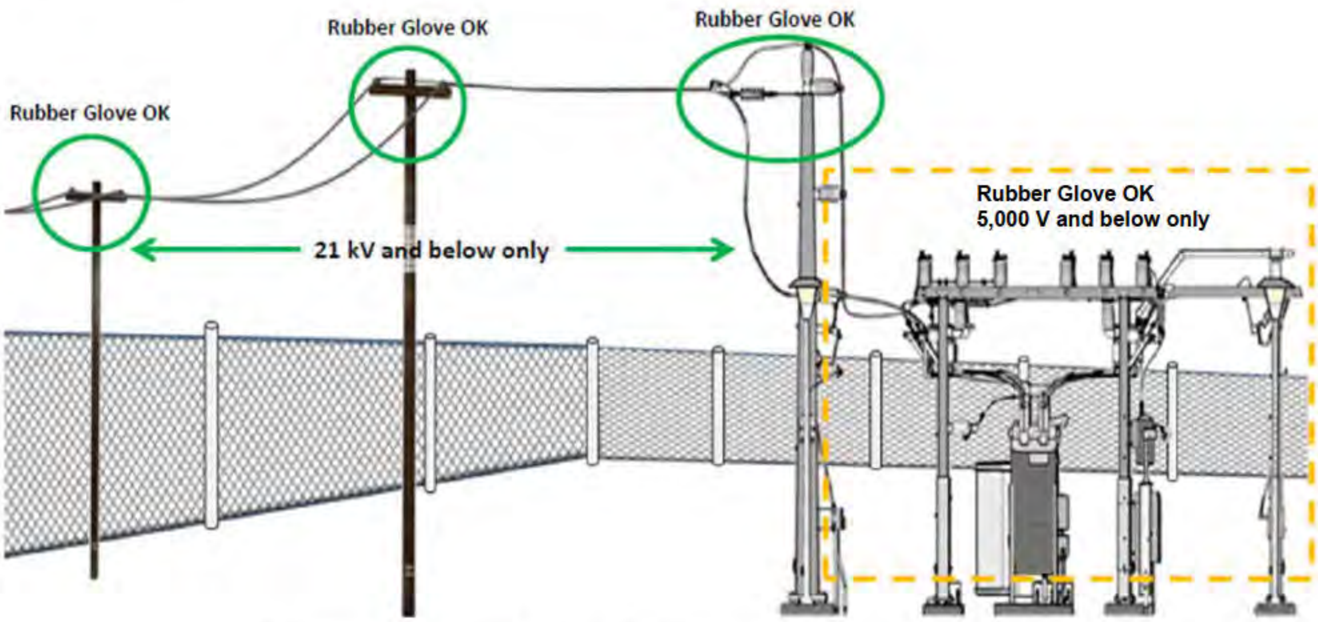


Figure 2. Energized Work Methods within Substation Facilities

2. Hot stick work methods may be used to perform energized work procedures on equipment within a substation, provided they are properly rated and tested for the voltage that they will be used.

   - This includes using hot sticks for the installation of rubber blankets and covers by qualified personnel.

Table 2. Approved Energized Work Methods in Substation Facilities

Distribution Line Equipment	Substation Equipment	
Up to 21kV	**Up to 5,000 V**	**12 to 21kV**
Hot sticks and rubber glove work methods	Hot sticks and rubber glove work methods	Hot sticks only

4 Minimum Crew Compliment/Crew Requirements for Rubber Glove Work

4.1 50 V to 5,000 V, When Using the **Insulate** Principle Only

1. 50 V to 600 V, OH and UG facilities

   a. One or two persons, depending on the scope of the work.

2. 601 V to 5,000 V

   a. Three persons, in any of the following configurations:

      (1) Two rubber gloved persons on the pole; both must be qualified electrical workers (QEWs), or one must be a QEW and one must be a qualified person (QP). In addition, there must be one trained ground person (QP) with a minimum 6 months experience in line construction.

      (2) Two rubber gloved persons (one worker on the pole and one worker in an aerial device); both must be QEWs, or one must be a QEW and one must be a QP. In addition, there must be one trained ground person (QP) with a minimum 6 months experience in line construction.

      (3) Two rubber gloved persons in an approved aerial device; both must be QEWs, or one must be a QEW and one must be a QP. In addition, there must be one trained ground person (QP) with a minimum 6 months experience in line construction.

   b. Two-person rubber glove work methods may be employed, but only from an approved aerial device utilizing the principles of **insulate and isolate**.

   c. Rubber glove work methods are not allowed on UG facilities over 600 V.

4.2 601 V to 21 kV, Two-Person Using Principles of **Insulate and Isolate**

1. A two-person rubber glove crew working alone consists of a rubber-glove qualified electric crew foreman and a rubber-glove qualified journeyman.

   - A qualified journeyman may be upgraded to crew foreman when performing two-person rubber glove work procedures.

   - Journeymen who have successfully completed appropriate Company training are considered “rubber-glove qualified.”

   - Appropriate Company training for two-person rubber gloving includes completion of initial rubber glove training and training on two-person rubber glove work methods.

4.2 (continued)

2. When using a two-person crew, one rubber-glove-qualified journeyman must remain on the ground to act **solely as an observer** to help prevent accidents or provide immediate assistance if an accident occurs.

3. The rubber-glove-qualified journeyman acting as a qualified observer must be trained in the following procedures:

    - First aid
    - Cardiopulmonary resuscitation (CPR)
    - Emergency Communication
    - Aerial lift operations, including upper controls, lower controls, and aerial rescue procedures

4.3 5,001 V to 21 kV, Three-Person Using Principles of **Insulate and Isolate**

1. All three-person rubber glove work involving voltages from 5,001 V to 21 kV, nominal, phase-to-phase, requires at least two qualified rubber glove employees, as well as a qualified observer on the ground.

> **NOTE**
>
> Journeymen who have successfully completed appropriate Company training are considered "rubber-glove qualified."

2. The following are the minimum crew combinations and assignments when work is being performed:

    a. Two qualified rubber glove employees in an approved insulated aerial device or on insulated platforms. At a minimum, one of the qualified rubber glove employees must be a QEW.

    b. One qualified rubber glove employee in an approved insulated aerial device and one qualified rubber glove employee on an insulted platform. At a minimum, one of the qualified rubber glove employees must be a QEW.

    c. One qualified rubber glove employee in an approved insulated aerial device using Class 2 rubber gloves and one qualified rubber glove employee on the pole using hot sticks. At a minimum, one of the qualified rubber glove employees must be a QEW.

4.3 (continued)

3. The following combination is **not** allowed when working aloft:

   - One qualified rubber glove employee on the pole using hot stick tools and one qualified rubber glove employee on an insulated platform using rubber gloves.

4. One qualified rubber glove employee must be in close proximity (bucket/pole/platform) and designated as the primary observer to prevent accidents.

   IF a QP is rubber gloving,

   THEN the primary observer must be a QEW.

   OTHERWISE, IF a QEW is rubber gloving,

   THEN the primary observer must be a QP, at a minimum.

5. The ground person for a three-person rubber glove crew must be a QP, whom the PIC assigns as the qualified ground observer.

6. The qualified ground observer must have a minimum 6 months experience in line construction. In addition, the qualified ground observer must be a regular employee trained in the following procedures:

   - First aid
   - Cardiopulmonary resuscitation (CPR)
   - Emergency Communication
   - Aerial lift operations, including upper controls, lower controls, and aerial rescue procedures

5 Crew Responsibilities

5.1 General (All Voltages)

1. Employees must IDENTIFY the work method(s) they will use.

   - Only one work method may be used at any given time.
   - All crew members must BE AWARE of the work method to be used before beginning the work AND must COMMUNICATE with each other before changing work methods.
   - All employees must FOLLOW the rules for the work method they are using.

5.1 (continued)

- It is acceptable to change work methods during a job; however, the crew must COMPLETELY STOP the work method in progress before changing to a new work method.

2. Employees must ENSURE that the lighting at the worksite is adequate to perform the work safely.

3. Only USE approved devices for picking up or dropping load.

4. CONSIDER weather conditions when planning rubber glove work.

   a. The PIC and crew DETERMINE if inclement weather is occurring or imminent.

      IF inclement weather develops after the crew begins working AND the crew must complete the job,

      THEN the crew may USE the hot stick method OR they may DE-ENERGIZE the circuit.

5. CONFINE work to one phase AND NEVER MAKE simultaneous contact with another phase.

6. CONFINE work to one phase AND NEVER MAKE simultaneous contact with an energized conductor and any unprotected part of a structure.

7. The insulated boom or bucket must not contact either unprotected, conductive objects or grounded objects when an employee is performing rubber glove work.

8. Before ground personnel come into contact with an approved aerial device/truck being used to perform rubber glove work methods, the following conditions must be adhered to:

   - There must be three-way communications between ground personnel and a person in an aerial position before touching the approved aerial device/truck.

   - When a rubber glove worker is in the contact area, ground personnel may ONLY TOUCH/ACCESS the approved aerial device/truck while wearing approved dielectric overshoes and Class 2 rubber gloves or Electric Hazard (EH) boots and Class 2 rubber gloves.

   - When a rubber glove worker is not in the contact area, ground personnel may TOUCH/ACCESS the approved aerial device/truck without wearing Class 2 rubber gloves.

5.1 (continued)

9. BE AWARE of the surroundings AND TAKE THE TIME required to identify the following before performing rubber glove work:

- MAD
- Contact area
- Second points of contact
- Adjacent phases
- Conductor sags
- Wire movement
- Loose ties
- Deteriorated pins
- Suspect bumps/sleeves
- Split arms
- Conductor condition
- Phase/circuit separations
- Unbalance strain on conductor
- Other indications of unsound mechanical conditions
- Other hazards associated with the work

10. DO NOT ALLOW conductive objects to hang on the outside of the bucket (e.g., hoists, hand coils of wire). Material/tool bags and buckets are allowed, if they are clean, dry, and in good repair.

11. DO NOT ALLOW conductive objects to extend above the lip of the material/tool bag or bucket.

12. ATTACH hand-lines to the pole or aerial device.

    - DO NOT SUPPORT hand lines from the lip of the bucket or from energized lines.
    - ENSURE that hand-lines are clean, dry, and in good repair.

13. ENSURE that any rope making direct contact with energized lines in excess of 600 V is approved "Specification 4" hot rope.

14. TAKE a current reading before opening or cutting any conductor, unless properly bypassed.

15. NEVER PERFORM any other work on a pole while performing rubber glove work on energized lines.

5.1 (continued)

16. Before moving conductors, CHECK the condition of pins, ties, bumps/sleeves, and insulators on adjacent structures. LOOK for the following conditions:

- Loose ties
- Deteriorated pins
- Suspect bumps/sleeves
- Split arms
- Conductor condition
- Phase/circuit separations
- Unbalance strain on conductor
- Other indications of unsound mechanical conditions
- Other hazards associated with the movement of wire

17. ENSURE approved cutters that are capable of cutting the conductor being worked on are in the immediate work area as an emergency response tool. In addition, ADHERE to the following guidelines:

- Always WEAR rubber gloves when using cutters.
- KEEP cutters within reach of each person who is wearing rubber gloves.

18. DO NOT MOVE energized conductors, unless they are properly controlled.

5.2 50 V to 600 V When Using the **Insulate** Principle Only

1. APPLY all guidelines from Section 5.1 beginning on Page 17.

2. WEAR appropriately rated rubber gloves for the work being performed.

- 50 V to 600 V: WEAR Class 00 rubber gloves with approved protectors.
  - Class 2 rubber gloves may be worn in lieu of Class 00 rubber gloves, both with approved protectors.

5.3 601 V to 5,000 V When Using the **Insulate** Principle Only

1. APPLY all guidelines from Section 5.1 beginning on Page 17.

2. The PIC must NOTIFY the Electric Control Center of all rubber glove work activities in progress involving two persons (optional for three-person rubber glove crew or larger). SEE the Before You Start Section for further instructions on how to use OMT to accomplish this. The PIC ENSURES that the following actions take place:

   a. Immediately before starting the work, the PIC UPDATES OMT, as close to the jobsite as communications permit.

5.3 (continued)

b. MAINTAIN direct communication OR MAKE PROVISIONS to maintain a means of communication with the appropriate Electric Control Center.

c. The crew STANDS in the clear, when required by the Electric Control Center.

d. Immediately after the work is completed, the PIC UPDATES OMT, as close to the jobsite as communications permit.

3. WEAR Class 2 rubber gloves with approved protectors.

4. During the tailboard, based on crew consensus, the PIC must DETERMINE whether a Non-Test is required.

5.4 601 V to 21 kV Two-Person Using Principles of **Insulate and Isolate**

1. APPLY all guidelines from Section 5.1 beginning on Page 17.

2. The PIC must NOTIFY the Electric Control Center of all rubber glove work activities in progress involving two persons. SEE the Before You Start Section for further instructions on how to use OMT to accomplish this. The PIC ENSURES that the following actions take place:

   a. Immediately before starting the work, the PIC UPDATES OMT, as close to the jobsite as communications permit.

   b. MAINTAIN direct communication OR MAKE PROVISIONS to maintain a means of communication with the appropriate Electric Control Center.

   c. The crew STANDS in the clear, when required by the Electric Control Center.

   d. Immediately after the work is completed, the PIC UPDATES OMT, as close to the jobsite as communications permit.

3. DO NOT PERFORM two-person rubber glove work involving voltages above 600 V directly from a pole, structure, or an insulated platform.

   - An approved aerial device must be used in order for a two-person rubber glove crew to perform rubber glove work above 600 V.

4. WEAR Class 2 rubber gloves with approved protectors.

5. Qualified rubber glove journeymen at the worksite must DETERMINE by consensus whether to perform work using two-person rubber glove work methods.

6. During the tailboard, based on crew consensus, the PIC must DETERMINE whether a Non-Test is required.

5.4 (continued)

7. When a crew consisting of three or more employees uses the two-person rubber glove work method, the crew foreman must BE on the worksite and readily available to provide guidance, and the crew must ADHERE to all two-person rubber glove work methods.

8. IF the crew foreman must leave the worksite,

   THEN the crew foreman must NOTIFY the two journeymen before leaving the worksite. The senior qualified journeyman onsite is then upgraded to crew foreman.

9. One of the two remaining rubber-glove-qualified journeymen must REMAIN on the ground to act solely as an observer to help prevent accidents or provide immediate assistance if an accident occurs.

10. IF the observer is required to perform any duties other than observing,

    THEN three-way communications must be used and the individual performing rubber glove work must STOP WORK AND LEAVE the contact area.

    When performing two-person rubber glove work methods, the rubber-glove-qualified journeyman acting as the qualified ground observer must WEAR the following PPE:

    - Approved dielectric overshoes or Electric Hazard (EH) boots.

      IF dielectric overshoes are used by the qualified ground observer,

      THEN they must PUT ON overshoes before any rubber glove worker enters the contact area.

    - Approved Class 2 rubber gloves on their person (i.e., in a storage bag clipped to their belt).

11. The rubber-glove-qualified journeyman acting as a qualified observer must MAINTAIN a clear line-of-site and communications with the employee performing rubber glove work. The qualified observer is also responsible for emergency communications.

5.5 5,001 V to 21kV Three-Person Using Principles of **Insulate and Isolate**

1. APPLY all guidelines from Section 5.1 beginning on Page 17.

2. An approved aerial device or insulated platform must be used to perform rubber glove work above 5 kV.

3. WEAR Class 2 rubber gloves with approved protectors.

5.5 (continued)

4. The following minimum complement of hot stick tools and equipment must be available when performing rubber glove work:

   - Eight hot stick tools with quick change heads
   - Two grip-all (Shot-gun) sticks
   - One 8-foot (ft.) hot cutter
   - One hand-line holder

5. Qualified rubber glove journeymen at the worksite DETERMINE by consensus whether to perform the work using hot stick tools or rubber glove work methods.

   - IF the consensus decision made by the qualified rubber glove journeymen is to use rubber glove work methods,

     THEN the PIC can OVERRULE the consensus.

6. During the tailboard, based on crew consensus, the PIC must DETERMINE whether a Non-Test is required.

7. During the tailboard briefing, the PIC ASSIGNS a QP as the qualified ground observer.

8. The following PPE is required for assigned qualified ground observers while work is being performed on energized lines above 5 kV nominal (phase-to-phase):

   - Approved dielectric overshoes or Electric Hazard (EH) boots.

     IF dielectric overshoes are used by the qualified ground observer,

     THEN they must PUT ON overshoes before any rubber glove worker enters the contact area.

   - Approved, Class 2 rubber gloves on their person (i.e., in a storage bag clipped to their belt).

6 Rubber Gloves & Insulating Protective Equipment

6.1 Ordering, Inspecting, and Testing

1. ORDER all rubber gloves, and rubber insulating protective equipment through the Emeryville Insulation Test Lab.

6.1 (continued)

2. Hard plastic insulating protective equipment must be purchased through MROIS. This equipment does not require in-service testing. SEE TD-2021P-01, “Insulated Hard Plastic Line Conductor Covers” for more information.

3. Approved rubber glove protectors must be purchased through MROIS. These gloves are specifically designed and manufactured to fit over rubber gloves.

   a. ENSURE that approved protectors are in good condition and do not have any holes.

      IF wet approved protectors are allowed to dry while still in contact with rubber gloves,

      THEN rubber glove discoloration may occur due to tannins used in the manufacturing process of the leather protectors leaching onto the rubber glove. This condition does not compromise the performance of the rubber glove in any way.

4. All approved rubber protective equipment must have the appropriate ASTM markings and a valid expiration date.

5. DO NOT USE any rubber glove or rubber protective equipment that does not have a current and valid date stamp.

   - Rubber gloves and rubber protective equipment electrical certification expires the last day of month stamped (for example, if stamped DEC 2017, electrical certification expires December 31, 2017).

6. SUBMIT rubber protective equipment for testing, as required, or when the equipment becomes suspect. Table 3 below shows the Company’s required testing intervals.

Table 3. Testing Intervals

Item	Time Interval
Gloves	6 months
Sleeves	12 months
Blankets	12 months
Line Hoses	12 months
Insulated Hoods	12 months
Hot Jumpers	12 months

6.1 (continued)

7. INSPECT all insulating protective equipment prior to use and at any other time when its condition is suspect.

8. Class 00 rubber gloves must be visually inspected and roll/air tested as described in Section 6.3, “Visual and Air Test for Rubber Gloves,” at least once each day prior to use – at the beginning of the work period, and any time their condition is in doubt (e.g., possible tear or puncture related to the work).

   a. VISUALLY EXAMINE the entire inner and outer surfaces of the gloves for any defects, such as burns, cuts, corona cracks, punctures, weak spots, and bruises.

      IF found defective,

      THEN DISCARD AND REPLACE.

9. Class 2 rubber gloves must be visually inspected, and roll/air, and roll/water tested, as described in Section 6.3, “Visual and Air Test for Rubber Gloves,” and Section 6.4,“Visual and Water Test for Rubber Gloves,” at least once each day prior to use – at the beginning of the work period, and any time their condition is in doubt (e.g., possible tear or puncture related to the work).

   a. VISUALLY EXAMINE the entire inner and outer surfaces of the gloves for any defects, such as burns, cuts, corona cracks, punctures, weak spots, and bruises.

   b. In addition, STRETCH the cuffs to detect abrasions and weak spots.

      IF found defective,

      THEN DISCARD AND REPLACE.

10. INSPECT all rubber glove protectors prior to use and any other time their condition is suspect.

   a. VISUALLY EXAMINE the entire inner and outer surfaces of the rubber glove protectors for any defects, such as holes, cuts, weak spots, open stitching, and worn or cracked gauntlet.

      IF found defective,

      THEN DISCARD AND REPLACE.

6.2 Use and Care

1. Rubber gloves must only be worn with Company-supplied and approved protectors in place. For approved protectors, SEE TD-2888B-074, "Leather Protectors for Primary and Secondary Rubber Protective Gloves."

2. NEVER WEAR rubber gloves without approved protectors.

3. Only WEAR approved protectors when wearing rubber gloves.

4. DO NOT USE any other type of glove in place of approved rubber glove protectors.

5. Rubber glove protectors provide mechanical protection for rubber insulating gloves. DO NOT USE rubber glove protectors for electrical protection.

6. NEVER WEAR rubber gloves and/or sleeves inside out.

7. DO NOT LAY insulating protective equipment on the ground or on other contaminated surfaces unless the surface is covered by a tarp or a similar protective device.

8. When insulating protective equipment is not being used, employees must PROTECT it from excessive heat, mechanical or chemical damage, and direct sunlight.

   a. STORE the equipment in the provided containers.

   b. DO NOT PLACE anything else in the containers designed for insulating protective equipment.

   c. STORE rubber gloves in approved storage bags hanging with gauntlets open and facing down with fingers facing up.

   d. DO NOT FOLD insulating protective equipment while stored.

9. IF insulating protective equipment is left on energized conductors or apparatus for extended periods of time (e.g., overnight),

   THEN REMOVE, CLEAN, AND VISUALLY INSPECT the insulating protective equipment before it can be reused.

   - IF rubber equipment is suspect,

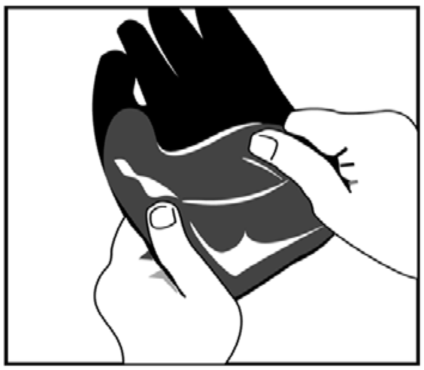
     THEN SEND it in for electrical testing.

   - IF insulating hard plastic protective cover is suspect,

     THEN DISCARD AND REPLACE.

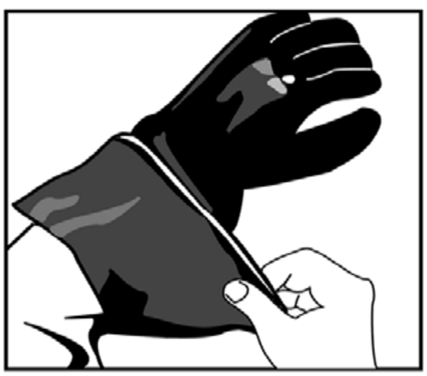
6.3 Visual and Air Test for Rubber Gloves

1. The following illustration (SEE Figure 3 below) can be found in the Code of Safe Practices, "Data Section," Page 13.



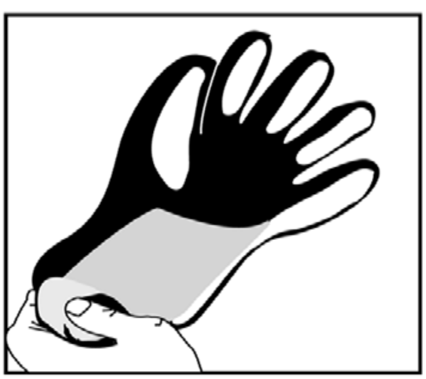
No. 1 – Examine entire outer surface for burns, cuts, cracks, punctures and weak spots.

No.2 – By stretching cuff slightly, abrasions and weak spots should become more evident.



No. 3 – Examine inside of cuff for tears, punctures, etc.

No. 4 – Squeeze air into parts to be examined. Careful attention should given to the palm and fingers.



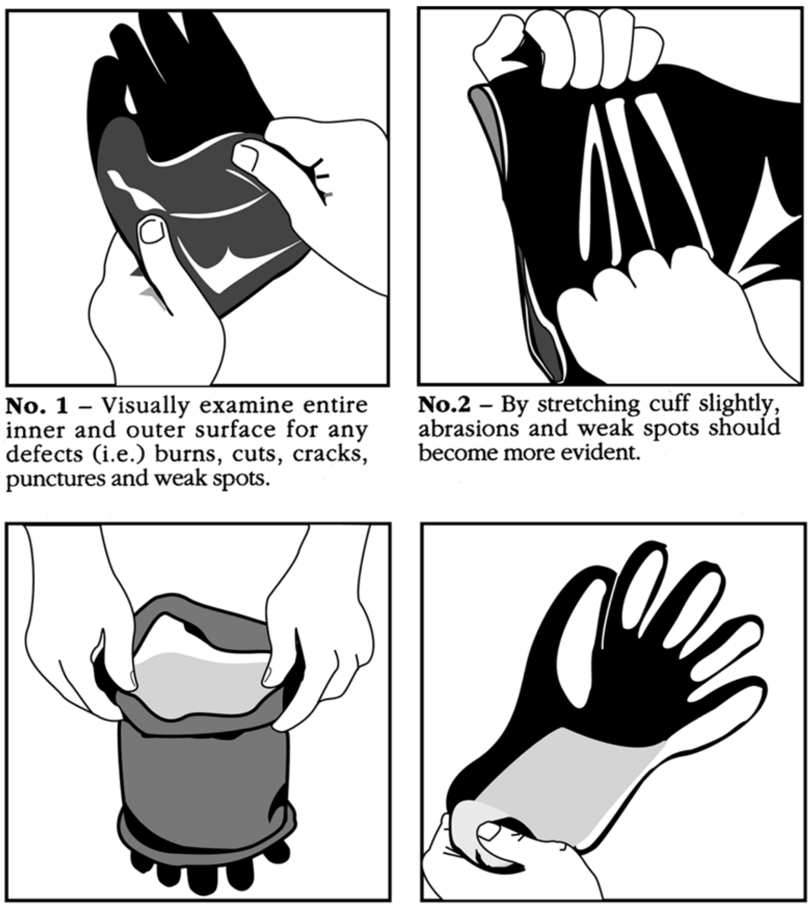
No. 5 – Roll cuff of glove to trap air. Hold tightly in this manner to prevent air from escaping.

No. 6 – By listening or felling, punctures and/or tears should be detected by escaping air.

Figure 3. Visual and Air Test for Rubber Gloves

6.4 Visual and Water Test for Rubber Gloves

1. The following illustration (SEE Figure 4 below) can be found in the Code of Safe Practices, “Data Section,” Page 14.



No. 1 – Visually examine entire inner and outer surface for any defects (i.e.) burns, cuts, cracks, punctures and weak spots.

No.2 – By stretching cuff slightly, abrasions and weak spots should become more evident.

No. 3 – Fill the rubber glove with clean water up to the wrist level, keeping the outer surface dry. Roll cuff of glove to trap air and water. Hold tightly in this manner to prevent air or water from escaping.

No. 4 – By observing or feeling the surface of the glove, punctures and tears may be detected by escaping air or beads of water.

Figure 4. Visual and Water Test for Rubber Gloves

7 Using Miscellaneous Tools (All Voltages)

7.1 USE only approved hot sticks to operate fused cutouts or disconnects, unless the cutouts and/or disconnects have been bypassed electrically.

- Cutouts bypassed with a Jack Jumper must be operated with an approved hot stick.

Rubber Glove Work Methods, 50 V to 21 kV

7.2 Employees must ONLY USE fiber-strap hoists on distribution voltages from 50 V to 21 kV.

- INSTALL an approved, insulating link stick between the hoist and any other surface with a different potential.

7.3 WEAR the appropriately rated rubber gloves, for the voltage being worked, when using approved insulated hand tools (probes, meters, screwdrivers, etc.) for activities performed in direct contact with exposed conductors or apparatus energized at greater than 50 V (e.g., checking voltage, checking rotation, checking load). Exception to this rule is when utilizing hot stick work methods.

END of Instructions

DEFINITIONS

Approved Aerial Device: A hydraulically operated aerial basket (bucket truck, material handler) with or without insulated boom sections or jib. An aerial lift allows employees to carry out above-ground rubber glove work. Approved aerial devices used for performing rubber glove work methods above 5 kV must meet the following requirements (SEE TD-2355B-003, "Vehicle Requirements, Electric Maintenance and Construction Manual, Section 7"):

- Aerial devices must have a current dielectric certification sticker/label affixed to the vehicle near the lower boom controls.
- Aerial devices must have both upper and lower boom controls.
- Aerial devices must be equipped with an approved bucket liner and pan. Bucket liners must have a current dielectric certification sticker/label affixed to the outer surface.

Barrier: A physical obstruction that is intended to prevent contact with equipment or live parts or to prevent unauthorized access to a work area.

Energized Conductor: Conductors or apparatus energized from 50 V to 21 kV, nominal, phase-to-phase.

Exposed: Energized, live parts of conductors or apparatus capable of being inadvertently touched or approached closer than the minimum approach distance (MAD). This definition applies to parts not suitably guarded, isolated, or insulated.

Insulating Protective Equipment: All rubber, hard plastic, or other associated non-conductive devices used by employees to make the work area safe (e.g., blankets, insulated jumpers, line hose, hoods).

Jobsite: One (or more) location(s) where work is being performed.

Nominal Voltage: The measured phase-to-phase voltage value assigned to a system or circuit of a given voltage class for the purpose of convenient designation/identification. The actual operating voltage of the system may vary above or below this value.

Definitions (continued)

Person-in-charge (PIC): The individual designated by the supervisor who is responsible for the job task or work activity. PICs working alone must perform all duties, as described in this procedure. If additional personnel are required to perform a job task, the PIC must brief each individual on the job scope when they enter the site.

Qualified Electrical Worker (QEW): The following definition is from CSP, Basic Safety Requirements, Rule P-10, "Qualifications for Duty":

- Only Qualified Electrical Workers shall perform work that is required by regulation to be performed by a Qualified Electrical Worker.
- Qualified Electrical Worker: A Qualified Electrical Worker is, by regulatory definition, a qualified person who has a minimum of two years of training and experience with high-voltage circuits and equipment and has demonstrated by performance, familiarity with the work to be performed and the hazards involved.

The following additional requirements only apply to Electric Transmission and Distribution employees designated as a QEW:

- Journeymen lineman classification or higher when working on or around energized facilities in excess of 600 V.
- Has received training and has demonstrated the ability to competently perform the following:
    - Distinguish exposed live parts from other parts of electric equipment.
    - Determine the nominal voltage of exposed live parts.
    - Know the MADs for the voltages exposed.
    - Know the precautionary techniques, PPE, insulating and shielding materials, and insulated tools to use at all times when working on or near exposed, energized parts of electric equipment.
    - Understand and be able to recognize all other hazards and potential hazards of working on and around high voltage equipment in excess of 600 V whether or not energized parts are exposed.

Definitions (continued)

Qualified person (QP): The following definition is from CSP, Basic Safety Requirements, Rule P-10, “Qualifications for Duty”:

> Employees shall only perform work for which they are qualified and authorized to perform, have been trained to perform, and are mentally and physically capable of performing.
>
> Only Qualified Persons shall be assigned to work on equipment or facilities.
>
> Qualified Person: A Qualified Person is, by regulatory definition, a person designated by the employer who has received training in and demonstrated skills and knowledge in the construction and operation of electric equipment and installations and the hazards involved, by reason of experience and training, has demonstrated the ability to safely perform assigned duties and, when required, is properly licensed in accordance with federal, state, or local laws and regulations. An employee who is undergoing on the job training and who, in the course of such training, has demonstrated an ability to perform duties safely at his or her level of training and who is under the direct supervision of a Qualified Person is considered to be a Qualified Person for the performance of those duties.

In addition to the requirements set forth above, a Qualified Person must:

- Complete training that enables the employee to safely and competently perform the tasks that are specific to the employee’s job classification (e.g., Street Light worker, Equipment Operator, MEO, T&D assistant)
- Demonstrate the ability to safely and competently perform the tasks that are specific to the employee’s job classification.
- Be able to identify and mitigate the hazards that are specific to the tasks performed in the employee’s job classification.

NOTE
The term “competent person” is not used to classify employees working on or near energized facilities.

Worksite: The immediate site(s) where a task will be conducted within a jobsite.

IMPLEMENTATION RESPONSIBILITIES

Electric transmission, distribution, and operations superintendents and managers must ensure that supervisor’s tailboard this procedure to affected employees.

GOVERNING DOCUMENT

- SAFE-1015S, "Low Voltage Electrical Safety"
- Safety Health and Claims (SH&C) Procedure 230, "Low Voltage Insulated Gloves and Tools" (currently under revision)

COMPLIANCE REQUIREMENT / REGULATORY COMMITMENT

United States Department of Labor Occupational Safety & Health Administration (Fed OSHA)**, Regulations (Standards – 29 Code of Federal Regulations),**

General Industry Safety Orders 1910:

- Subpart F - Powered Platforms, Manlifts, and Vehicle-Mounted Work Platforms, 1910.67 - Vehicle-mounted elevating and rotating work platforms.
- Subpart I – Personal Protective Equipment, 1910.137 – Electrical Protective Equipment
- Subpart R - Special Industries, 1910.269 - Electric Power Generation, Transmission, and Distribution

Construction Safety Orders 1926:

- Subpart E - Personal Protective and Life Saving Equipment, 1926.97
- Subpart V - Electric Power Transmission and Distribution, 1926.950 – 1926.968

California Department of Industrial Relations (Cal OSHA), California Code of Regulations, Title 8 Regulations, Chapter 4 Division of Industrial Safety, Subchapter 5 Electrical Safety Orders (Sections 2299 - 2974):

- Group 1, Low-Voltage Electrical Safety Orders (Sections 2299 - 2599)
- Group 2, High-Voltage Electrical Safety Orders (Sections 2700–2989)

REFERENCE DOCUMENTS

Developmental References:

- TD-3340P-07, "Distribution Feeder Relay Settings for Arc-Flash Safety"
- SAFE-1001S, "Safety and Health Program Standard"
- SAFE-1015S, "Low Voltage Electrical Safety"

Reference Documents (continued)

- Safety Health and Claims (SH&C) Procedure 230, "Low Voltage Insulated Gloves and Tools" (currently under revision)
- SH&C Procedure 237, "Arc-Flash Hazard Control Procedure" (currently under revision)
- American Society of Testing and Materials (ASTM International) Standards:
  - D120-14a, "Standard Specification for Rubber Insulating Gloves"
  - D1048-14, "Standard Specification for Rubber Insulating Blankets"
  - D1049-98 (2010), "Standard Specification for Rubber Insulating Covers"
  - D1050-05(2011), "Standard Specification for Rubber Insulating Line Hose"
  - D1051-14a, "Standard Specification for Rubber Insulating Sleeves"
  - F478-14a, "Standard Specification for In-Service Care of Insulating Line Hose and Covers"
  - F479-06 (2011), "Standard Specification for In-Service Care of Insulating Blankets"
  - F496-14a, "Standard Specification for In-Service Care of Insulating Gloves and Sleeves"
  - F696-06 (2011), "Standard Specification for Leather Protectors for Rubber Insulating Gloves and Mittens"
  - F711-02 (2013), "Standard Specification for Fiberglass-Reinforced Plastic (FRP) Rod and Tube Used in Live Line Tools"
  - F712-06 (2011), "Standard Test Methods and Specifications for Electrically Insulating Plastic Guard Equipment for Protection of Workers"
  - F1116-14a, "Standard Test Method for Determining Dielectric Strength of Dielectric Footwear"
  - F1117-03 (2013), "Standard Specification for Dielectric Footwear"
  - F1236-16, "Standard Guide for Visual Inspection of Electrical Protective Rubber Products"
  - F1701-12, "Standard Specification for Unused Rope with Special Electrical Properties"

Reference Documents (continued)

- F2321-14, "Standard Specification for Flexible and Rigid Insulated Temporary By-Pass Jumpers"

- Institute of Electrical and Electronics Engineers (IEEE) Std. 516-2009 "Guide for Maintenance Methods on Energized Power Lines"
- Utility Business Media, Inc., Incident Prevention: "Training Second Point of Contact"
- Company/Union Letter Agreements:
  - 90-34-PGE
  - 03-10-PGE
  - 05-23-PGE
  - R2-05-45-PGE

Supplemental References:

- Code of Safe Practices (CSP)
- Pacific Gas and Electric Company Safety & Performance Fundamentals Handbook
- Utility Procedure TD 2024P-01, "Tailboard Briefings for Electric Operations,"
- Utility Procedure TD-2509P-01 "Flame Resistant (FR) Clothing Procedures."
- Utility Procedure TD-1002P-06, "Temporary Pole-Mounted Work Platforms"
- Utility Procedure TD-2700P-03, "Clearances and Non-Tests," Section 17
- Utility Procedure TD-2021P-01, "Insulated Hard Plastic Line Conductor Covers"
- Utility Bulletin TD-2700B-004, "Outage Management Tool (OMT) Requirements for Rubber Glove Work"
- Utility Bulletin TD-2888B-074, "Leather Protectors for Primary and Secondary Rubber Protective Gloves."
- Utility Manual TD-1257M, "Insulator Cleaning Manual."
- Utility Manual TD-2355M, "Electric Maintenance and Construction Manual, "Chapter 1: Overhead Transmission and Distribution"
- Utility Manual TD-2908M, "Distribution Field Switching Manual"

APPENDICES

- Appendix A, “Human Performance Error Prevention Tools”
- Appendix B, “Requirements for Making Temporary Jumpers in the Field”
- Appendix C, “Energized Re-conductor Decision Matrix, Best Practices, and Q&A”

ATTACHMENTS

NA

DOCUMENT RECISION

This Utility Procedure cancels and supersedes the following documents:

- TD-2360P-01, “Rubber Glove Work Methods, “50 V to 21k V” dated 11/15/2017, Rev: 2

DOCUMENT APPROVER

[redacted] Manager

DOCUMENT OWNER

[redacted], Manager

DOCUMENT CONTACT

[redacted], Manager

REVISION NOTES

Where?	What Changed?
Section 2.2 – Table 1	Updated Voltage Range Nominal Phase-to-Phase to 15.1kV – 23kV; Updated MAD inches for 15.1kV – 23kV to 30 inches
Section 2.3.1	Changed contact area from 37 inches to 30 inches
Section 2.3 – Figure 1	Updated “Contact Area When Using the Rubber Glove Work Method 601 V – 21 kV” from 37 inches to 30 inches within Figure 1.

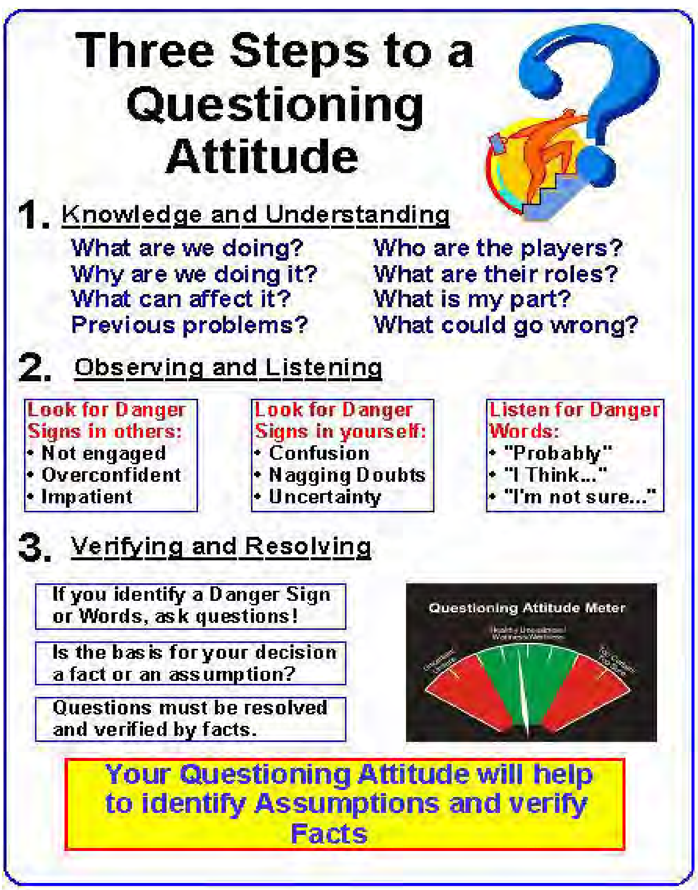
Appendix A, Human Performance Error Prevention Tools

Two Minute Rule

The key objective of this tool is to improve a person(s) situational awareness when first arriving at the jobsite, or when conditions or job scope has changed. A carefully performed two minute rule review will take as much time as needed to help a person(s) to develop an accurate understanding of critical indicators and the work environment. Situational awareness is the accuracy of a person(s)' current knowledge and understanding of the task at hand and related working conditions compared to actual conditions at a given time. Situational awareness demands that the individual(s) clearly understand the job requirements, the equipment conditions, and the work environment before acting.

Questioning Attitude

A questioning attitude fosters situational awareness, promotes a preference for facts over assumption and opinion, and encourages thought about safety before action is taken. Without sufficient facts or verification, any performer or observer shall stop the activity to address unexpected work situations that could lead to either a serious mistake or a significant event. Ask why? What if?



Appendix A, Human Performance Error Prevention Tools
Page 2 of 4

Stop When Unsure

When confronted with confusion or uncertainty, a person is in unfamiliar territory. Given that the chance for error is particularly high in such situations, the best course of action, when unsure, is to stop and get help from other people.

Self Checking (STAR)

(Stop, Think, Act, Review) – Self-checking helps the performer focus attention on the appropriate component, think about the intended actions, understand the expected outcome before action is taken, and verify the results after the action. When used rigorously, self checking boosts attention and thinking just before physical actions are performed.

Tailboards and Task Preview

Prepares workers to perform the job right, the first time. A tailboard involves having a conversation among all participants about what is to be accomplished and what is to be avoided regarding a specific task before performing it:

- IDENTIFY tasks.
- IDENTIFY AND ADDRESS hazards.
- IDENTIFY AND ADDRESS related safety precautions.

Steps to Perform a Task Preview are S.A.F.E.R.

1. SUMMARIZE the critical steps.
2. ANTICIPATE errors for each critical step and relevant error precursors.
3. FORESEE possible worst-case consequences should an error occur during each critical step.
4. EVALUATE controls or contingencies at each critical step to prevent, catch and recover from errors, and to reduce their consequences.
5. REVIEW previous experience and lessons learned relevant to the specific task and critical steps.

Three-Way Communication

Three-way communication promotes a reliable transfer of information and understanding, with the goal of assuring the correct action, State, Repeat, Confirm. When using Three-Way communication as a speaker, enunciate. The listener will restate or paraphrase his understanding of the message and repeat it back to the speaker for verification. The speaker acknowledges that what you heard and restated is correct.

- The speaker states a message.
- The listener repeats back the message for verification of understanding.
- The speaker confirms and acknowledges what you heard is correct.

Appendix A, Human Performance Error Prevention Tools
Page 3 of 4

Phonetic Alphabet: USE the phonetic alphabet for communicating alphanumeric information.

Procedure Use and Adherence

Understanding the overall purpose and strategy of approved procedures promotes a safe, reliable outcome. Adhering to approved procedures helps to dispel doubt and provides clarification regarding questions in the execution of various tasks and duties.

Placekeeping

Placekeeping is used when performing switching operations. SEE TD-2908P-01, “Distribution Switching Procedures,” Section 3, “Placekeeping” for detailed information.

How to Do Placekeeping:

1. WRITE current time in Time Given column of switching log.

2. WRITE switchman’s name in the Executed By Person column of switching log.

3. CIRCLE switching operation number to be performed.

When switching operation is completed, ENTER time AND SLASH THROUGH the circle.

Appendix A, Human Performance Error Prevention Tools
Page 4 of 4

Safe Switching Triangle

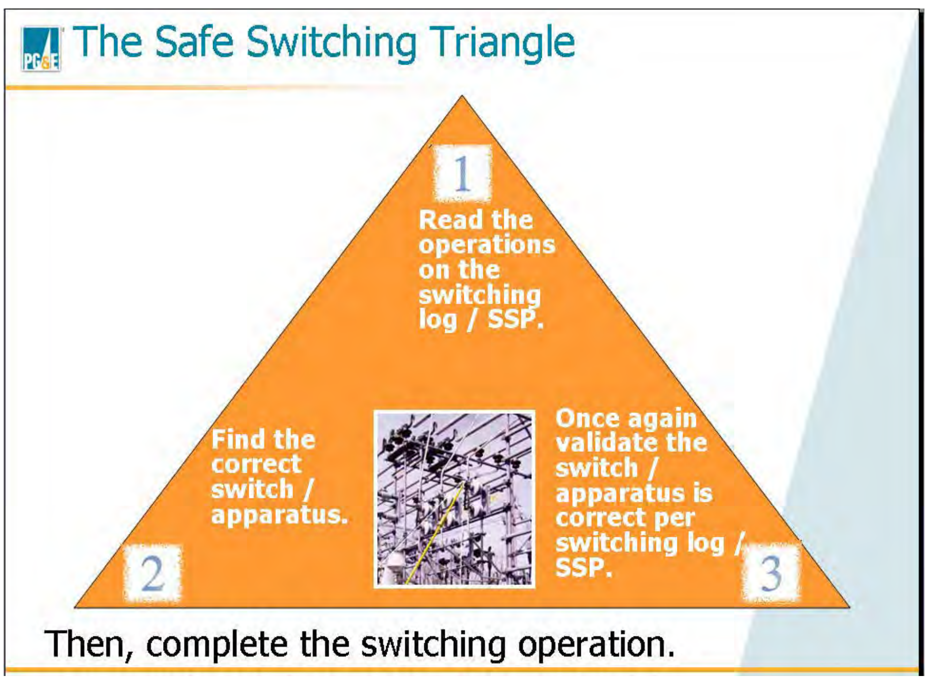
The safe switching triangle is a simplified way to remember what to do before operating a switch or apparatus.

1. READ the operations on the switching log or Standard Switching Program.

2. FIND the correct switch or apparatus.

3. Once again, VALIDATE the switch or apparatus is correct, per the switching log or Standard Switching Program.

Upon completion of these tasks (Steps 1 through 3 above), PERFORM the switching operation.



Appendix B, Requirements for Making Temporary Jumpers in the Field

Page 1 of 1

- Temporary jumpers may be assembled at the jobsite but must be disassembled upon completion of work.
- Temporary jumpers must be at a minimum, equal conductor size and material or meet the ampacity rating of the conductor being worked.
- Approved connectors with proper work methods must be used (i.e., Tap clamps, ampac).
- TREAT temporary jumpers assembled at the jobsite as energized conductors.
- Mini wedges are acceptable for secondary voltages only.
- Ground shunt jumper cannot be used as a temporary jumper.
- Temporary jumpers should be kept as short as possible not to exceed 8 feet in length.
- Temporary jumpers can be installed on a de-energized line by a qualified electrical worker working alone during emergency restoration utilizing an approved hot stick.
- Temporary jumpers are not to be used as a permanent installation and when utilized for emergency restoration must be removed within twenty one calendar days.
- ENSURE the temporary jumper connections are clean and tightened.
- REFER to construction standard 076251, "Ampacity of Overhead Distribution Line Conductors" for proper conductor selection.
- REFER to construction standard 028852, "Connectors for Aluminum Conductors on Distribution Lines" for proper tap clamp connector selection.

Appendix C, Energized Reconductor Decision Matrix, Best Practices, and Q&A

Decision Matrix

CONSIDER the following issues when determining if a job is a candidate for the energized reconductor work practice (this list is not meant to be all inclusive).

- Can the line be cleared to use conventional means?
- How many customers would be impacted using conventional means?
- How long would the customers be impacted using conventional means?
- What types of customers will be impacted – residential, commercial, industrial, AG?
- Can the energized work practice be used to get past a critical point and then use conventional means to reduce the overall cost of the job and reduce customer impact?
- There may be cases where customers will have to be de-energized regardless of the work practice used. WEIGH the benefits of each work practice in making the decision.
- Given the fact the crew will be in this area approximately 2-3 times as long, what will the impact be on the area, traffic control, etc.?
- What is the availability of the tools and equipment?

Best Practices

The following “Best Practices” were identified during the pilot projects (this list is not meant to be all inclusive).

- PERFORM a job walk-down with the crew, supervisor, and any available SMEs.
- PLAN the removal of the old conductor in the planning stage of the job (KNOW how the wire will be let down and where the “heavy-duty Hastings temporary hot dead-end arms” need to be installed, versus the “light-duty Chance temporary hot arms.”)
    - CONSIDER the added strain being placed on existing and new framing when the temporary hot arms are installed.
    - IF the old conductor being removed will be connected at each end to a digger derrick so that it can be swung away from the new energized line when being lowered,

      THEN the old conductor on the poles between the trucks may need to be tied to the poles above the reach of employees or the public as conductors are removed from the temporary arms.

Appendix C, Energized Reconductor Decision Matrix, Best Practices, and Q&A
Page 2 of 4

Best Practices, continued

- DETERMINE what work dictates the need for a Non-Test, some may include:
  - Stringing pulling lines
  - Stringing conductor
  - Unclipping/clipping the conductor
  - Removing conductor
  - Making/breaking the loop
  - Transferring the taps/load to the new conductor
- When pulling under tension, even small elevation changes must be addressed.
- Equipment left on the jobsite overnight must be secured against theft or vandalism (i.e., rope truck or trailer, or “Spider Line” trailer).
- Pulling line can be installed as you go, if the conductor can be installed the same day or equipment can be secured against theft and vandalism.
- CONSIDER the integrity of the rope (keep it clean).
- Always USE the manufacturer’s insulators with the “light-duty Chance temporary hot arms.” Torque to 360 in-lbs. or 30 ft-lbs.
- CONSIDER having a crew that has previously performed an energized reconductor assist the crew that has little or no experience with this work practice.
- A minimum of 2 bucket trucks per crew is recommended.
- 2 crews are recommended on wire stringing/removal days.
- The person in charge’s (PIC) full attention must be focused on the execution of the job, not physically performing the work.
- Using power take-up equipment at the tensioning end of the job is recommended (this makes re-stringing the “bull wheels” easier).

Appendix C, Energized Reconductor Decision Matrix, Best Practices, and Q&A

Best Practices, continued

- Fuses on tap lines may melt when transferring from the old smaller conductor to new larger conductor if it is only energized from one end.
  - Making the loop (box loop) keeping both the old and new conductors connected at both ends should eliminate this from happening.
  - Installing a jumper across the cutout is another option (the “Jack Jumper” can be used under 80 amps).

Questions and Answers

A. How should grounds be installed during the wire stringing?

- GROUND all equipment per the *Protective Grounding Manual* (TD-2345M).
- A running ground must be installed on the wire at the tensioning equipment.
- A traveling ground must be installed at the first pole from the tensioning equipment.
- All grounds at the tensioning end must be tied to the same ground source.
- When snubbing and separating the newly installed conductor at the tensioning end, a ground must be installed on the wire at the pole until the wire is dropped to the ground.
- Running grounds are not required at or adjacent to distribution hot crossings.
  - Per Title 8, 2941(i)(1)(D) When there is a possibility of the conductor accidentally contacting any energized high voltage circuit or receiving a hazardous induced voltage buildup, the conductor being installed or removed shall be grounded or provisions made to isolate or insulate the employees.
  - Per Title 8, 2941(i)(1)(E)2. When crossing over or within 10 feet under conductors energized in excess of 300 volts, rope nets or guard structures shall be installed unless provision is made to isolate or insulate the workers or the energized conductor. Where practical the automatic reclosing feature of the circuit interrupting device shall be made inoperative. In addition, the line being strung shall be grounded on either side of the crossing or considered and worked as energized.
- IF the wire at the pulling end cannot be contacted from the ground,

  THEN a traveling ground is not required.

Appendix C, Energized Reconductor Decision Matrix, Best Practices, and Q&A
Page 4 of 4

Questions and Answers, continued

B. How do we contact the wire or rope during stringing?

- All personnel must wear Class 2 rubber gloves and EH boots or overshoes any time they are to touch the wire or rope.

C. How do we contact the equipment during stringing?

- All personnel must wear Class 2 rubber gloves and EH boots or overshoes whenever mounting or dismounting the equipment.
- All personnel must wear Class 2 rubber gloves and EH boots or overshoes whenever making adjustments to the equipment.

D. Do grounds need to be installed during the removal of the old wire?

- Per Title 8, 2941(i)(1)(D) When there is a possibility of the conductor accidentally contacting any energized high-voltage circuit or receiving a hazardous induced voltage buildup, the conductor being installed or removed shall be grounded or provisions made to isolate or insulate the employees.
    - As long as the old wire that is let down is not above a hot crossing, Class 2 rubber gloves and EH boots or overshoes are adequate.

