State of California – A Natural Resources Agency
Gavin Newsom, Governor

**OFFICE OF ENERGY INFRASTRUCTURE SAFETY**
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Caroline Thomas Jacobs, Director

**TRANSMITTED VIA ELECTRONIC MAIL**

January 23, 2024

Dan Marsh
Senior Manager, Rates and Regulatory Affairs
Liberty Utilities
701 National Ave, Tahoe Vista, CA 96148

NOV_ CAC9_LU_ 20220804_1232

# NOTICE OF VIOLATION

Mr. Marsh,

Pursuant to Government Code § 15475.1, the Office of Energy Infrastructure Safety (Energy Safety) has completed a compliance assessment of Liberty Utilities and determined the existence of one or more violations. In accordance with Government Code § 15475.2 and the California Code of Regulations, Title 14, Division 17 § 29302(b)(2), the purpose of a Notice of Violation is to identify noncompliance with an approved Wildfire Mitigation Plan or any law, regulation, or guideline within the authority of the Office.

On August 4, 2022, Energy Safety conducted an inspection of Liberty Utilities WMP initiatives in the vicinity of the city of Portola, Plumas County, California. The inspection report is enclosed herewith. Energy safety found the following violation:

**Violation 1:** Energy Safety observed that in implementing 2021 WMP initiative number 7.3.3.6, Liberty Utilities failed to adhere to its pole setting installation protocols[1] on pole number 294725 (Lat/Long: 39.81516809599972, -120.4719928624206). Energy Safety considers this violation for failure to adhere to protocol to be in the Moderate risk category.

## Response Options

Energy Safety may prescribe a timeframe for resolution of a violation or defect associated with the assigned risk category.[2] Within 30 days from the issuance date of this notice of violation (NOV), the electrical corporation must provide a response advising Energy Safety of corrective

[1] 2021_Sept-Concatenated_Standards.pdf page 457, POL01T, Pole Setting Depths 4.4
[2] Energy Safety Compliance Guidelines, pp. 5-6

actions taken or planned to remedy the above identified violation(s) and prevent recurrence. Alternatively, the electrical corporation must advise Energy Safety that it will not correct the violation, including the reasoning or justification for inaction and all supporting documentation.[3]
This response shall be filed in the Energy Safety e-Filing system under the 2021 NOV Docket[4] and the associated file name(s) must begin with the NOV identification number provided above.

Pursuant to Government Code § 15475.4, if the electrical corporation intends to request a hearing "to take public comment or present additional information," it must also do so within the 30-day timeframe. If a petition for hearing is not received by the deadline, then the determination and conditions set forth in this NOV become final.

Prior to its response or request for hearing, the electrical corporation may also request an informal conference with Energy Safety's Compliance Assurance Division for the purpose of disputing any issues raised in this NOV no later than five (5) business days before the response deadline.[5] Requests for informal conferences with Energy Safety must be e-mailed to compliance@energysafety.ca.gov, with a copy sent to all Energy Safety's Compliance Assurance Division staff identified in the NOD. Electrical corporations are encouraged to schedule a conference at the earliest possible time to assure an expeditious resolution of any issues.

Pursuant to Public Utilities Code § 8389(g), following receipt of the electrical corporation's response to this NOV and resolution of any disputes, this matter may be referred to the California Public Utilities Commission (CPUC) for its consideration of potential enforcement action, as the CPUC deems appropriate.

Sincerely,

Shannon O'Rourke
Deputy Director | Electrical Infrastructure Directorate
Office of Energy Infrastructure Safety

Cc:
Peter Stoltman, Liberty Utilities
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[3] Energy Safety Compliance Guidelines, p. 7
[4] https://efiling.energysafety.ca.gov/EFiling/DocketInformation.aspx?docketnumber=2021-NOV
[5] Energy Safety Compliance Guidelines, p. 6

# Energy Safety Inspection Report

CALIFORNIA
OFFICE OF ENERGY INFRASTRUCTURE SAFETY

# Table of Contents

Report Number: CAC9_LU_20220804_1232
Date: August 4, 2022
Inspector: CAC9
Utility: Liberty Utilities
Attention: Dan Marsh, Senior Manager, Rates and Regulatory Affairs

# I. BACKGROUND

While wildfires are a natural part of California's ecosystem, the “fire season” in California and throughout the West is beginning and finishing earlier and later each year. Climate change and drought are believed to be major contributors to this unsettling pattern. Utility-ignited wildfires are also a significant contributor to the wildfire risk in the Golden State, as this ignition cause category represents a disproportionate amount of the largest and most destructive fires in state history. Consequently, the Office of Energy Infrastructure Safety (Energy Safety) was established per the California Energy Infrastructure Safety Act (Government Code sections 15470 – 15476) with the primary objective to ensure electrical corporations reduce wildfire risk and comply with energy infrastructure safety measures. One method Energy Safety deploys to meet its objective is conducting detailed visual inspections of electrical infrastructure.

Inspections are carried out by Energy Safety’s Compliance Division on a regular basis to verify the work performed by electrical corporations, as reported in approved wildfire mitigation plans (WMPs) or subsequent filings and assess general conditions of electrical infrastructure that may adversely impact an electrical corporation’s wildfire risk. Accordingly, Energy Safety inspections are distinguished into two lines of effort. Inspections related to an electrical corporation’s execution of its WMP initiatives are referred to as “WMP Initiative Inspections,” and findings are detailed in Table 2 below. Issues discovered during these inspections are categorized as violations and are accompanied by a notice of violation (NOV). In addition to assessing compliance with WMP initiatives, Energy Safety inspectors also visually assess the electrical infrastructure and surrounding vegetation to determine whether conditions are present that increase an electrical corporation’s ignition and wildfire risk in accordance with the electrical corporation’s obligation to “construct, maintain, and

operate its electrical lines and equipment in a manner that will minimize the risk of catastrophic wildfire posed by those electrical lines and equipment." (Public Utility Code section 8386) These inspections are referred to as" General Wildfire Safety (GWS) Inspections", and findings are detailed in Table 3 below. Issues discovered during these inspections are categorized as defects and are accompanied by a notice of defect (NOD).

This report details the findings of a recent Energy Safety inspection.

# II. RESULTS

In accordance with Energy Safety's WMP Compliance Process, violations and defects discovered by Energy Safety must be corrected in a timely manner. The timeline for corrective action is dependent upon the risk category, location, and potential impact to worker safety of the violation or defect discovered. Risk categories range from minor to severe, and locational risks are determined with tier levels in the California Public Utilities Commission's High Fire Threat District (HFTD) map. Table 1 below outlines violation and defect risk categories and their associated correction timelines. The correction timelines identified below apply to the results of both WMP Initiative Inspections as well as GWS Inspections.

## **Table 1**. Risk Category and Correction Timelines

| Risk Category | Violation and defect correction timeline |
|---|---|
| Severe | • Immediate resolution |
| Moderate | • 2 months (in HFTD Tier 3)<br>• 6 months (in HFTD Tier 2)<br>• 6 months (if relevant to worker safety; not in HFTD Tier 3) |
| Minor | • 12 months or resolution scheduled in WMP update |

## **Table 2**. WMP Inspection Violations

| Item | Structure ID | Lat/Long | HFTD | Initiative Number | Violation Type | Severity | Violation Description |
|---|---|---|---|---|---|---|---|
| V1 | 294725 | 39.81516809599972, -120.47199286242 | Non-HFTD | 7.3.3.6 | Adherence to Protocol | Moderate | Failure to set the pole to Protocol |

## **Table 3.** General Wildfire Safety Inspection Defects

| Item | Structure ID | Lat/Long | HFTD | Defect Type | Severity | Defect Description |
|---|---|---|---|---|---|---|
| D1 | 294723 | 39.81342673405091, -120.462361682919 | Non-HFTD | Pole evidence of significant decay/damage | Severe | Pole has been on fire, is damaged, and charred |
| D2 | 294723 | 39.81342673405091, -120.462361682919 | Non-HFTD | Down guy wire loose | Severe | Evidence of guy wire exposed to fire |
| D3 | 70936 | 39.81348906530345, -120.462249268081 | Non-HFTD | Pole evidence of significant decay/damage | Severe | Pole has been on fire is damaged, and charred |

# III. DISCUSSION

On September 3, 2021, Liberty Utilities submitted its quarterly data report (QDR) for the second quarter (Q2) of 2021, covering the reporting period of April 1, 2021, through June 30, 2021. Liberty Utilities' Q2 QDR data was submitted pursuant to Energy Safety Data Standard published on February 14, 2021. The Q2 QDR data detailed the status of Liberty Utilities' WMP initiatives as of the end of Q2 2021.

Energy Safety utilized an internally established selection criteria to define the sample of Q2 2021 initiative activities and structures to inspect for WMP compliance. Based on this, Energy Safety conducted inspections of the selected structures to assess Liberty Utilities' compliance with the following WMP initiative: Distribution Pole Replacement and Reinforcement, Including Composite Poles (2021 WMP initiative number 7.3.3.6). The inspections serve to assess the accuracy of Liberty Utilities' QDR data, the completeness of its work, and whether it followed its protocols.

On August 4, 2022, Energy Safety conducted an inspection pursuant to the established selection criteria described above, in the vicinity of the city of Portola, Plumas County, California. Upon arriving at the inspection location, Energy Safety observed the following violation and defects:

Violation 1: Energy Safety observed that pole number 294725 (Lat/Long: 39.81516809599972, -120.4719928624206) does not meet Liberty Utilities' pole setting standards and installation protocol. In its 2021 WMP Liberty Utilities committed to replacing "approximately 400 poles in HFTD 2 areas that were identified as needing replacement during Liberty's System Survey." [1] Pole number 294725 was reported by Liberty Utilities as a pole scheduled for replacement and was replaced. Per Liberty Utilities' 2021_Sept-Concatenated_Standards.pdf page 457, POL01T, Pole Setting Depths 4.4, "After the pole is positioned in the hole, only one person needs to shovel the backfill while 2 or 3 will continually tamp in the backfill until the hole is completely filled. The remaining soil will be piled

[1] **Liberty Utilities 2021 Wildfire Mitigation Plan Update, 2021 WMP initiative number 7.3.3.6, page 90**

firmly up and around the base of the pole."[2] Liberty Utilities' Final Contract 8800-0000 16-01-05-08, also states, "Contractor shall generously backfill and tamp any soil excavation to preclude the possibility of subsequent setting creating a depression area around the utility pole. At minimum, the backfill operation shall consist of replacing the first 10 inches of soil, and tamping followed by replacement of the remaining soil and tamping it."[3] These protocols were provided to Energy Safety in the Energy Safety DR-067 (Data Request) dated March 9, 2022.

Visual inspection of the base of the pole shows a hole in the earth at the base of the pole approximately three inches in diameter, and an area approximately one foot in diameter around the base that was not filled in or firmly piled up around the base of the pole. See V1 photo on page A-6. Failure to adhere to pole setting protocols may decrease the stability of the pole, increasing the possibility of failure, which may lead to falling, leaning, and reduced clearances, thereby increasing ignition risk and endangering public safety. Energy Safety considers this violation for failure to adhere to protocol to be in the Moderate risk category.

In addition to the violation discovered during the WMP compliance inspection, Energy Safety discovered the following defects:

Defect 1: Energy Safety observed that pole number 294723 (Lat/Long: 39.81342673405091, -120.46236168291999) shows severe fire damage and is completely charred from the ground to the top of the pole, as shown in the D1 photo on page A-2. Poles are intended to support the structural and mechanical loads of the energized equipment on the pole. When a pole is charred from fire damage, it loses material strength and may no longer support the loads it was designed to hold. In such cases, the pole is unable to safely support overhead equipment, and may result in pole failure causing energized equipment on the pole to fall on the ground. Liberty Utilities' Concatenated_Standards.pdf document GEN02T 7.1 states, "Poles must be able to support the

[2] Liberty Utilities Concatenated_Standards.pdf, p 457, POL01T General Wood Pole Data 4.4. See Appendix B
[3] Liberty Utilities Final Contract 8800-0000 16-01-05-08, page 21 of 31

horizontal loads caused by wind loading on the pole itself, plus the wind on the conductors/equipment supported by the pole."[4] Further, General Order 95 (GO 95) states, "Poles must be of sound timber."[5] Energy Safety found this pole is not of sound timber increasing the chance of pole failure and thereby increasing Liberty Utilities' ignition and wildfire risk. Energy Safety considers this defect to be in the Severe risk category.

Energy Safety notified Liberty Utilities by phone on August 4, 2022, of the Severe defect listed above. Liberty Utilities responded on August 16, 2022. On August 24, 2022, Liberty Utilities notified Energy Safety that corrective actions were in progress. On September 21, 2022, Liberty Utilities notified Energy Safety by email reporting that the pole has been replaced. Energy Safety accepts Liberty Utilities' response and considers this defect closed.

Defect 2: Energy Safety found fire damage to the down guy wire and its hardware at the above referenced pole number 294723 (Lat/Long: 39.81342673405091, -120.462361682919), as shown in D2 photos on page A-2. The purpose of guy wires is to provide the necessary mechanical support of the pole, conductors, equipment, and balance the load. If the load on a pole is unbalanced, then the structure can become unstable and increase the likelihood of failure. By itself, this would warrant a Minor risk defect. However, in conjunction with Defect 1, Energy Safety considers this defect to be in the Severe risk category.

Energy Safety notified Liberty Utilities via phone on August 4, 2022, of the Severe defect listed above. Liberty Utilities responded on August 16, 2022. On August 24, 2022, Liberty Utilities notified Energy Safety that corrective actions were in progress. On September 21, 2022, Liberty notified Energy Safety via email reporting that the pole and guy wire has been replaced. Energy Safety accepts Liberty Utilities' response and considers this defect closed.

[4] Liberty Utilities 2021_Sept-Concatenated_Standards GEN02T 7.1. See Appendix B.
[5] General Order 95, Rule 49.1 A. (1). See Appendix B.

Defect 3: Energy Safety observed a burn crater through the center of the pole, spanning the entire length of pole number 70936 (Lat/Long: 39.81348906530345, -120.462249268081), as shown in D3 photos on page A-4. Poles are intended to support the structural and mechanical loads of the energized equipment on the pole. When a pole is hollowed from fire damage, it may lose material strength and can no longer support the same loads it was originally designed for. In such cases, the pole is unable to safely support overhead equipment, and may result in pole failure causing energized equipment on the pole to fall on the ground, increasing ignition risk. Liberty Utilities' Concatenated_Standards.pdf document GEN02T 7.1 states, "Poles must be able to support the horizontal loads caused by wind loading on the pole itself, plus the wind on the conductors/equipment supported by the pole."[3] Further, GO 95 states, "Poles must be of sound timber."[4] Energy Safety found this pole may not be of sound timber increasing the chance of pole failure and thereby increasing Liberty Utilities' ignition and wildfire risk.. Energy Safety considers this defect to be in the Severe risk category.

Energy Safety notified Liberty Utilities via phone on August 4, 2022, of the Severe defect listed above. Liberty Utilities responded on August 16, 2022. On August 24, 2022, Liberty Utilities notified Energy Safety that corrective actions were in progress. On September 21, 2022, Liberty Utilities notified Energy Safety via email reporting that the pole has been replaced. Energy Safety accepts Liberty Utilities' response and considers this defect closed.

# IV. CONCLUSION

Pursuant to its objectives and statutory obligations, Energy Safety has completed the above referenced inspection and discovered a violation and defects associated with Liberty Utilities' equipment. Liberty Utilities' required response to these non-compliances and options for hearing are detailed in the associated notices of violation and defect, respectively.

# V. APPENDICES

## APPENDIX A: Photo Log

**Structure ID: 294723**

General Photos

| | |
|---|---|
|  |  |
| **Item1GImg1**: Overall Structure | **Item1GImg2**: Structure ID 294723 |

D1 Photo

**Item1PL2Img1**: Fire damaged and charred.

D2 Photos

**Item1GW1Img1**: Guy anchor rod and strand vice pulled out of the ground

**Item1GW1Img2**: Evidence of Guy Wire having been exposed to fire

**Structure ID:** 70936

General Photos

| | |
|---|---|
|  |  |
| **Item3GImg1**: Overall | **Item3Gimg2**: One of two Pole IDs found on pole |
|  | |
| **Item3Gimg3**: Two of two Pole IDs found on pole. Energy Safety recognizes this pole ID | |

D3 Photos

| | |
|---|---|
|  |  |
| **Item3PL2Img1**: Fire damaged | **Item3PL2Img2**: Fire hollowed out pole |

**Structure ID**-294725

General Photos

| | |
|---|---|
|  |  |
| **Item5GImg1**: Overall | **Item5GImg2**: Pole ID |

V1 Photos

| | |
|---|---|
|  |  |
| **Item5IA2Img2**: Hole at the base of pole that was not filled in or firmly set | **Item5IA2Img1**: Possible material movement at the base of the pole |

4.4 After the pole is positioned in the hole, only one person needs to shovel the backfill while 2 or 3 will continually tamp in the backfill until the hole is completely filled. The remaining soil will be piled firmly up and around the base of the pole.

4.5 Pole setting depths must be maintained as accurately as practical due to JOINT use space and clearance requirements. In cases where poles are set in a proposed fill or cut area, the poles shall be set so the proper setting depth will be achieved at final grade.

## 5.0 POSITION OF POLE

5.1 Facing the poles means canting the poles into the proper direction after they have been place into the ground. The side of the pole which has the longest concave sweep between the ground and the top is the face side of the pole. Poles are normally branded on the face side of the pole by suppliers.

5.2 Poles that are not guyed and installed on angles of 5 degrees or less or other points of unbalanced load (conductor pull - alley arms, etc.) shall be raked away from the direction of pull. Raking a pole does not add to its strength or stability, but does compensate for the pole gradually leaning towards the direction of pull over a period of time. Poles should be raked at the top a maximum of 1" from the vertical for each 5' of pole above ground.

5.3 Poles set near intersections using crossarm construction shall be set with gains away from the intersection. Where conditions arise such as long spans and crossings, poles on each side of the special construction shall be gained away from the special construction. For additional information, please refer to the Lineman and Cableman's Handbook, Section 11. For typical tangent construction, see Figures 5.1 and 5.2 below.

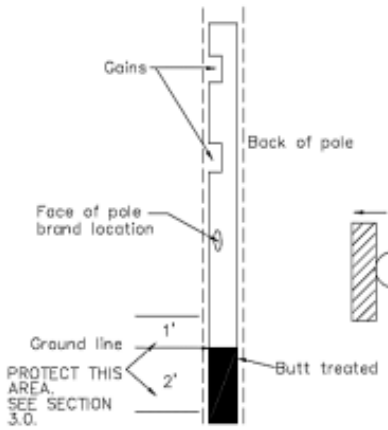


FIGURE 5.1
Wood pole setting depths


FIGURE 5.2

| Liberty Utilities | | | | | ENGINEERING & CONSTRUCTION STANDARD | 11.1.3 OF 10 |
|---|---|---|---|---|---|---|
| | | | | | GENERAL WOOD POLE DATA | OVERHEAD TECHNICAL |
| DRAWN | DESIGN | SUPR. | DATE | REV | | DRAWING NUMBER |
| LL | ET | JM | 09/19 | 02 | | POL01T |

Application rates shall be in accordance with manufacturer's EPA-issued label but shall at least satisfy the requirements of the chart listed here:

| All Hole Diameters (Inches) | Plastic Plug Size (Inches) | Original Pole Circumference (Inches) | Hole Depth (Inches) | Fumigant (Pints) | Minimum Number of Holes |
|---|---|---|---|---|---|
| 7/8" | 7/8" X 1 9/16" | < 32" | 9" | ¾ Pt. | 4 |
| 7/8" | 7/8" X 1 9/16" | 32" – 45" | 15" | 1 Pt. | 3 |
| 7/8" | 7/8" X 1 9/16" | 46" – 59" | 15" | 1 ½ Pt. | 5 |
| 7/8" | 7/8" X 1 9/16" | 60" and Over | 15" | 2 Pt. | 6 |

Note: CalPECo reserves the right to change or modify the type and quantity of fumigant(s) specified.

Alternative Internal Treatment: CalPECo may, under certain circumstances instruct the Contractor to supply and use boron-based or other products for internal treatments. Refer to CalPECo's Representative for approval of specific products.

Plugging: Contractor shall supply and plug all 3/8" drilled holes with snug fitting copper napthenate preservative treated wood dowels or plastic plugs (1/16" interference fit). All 7/8" holes shall be plugged with removable plastic plugs.

Site Cleanup: Contractor shall generously backfill and tamp any soil excavation to preclude the possibility of subsequent settling creating a depressed area around the utility pole. At minimum, the backfill operation shall consist of replacing the first 10 inches of soil, and tamping followed by replacement of the remaining soil and tamping it. No organic matter such as roots, branches, wood chips or fragments removed from the pole, etc., or refuse such as plastic bucket liners shall be included in the backfill material. Turf, shrubs, and plants on private property shall be carefully replaced so as to replicate the original conditions, as much as possible.

**Informing Customers:**

In the event that a pole is located on private property and requires entry through locked gates or has similar access restrictions, before entering the area the Contractor must provide the customer with notification.

If the Contractor enters the customer's premises when they are not at home, a door hanger shall be left behind informing the customer they were on the premises performing Work.

## General Order 95 Rule 49



### 48.6 Conductors, Span Wires, Guys and Messengers

Values used for ultimate strengths of wires and cable shall not exceed those given in Appendix B. The ultimate strengths given in Table 17 to 24 of Appendix B, except for medium–hard drawn copper, are based on the minimum ultimate strengths given in the standard specifications of the American Society for Testing Material. The ultimate strengths given in Appendix B for medium–hard drawn copper are based on the standard specifications of the ASTM and provide an allowance above the minimum values of one–quarter of the range between minimum and maximum values. For use of types of wires and cables of other material not included in Appendix B, values for ultimate strengths similarly derived from specifications of the ASTM shall be used except that, if such specifications are nonexistent, maker's specifications may be used provided that tests have been made which shall justify the maker's rating for ultimate strength.

### 48.7 Tower or Pole Foundations and Footings

The resistance of soil to foundation or footing bearing and uplift shall be calculated from the best available data or determined by test(s).

Foundation or footing resistance shall be designed with the safety factors applied as specified in Rule 44.

## 49 Detailed Strength Requirements

### 49.1 Poles, Towers and Other Structures

#### A. Strength (See Rule 48)

**(1)** Wood poles shall be of sound timber.

**(2)** In cases where lateral loads on a pole or structure require the use of a guy(s), the pole or structure below the point of the guy attachment shall be considered merely a strut, the guy(s) taking all lateral loads. In such cases, the pole strength requirement shall apply at the point of guy attachment rather than at the ground line.

Note: Revised July 26, 1966 by Decision No. 71009; March 30, 1968 by Decision No. 73813; February 13, 1974 by Decision No. 82466, January 21, 1992 by Resolution SU–10, January 13, 2005 by Decision No. 0501030, and February 5, 2014 by Decision No. 1402015.