



Preliminary Ignition Investigation Report

Ignition Database Index:	20241158
Electric Incident Investigation (EII) Number:	N/A
Incident Name:	N/A
PG&E Facility Ignition?	Yes
CPUC Reportable Ignition?	Yes
Date & Time of Incident:	August 16, 2024, 1824 hours
Street Address:	[REDACTED]
City:	San Anselmo
County:	Marin
Latitude/Longitude:	[REDACTED]
State Responsibility Area (SRA) / Local Responsibility Area (LRA) / Federal Responsibility Area (FRA)	Local Responsibility Area
PG&E Division:	North Bay
High Fire Threat District (HFTD):	Tier 3
High Fire Risk Area (HFRA):	Yes
EPSS Buffer:	No
Fire Index Area (FIA):	190
Fire Potential Index (FPI) Rating: FIA	R4
Fire Potential Index (FPI) Rating: Circuit	R4
Was there a PSPS event at the time of ignition?	No
Suspected Initiating Event:	Equipment – PG&E
Failure Driver:	All types of equipment/facility failure
Failure Sub-driver:	Utility work/Improper construction
Circuit:	SAN RAFAEL 1108
Circuit Protection Zone:	SAN RAFAEL 1108322
Nominal Voltage:	750V – Secondary (Incident Location) 12kV – Primary
Pole SAP Equipment ID:	104121953
Subject to PRC 4292 Veg Pole Clearance:	No
PG&E Equipment associated with ignition:	Service Drop Conductor
EPSS enabled at time of ignition?	N/A. EPSS does not extend to Service Drops
Fault Type:	Short Circuit
Wire Down (Primary)?	No
Lead Agency/Agency Having Jurisdiction:	Ross Valley

Fire Size:	1 – 3 Meters
FAS Field Remarks:	service neutral to [REDACTED] broken due to shorting to hot leg at pole. Creating sparks which caused brush/fence fire at base of pole. tag made for crew to replace service to [REDACTED]
HAWC Summary:	N/A
Injuries / Fatalities / Property Damage / Media Attention:	Damage to fence, estimated under \$10, 000 per Ross Valley Fire Department No Injuries/Fatalities/Media Attention
Weather Conditions:	At 18:24 near the incident location Temperature: 72.0°F Relative Humidity: 52% Wind Speed: 2.0 mph from the north-northwest Wind Gust: 7.0 mph
Red Flag Warning (RFW) / High Wind Warning (HWW):	RFW – Yes HWW – No
911 Standby Relief Time:	14 minutes
OIS #:	2544011
ILIS #:	N/A
FAS #:	T006476704
TOTL #:	N/A
Assigned Attorney:	N/A
Ignition Investigator & Phone:	[REDACTED]

Executive Summary

On August 16, 2024 at 1824 hours, Ross Valley Fire Department notified PG&E of a report from a customer of loud arcing noise, sparks flying down from the pole and smoke at the pole. At 1825 hours PG&E dispatched a troubleshooter to the single-phase secondary service overhead segment of the SAN RAFAEL 1108 distribution line at [REDACTED] in San Anselmo, California (“Incident Location”, Figure 1). At 1828 hours Ross Valley Fire Department updated the incident to a vegetation fire. The incident location is within a Tier 3-HFTD/HFRA and was not located in an EPSS-enabled Circuit Protection Zone due to the secondary voltage level of the fault. No customer outages occurred at the time of the incident.

Upon arrival at 1840 hours, the responding troubleshooter observed multiple fire engines at the incident location clearing the vegetation fire. In addition, the troubleshooter observed the service neutral to the customer residence was broken due to a shorting to the hot leg at wood pole SAP ID 104121953. The troubleshooter assessed that the cause of the short circuit was due to the construction of the connectors being too close to the neutral, creating tension over time under the insulated secondary wire. The shorting hot leg created sparks, igniting the vegetation fire in the vicinity of the pole. The ensuing fire was between one and three meters in size, burning a pile of wood and a wooden fence near the pole. The estimated damages to the property were estimated as less than \$10,000 by the Fire Department. On August 17, 2024 at 0817 hours, PG&E dispatched a repair crew to make repairs to replace the secondary conductor, EC Notification 129400622.

The incident and failure were reviewed by an Asset Failure Analysis (AFA) engineer. AFA concluded that due to a lack of air gap between the impacted hot leg/conductor and neutral messenger, the two components rubbed

System Protection Analysis

The San Rafael 1108 12kV distribution circuit was enabled with Enhanced Powerline Safety Settings (EPSS) at the time of the incident. Due to the location of the failure (at the service drop), EPSS would not have de-energized this location and was not a factor in this ignition.

Ignition Impact

The ignition was isolated at the base of a intumescent wrapped wood pole, leaving a burn scar approximately one to three meters in size.

There were no reports of injuries, fatalities, or media attention. The incident occurred on the hot leg/neutral beneath the pole mounted transformer of a pole serving 14 customers who were not impacted by an outage.

Sequence of Events

August 16, 2024 (no ILIS record for this event)

- 1824 hours – PG&E notified by fire department of sparking and smoke coming from the pole.
- 1825 hours – Start time (OIS) – Customer did not lose power.
- 1826 hours – Troubleshooter dispatched.
- 1828 hours – Ross Valley Fire Department updated incident to a vegetation fire.
- 1840 hours – Troubleshooter onsite – failed equipment inspected, submits repair tag.
- 2021 hours – Troubleshooter departs incident location.

August 17, 2024

- 0817 hours – PG&E repair crew dispatched.
- 0822 hours – ETOR pushed out.
- 1010 hours – PG&E repair crew arrived onsite.
- 1745 hours – PG&E repair crew departs incident location.

Corrective Notification Associated with Ignition

The responding troubleshooter created Corrective Notification EC 129400622 to replace the service neutral conductor and hot leg. Replacement of the conductor was completed on August 17, 2024.

Pending Work

Type	Number	Description	Priority	Date Identified	Due Date
EC Notification	129400622	50-foot service conductor replaced with 1/0 2 strand aluminum triplex	A	8/16/2024	8/17/2024
COE Notification	N/A				
LC Notification	N/A				
Veg Work Order	N/A				

Please note this may not include pending major program or project work at the incident location.

Asset Info & Most Recent Inspections and Tests

Source Side Structure		
Info / Inspection	Most Recent Date	Findings
Install Date:	2022	Wood – Douglas Fir, Koppers Co., Cellon Gas Treated, Class 4, 45' tall
Inspection:		Due to the recent installation of the pole, there are no inspection records at this time.
Patrol:	N/A	
Corrective History:	N/A	
Aerial Inspection Records:	N/A	
VM Inspection:	N/A	
EVM Inspection:	N/A	
Equipment Test:	N/A	
Pole Intrusive Test:	N/A	
WSIP Inspection:	N/A	

*Incident Location: SAP ID: 104121953

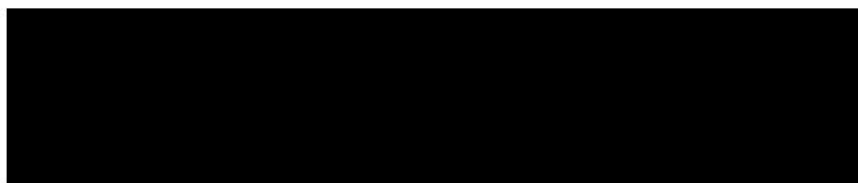
Hazard Barrier Analysis:

Hazard	All types of equipment/facility failure	Sub-Hazard	Conductor failure-all (hot leg & neutral service)
Target	The ignition events have caused property damage/equipment damage		
Barrier	Expected vs. Observed Performance	Why did the barrier not prevent the ignition event? (See ICF Codes)	Notes/Comments
Barriers that Negatively Affected Ignition			
Distribution Construction Completion Standards Checklist (CCSC)	Expected Performance: To ensure proper construction including installation of secondary; Observed Performance: Barrier did not perform as expected	[A3B1C2D3 - Non-Conformance : Work Non-Conformance; Work Execution; Work not performed in accordance to standard]D	
Proper Construction & Installation	Expected Performance: To ensure proper installation of secondary; Observed Performance: Barrier did not perform as expected	[A3B1C2D3 - Non-Conformance : Work Non-Conformance; Work Execution; Work not performed in accordance to standard, A2B1C1D1 - Malfunction: Operational Malfunction; Installation Malfunction; Equipment improperly installed]	According to, CONDUCTOR SPLICES FOR OVERHEAD CONDUCTORS document #022487 Rev #12, page 2, General information Sec. B stated, <i>"The practice of splicing service drops on pole replacement jobs is prohibited. The service drops shall be replaced. Splicing of services for repair purposes is <u>only permitted for service drops with black insulation</u>. Care should be taken to inspect the service drop being repaired to insure it is still in good condition and meets current standards."</i>

Potential Next Steps / Associated CAP Items:

- None at this time.

Single Line Diagram



LEGEND



Substation



Fuse

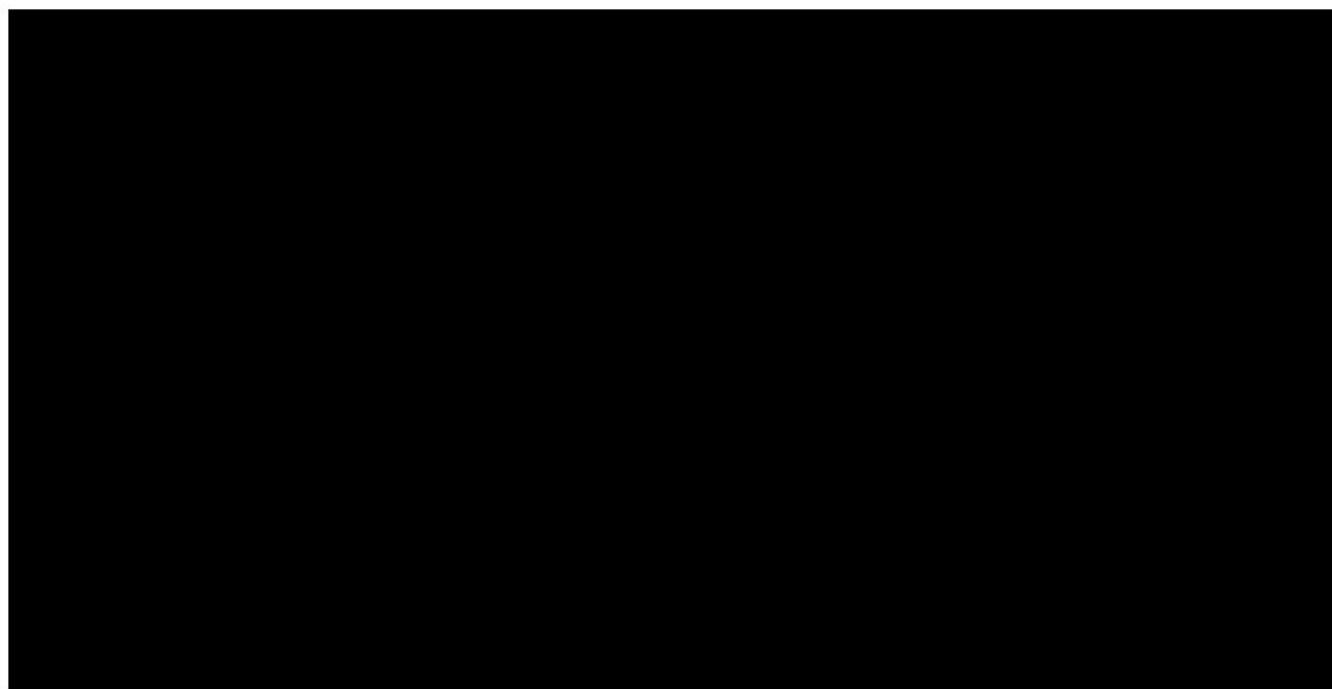


Line
Recloser



Area of
Interest

Photos and Diagrams of Events



Internal

Figure 1 EDGIS map of incident location



Figure 2 Burn scar at the base of pole. Photo taken by troubleshooter on August 16, 2024



Figure 3 Property damage near the Incident Pole. Photo taken by troubleshooter on August 16, 2024.



Figure 3 Property damage near the incident pole. Photo taken by troubleshooter on August 16, 2024



Figure 5 Damaged neutral and hot leg. Photo taken by troubleshooter on August 16, 2024

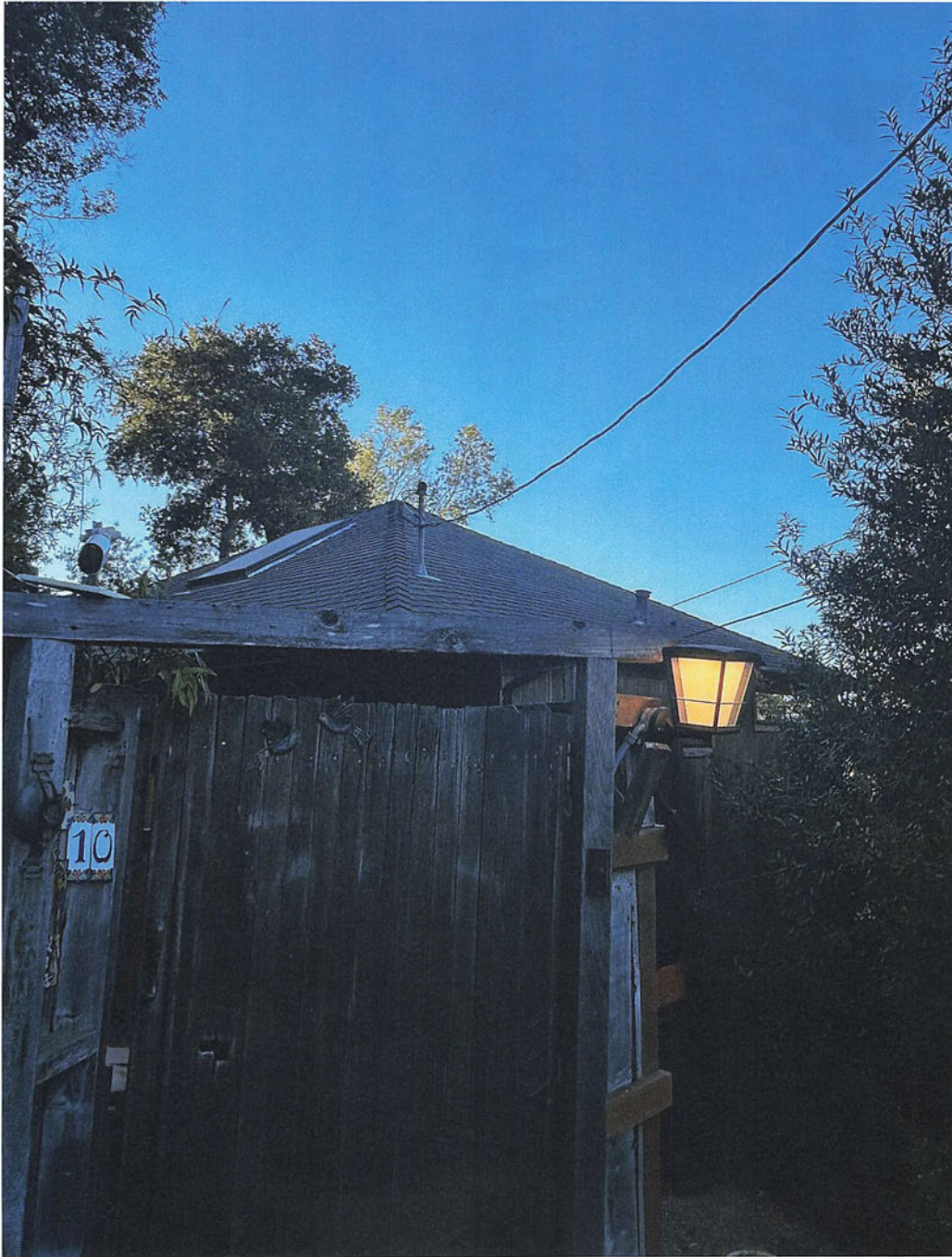


Figure 6 Service conductor from the residence. Photo taken by troubleshooter on August 16, 2024

This report is preliminary and based on available information as of January 24, 2025; event data is subject to change based upon subsequently discovered information.

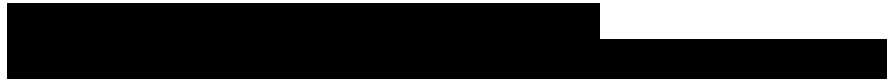
Doc. R19 – Jan 2025

Internal

CONFIDENTIAL

Attachments

Attachments and references can be located in the ESA folder, located below:



-----END of REPORT-----