



## Preliminary Ignition Investigation Report

Ignition Database Index:	20241489
Electric Incident Investigation (EII) Number:	N/A
Incident Name:	Roberts
PG&E Facility Ignition?	Yes
CPUC Reportable Ignition?	Yes
Date & Time of Incident:	October 14, 2024 @ approximately 1403 hours
Street Address:	Near 4334 Lichau Road
City:	Penngrove
County:	Sonoma
Latitude/Longitude:	38.3312, -122.6273
State Responsibility Area (SRA) / Local Responsibility Area (LRA) / Federal Responsibility Area (FRA)	State Responsibility Area
PG&E Division:	Sonoma
High Fire Threat District (HFTD):	Tier 2
High Fire Risk Area (HFRA):	Yes
EPSS Buffer:	No
Fire Index Area (FIA):	180
Fire Potential Index (FPI) Rating: FIA	R2
Fire Potential Index (FPI) Rating: Circuit	R1
Was there a PSPS event at the time of ignition?	No
Suspected Initiating Event:	Contact - 3 <sup>rd</sup> Party
Failure Driver:	Contact from Object
Failure Sub-driver:	Contact – Balloon
Circuit:	Penngrove 1101
Circuit Protection Zone:	Penngrove 1101 LR 950828
Nominal Voltage:	12kV
Pole SAP Equipment ID:	103886356
Subject to PRC 4292 Veg Pole Clearance:	No
PG&E Equipment associated with ignition:	Primary Conductor “4 Aluminum Conductor, Steel Reinforced (4ACSR)”
EPSS enabled at time of ignition?	Yes
Fault Type:	Line to Line
Wire Down (Primary)?	No
Lead Agency/Agency Having Jurisdiction:	CAL FIRE
Fire Size:	Four acres (approximately)

<b>FAS Field Remarks<sup>1</sup>:</b>	Mylar balloons on 12kv line.
<b>HAWC Summary<sup>2</sup>:</b>	<p>Resources responded to a vegetation fire at Roberts Road X Lichau Road in Penn Grove in a Tier 2 area. The fire was contained at 4 acres.</p> <p>There was an outage in the immediate area. The outage was on the PENNGROVE 1101 circuit impacting approximately 263 customers on OIS # 2594474.</p> <p>This was an EPSS enabled circuit. SIPT did not respond to this incident. There was not damage to assets. An Everbridge message was sent.</p> <p>Notifications: HAWC Ops, PSS, DCC <input checked="" type="checkbox"/>, GCC <input type="checkbox"/>, GAS <input type="checkbox"/>, ENOC <input type="checkbox"/>, HYDRO <input type="checkbox"/>, REMOTE GRID <input type="checkbox"/></p> <p>An Incident Report was not sent. A Preliminary Fire Report was not sent.</p>
<b>Injuries / Fatalities / Property Damage / Media Attention:</b>	No
<b>Weather Conditions:</b>	<p>At 1400 hours near the Incident Location:</p> <p>Temperature: 72.7</p> <p>Relative Humidity: 55%</p> <p>Wind Speed: 4.7 mph</p> <p>Wind Gust: 8.0 mph out of the west</p>
<b>Red Flag Warning (RFW) / High Wind Warning (HWW):</b>	No/ No
<b>911 Standby Relief Time:</b>	N/A
<b>OIS #:</b>	2594474
<b>ILIS #:</b>	24-0123003
<b>FAS #:</b>	T006525869
<b>TOTL #:</b>	N/A
<b>Assigned Attorney:</b>	N/A
<b>Ignition Investigator &amp; Phone:</b>	

<sup>1</sup> FAS Remarks entered verbatim

<sup>2</sup> HAWC Summary entered verbatim

## Executive Summary

On October 14, 2024, at 1402 hours PG&E received notification that a SmartMeter™ on the Penngrove 1101 12kV went offline. At 1403 hours Line Reclosure 950828 detected a line-to-line fault and operated, deenergizing 263 customers. Two PG&E troubleshooters were dispatched at 1408 hours to a three-phase primary overhead section of the Penngrove 1101 12kV Distribution Circuit to patrol due to the Enhanced Powerline Safety Settings (EPSS) outage.

Troubleshooter #1 arrived at SAP Pole ID# 103886356 ("Incident Location") at 1521 hours, while Troubleshooter #2 continued with patrolling efforts. CAL FIRE was on site when Troubleshooter #1 arrived and redirected him to the base and surrounding area of SAP pole ID# 103886356 (Incident Location). Upon arrival, Troubleshooter #1 observed entangled mylar balloons in the primary lines approximately 12-inches from SAP ID# 103886356 and CAL FIRE personnel on site suppressing the ignition. Troubleshooter #1 was able to determine the cause of the outage as a balloon contact.

Troubleshooter #1 removed the balloons from the line and CAL FIRE retained the balloons as evidence. The ensuing fire was approximately four acres in size and the fire was suppressed by CAL FIRE. The incident occurred within a Tier 2 HFTD and HFRA during R1 conditions. There were small arc marks on one of the conductors. No corrective tags were created in response to the outage.

The MesoWest weather observation site (PG562) located approximately 1.4 miles southeast (elevation 1095 ft) of the Incident Location indicated it was a fair and dry day on October 14, 2024, near the Incident Location. The high temperature for the day was 73.6°F at 1350 hours and the low temperature was 55.8°F at 0700 hours. The relative humidity was as high as 89% at 0700 hours and as low as 53% at 1350 hours. The strongest wind speed was 14.5 miles per hour (mph) out of the north-northwest at 0320 hours and out of the north at 0150 hours.

This information is preliminary.

## System Protection Analysis

The Penngrove 1101 12kv distribution circuit was enabled with Enhanced Powerline Safety Settings (EPSS) at the time of the ignition. The primary line was protected by LR (Line Recloser) 950828 in Alternative #3 mode with Sensitive Ground Fault (SGF) settings enabled. LR 950828 did operate at the time of the event due to the high magnitude line-to-line fault detected. The protective devices operated as designed.

## Ignition Impact

The ignition was isolated to vegetation on the ground, resulting in a burn scar approximately four acres in size. There were no reports of injuries, fatalities or property damage. There were 263 customers impacted by the outage for a total of 42,343 combined customer minutes.

## Sequence of Events

October 14, 2024

- 1402 hours- PGE notification that SmartMeter™ went offline.
- 1403 hours – First No Light, Line Recloser 950828 (263 customers deenergized)

This report is preliminary and based on available information as of **October 16, 2024**; event data is subject to change based upon subsequently discovered information.

- 1408 hours – Troubleshooter dispatched
- 1521 hours – Troubleshooter onsite
- 1644 hours – Line Recloser 950828 (263 customers restored)

### Corrective Notification Associated with Ignition

No corrective notifications were created as a result of this incident. The troubleshooter removed the balloons from the overhead lines working off the FAS tag (#T006525869).

### Pending Work

Type	Number	Description	Priority	Date Identified	Due Date
EC Notification	119576064 (PM #45534421)	High sign damage on top arm. Guy strain and abrasion, adjust. High sign damaged, replace. After CIRT review of the FSR photos and comments, recommended 003-202. Needs to be completed within 12 months of FSR date. New FRD 10/5/2024.	E	08/07/2020	10/5/2024
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

<b>Incident Structure</b>	SAP Pole ID # 103886356	
<b>Info / Inspection</b>	<b>Most Recent Date</b>	<b>Findings</b>
Install Date:	2007	Through bore, 50ft tall, class 4
Inspection:	10/4/2023	Anchor and Guy (Guy wire broken, damaged, clearance issues, corroded, strain or abrasion) EC notification # 119576064
Patrol:		N/A
Corrective History:		N/A
Aerial Inspection Records:	8/30/2019	N/A
VM Inspection:		N/A
EVM Inspection:		N/A
Equipment Test:		N/A
Pole Intrusive Test:	11/30/2023	Pass/ wood strength 100%

WSIP Inspection:	April 10, 2019	Auto-splices associated with this pole/span 9 count EC notification #119576064 Flying Bells installed in the primary
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\*Incident Location: SAP Pole ID: 103886356

### Hazard Barrier Analysis:

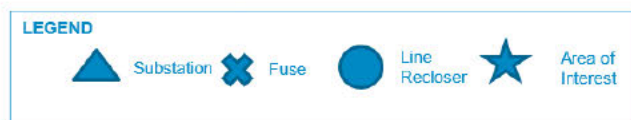
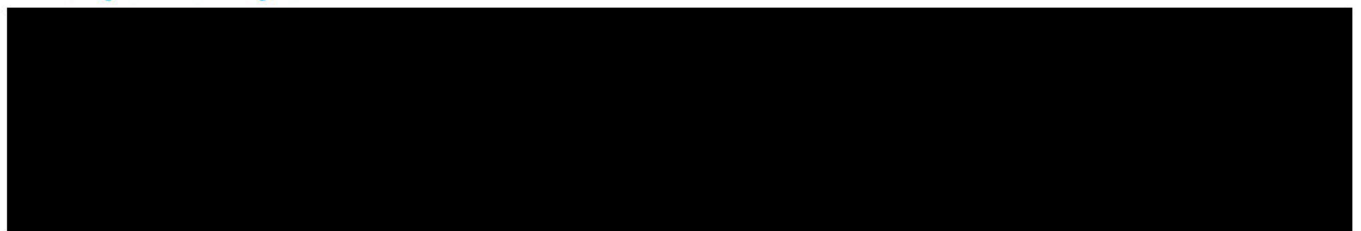
Hazard	3 <sup>rd</sup> Party Contact	Sub-Hazard	Balloon Contact
Target	Balloon contact on conductor in Tier 2 HFTD leading to ~4-acre ignition.		
Barrier	Expected vs. Observed Performance	Why did the barrier not prevent the ignition event? (See <a href="#">ICF Codes</a> )	Opportunity
Barriers that Negatively Affected Ignition			
AB 847 - Electrically Conductive Balloons	Expected Performance: Transition CA away from the use of electrically conductive foil balloons in an effort to reduce balloon contact overhead power line safety incidents.  Observed Performance: Barrier did not perform as expected	A1B3C2D2 –Lack of customer awareness or customer disregard for program/service	AB-847 has been in effect since September 18, 2022. Vendors have until September 18, 2026, to completely transition their stock 100% to non-metallic balloons for their inventory.
Public Safety Outreach	Expected Performance: Prevent safety issues through third party awareness of safety hazard of using mylar balloons around power lines;  Observed Performance: Barrier did not perform as expected	A1B3C2D2 –Lack of customer awareness or customer disregard for program/service	The customer let the balloons free (accidental maybe).
Barriers that Positively Affected Ignition			
Enhanced Powerline Safety Settings - Instantaneous Trip Settings	Expected Performance: Automatically turn off power when a hazard is detected to reduce the risk of ignition.  Observed Performance: Barrier performed as expected	N/A	Phase/Ground instant delay has been reduced from 0.04s to 0.02s
Barriers that were Assessed as Opportunities			

Pole Clearing Program	<p>Expected Performance: Limit fire spread potential near poles for a PG&amp;E equipment involved ignition event.</p> <p>Observed Performance: Barrier did not exist</p>	A4B2C3D1 – Only applies to poles with non-exempt equipment	This pole was not slated for pole clearing due to lack of non-exempt equipment.
Utility Defensible Space	<p>Expected Performance: Extends pole clearing program to expand vegetation clearance around certain poles in HFTDs to extend firebreak</p> <p>Observed Performance: Barrier did not exist</p>	A4B2C2D1 – Location not prioritized for program	The location does not have non-exempt equipment.
Voluntary Risk Reduction	<p>Expected Performance: Reduce the likelihood of rapid-fire development or impact in proximity to PG&amp;E assets.</p> <p>Observed Performance: Barrier did not exist</p>	A4B2C2D1 – Location not prioritized for program	Location not prioritized for program.

#### Potential Next Steps / Associated CAP Items:

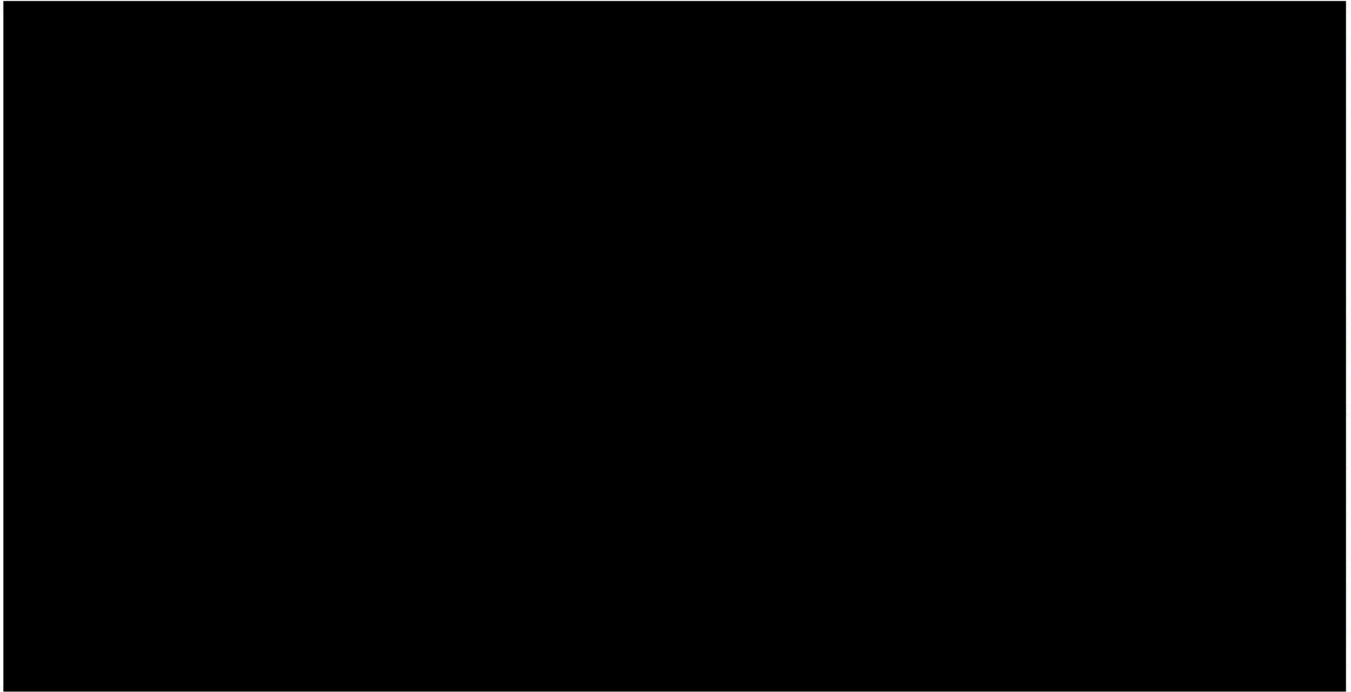
No pending action items as a result of this incident.

#### Single Line Diagram





## Photos and Diagrams of Events



*Figure 1- Google Map Image of the location of the incident. SAP Pole ID 103886356*



Figure 2 - Photo of the contained fire and burn scar with the balloon contact on the line. Photo taken by troubleshooter on October 142024. SAP Pole ID 103886356





*Figure 3- Contained fire and Mylar balloon remnants found that led to the cause of the ignition. Photo taken by troubleshooter on October 14, 2024. SAP Pole ID # 103886356*



Figure 4- Suppressed fire and PG&E troubleshooter identifying the Mylar balloon prior to removal. Photo provided by troubleshooter on October 14, 2024. SAP Pole ID3103886356



*Figure 5 Photo of the Mylar balloon and the suppressed fire. Photo provided by the Troubleshooter on October 14, 2024. SAP Pole ID #103886356*

## Attachments

[REDACTED]

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