



## Preliminary Ignition Investigation Report

<b>Ignition Database Index:</b>	20240531
<b>Electric Incident Investigation (EII) Number:</b>	N/A
<b>HAWC Incident Name:</b>	Westport – 29 May 2024
<b>PG&amp;E Facility Ignition?</b>	Yes
<b>CPUC Reportable Ignition?</b>	Yes
<b>Date &amp; Time of Incident:</b>	May 29, 2024 at 2113 hours
<b>Street Address:</b>	California Highway 1, south of Pacific Avenue
<b>City:</b>	Westport
<b>County:</b>	Mendocino
<b>Latitude/Longitude:</b>	39.627296, -123.782456
<b>State Responsibility Area (SRA) / Local Responsibility Area (LRA) / Federal Responsibility Area (FRA)</b>	State Responsibility Area
<b>PG&amp;E Division:</b>	Humboldt
<b>High Fire Threat District (HFTD):</b>	Tier 2
<b>High Fire Risk Area (HFRA):</b>	Yes
<b>EPSS Buffer:</b>	No
<b>Fire Index Area (FIA):</b>	140
<b>Fire Potential Index (FPI) Rating: FIA</b>	R1
<b>Fire Potential Index (FPI) Rating: Circuit</b>	R1
<b>Was there a PSPS event at the time of ignition?</b>	No
<b>Suspected Initiating Event:</b>	Vegetation
<b>Failure Driver:</b>	Contact from Object
<b>Failure Sub-driver:</b>	Contact-Vegetation
<b>Circuit:</b>	FORT BRAGG A 1101
<b>Circuit Protection Zone:</b>	LR95294
<b>Nominal Voltage:</b>	12kV
<b>Pole SAP Equipment ID:</b>	102308474
<b>Subject to PRC 4292 Veg Pole Clearance:</b>	No
<b>PG&amp;E Equipment associated with ignition:</b>	Conductor
<b>EPSS enabled at time of ignition?</b>	No
<b>Fault Type:</b>	Line to Line
<b>Wire Down (Primary)?</b>	Yes
<b>Lead Agency/Agency Having Jurisdiction:</b>	Westport Fire Department
<b>Fire Size:</b>	1 Meter-< 3 Meters
<b>FAS Field Remarks:</b>	Crew to repair wire down caused by tree branch. Small fire ignition was put out.

<b>HAWC Summary:</b>	Resources responded to a vegetation fire, the Westport Incident. It was located at 36000 N. Hwy 1 in Mendocino County. This is a Tier 2 area. The fire size was last listed as a 4 x 4 spot. There was an outage associated with this incident. The outage was on the FORT BRAGG A 1101 circuit with 1 customer impacted. The OIS number was 2470461. No notifications were made due to late arrival of fire information.
<b>Injuries / Fatalities / Property Damage / Media Attention:</b>	0/0/0/0
<b>Weather Conditions:</b>	It was a fair and dry day on May 29, 2024 near the incident location. The high temperature for the day was 59.5° at 15:40 and the low temperature was 49.2° at 0410 hours. The relative humidity was as high as 91% at 0350 hours and was as low as 59% at 1550 hours. The strongest wind gust was 24.5 mph at 1540 hours from the north-northeast.
<b>Red Flag Warning (RFW) / High Wind Warning (HWW):</b>	No high wind or red flag warning issued.
<b>911 Standby Relief Time:</b>	40 Minutes
<b>OIS #:</b>	2470461
<b>ILIS #:</b>	24-0071170
<b>FAS #:</b>	T006405647
<b>TOTL #:</b>	N/A
<b>Assigned Attorney:</b>	N/A
<b>Ignition Investigator &amp; Phone:</b>	[REDACTED]

## Executive Summary

On May 29, 2024, at approximately 2113 hours, PG&E received a call regarding a pole fire near 36000 Highway 1, in Mendocino County. The ignition occurred on a two-phase primary overhead segment of the FORT BRAGG A 1101 12kV distribution circuit located within a Tier 2 High Fire Threat District (HFTD) and High Fire Risk Area (HFRA). PG&E's Enhanced Powerline Safety Settings (EPSS) were not enabled at the time of the incident. This incident caused a power outage affecting two customers for 724 minutes.

Responding to the pole fire report the Troubleshooter was dispatched at 2120 to a two-phase primary overhead line between SAP#102308474 and SAP# 102308475. Upon arrival at 2151 hours, the crew discovered two blown fuses on 8595. A tree branch had fallen onto the primary line, impacting two spans downstream from fuse 8595. This resulted in arcing and a small vegetation fire under three meters in diameter. First smart meter data indicates NIC power failure alarm at 2034 hours, followed by the first partial voltage alarm at 2039 hours. This line was protected by Line Recloser (LR) 95294. The Single Ground Fault (SGF) data indicated a ground fault at 2043 hours with a current magnitude of less than 6 Amp. This amperage is insufficient to activate the traditional ground fault protection, which is set at 15 Amp. Fuse 8595 functioned as intended, isolating the fault and de-energizing the line before the crew's arrival.

A review of our record reveals a trend of tree-related failures on this section of the line. On January 15, 2023, at the incident SAP pole ID#102308474, fallen tree branch contacted the conductor, causing complete failure of both the crossarm and guywire. This incident required a conductor repair. Additionally, a review of EC tags reveals a similar failure on adjacent SAP pole ID#102308475 south of the incident pole in 2017. The pattern continues on the next south pole SAP ID#102308476 where records show a tree fell onto the conductor in March 2023. This resulted in the replacement of the transformer, insulator, and crossarm. (Refer to Photo 5 for the map.)

PG&E's Vegetation Management (VM) department performed an Extent of Condition (XoC) patrol on May 31, 2024. They found a fallen pine branch on the ground. The branch measured roughly 17.5 feet long, six inches in diameter, lying on the ground at the point of wire failure. Notably, a recent inspection conducted just 13 days prior to the incident identified the tree as mature and healthy with no signs of major defects or decay. The XoC prescribed the subject tree for additional overhang removal. Additionally, two other Monterey pines were flagged for priority work: one requiring removal and another requiring trimming.

The weather was a fair and dry day on May 29, 2024, near the Incident Location. The high temperature for the day was 59.5°F at 1540 hours and the low temperature was 49.2°F at 0410 hours. The relative humidity was as high as 91% at 0350 hours and was as low as 59% at 1550 hours. The strongest wind gust was 24.5 miles per hour (mph) at 1540 hours from the north-northeast. The weather was taken from MesoWest weather station, the nearest observation site, 205 feet elevation, 16 miles south of the Incident Location.

## System Protection Analysis

The FORT BRAGG A 1101 circuit was not enabled with Enhanced Powerline Safety System (EPSS) on May 29, 2024, due to the fact that the circuit was in an R1 Fire Potential Index (FPI) rating and did not meet the expected wind speeds, relative humidity, and/or fuel moisture content enablement thresholds.

## Ignition Impact

The ignition event on May 29, 2024, resulted in a small grass fire that measured approximately less than three meters in size. The associated outage affected two customers for a total of 724 minutes after Fuse 8595 opened. There were no reported injuries, fatalities, property damages or significant media attention associated to this event.

## Sequence of Events

May 29, 2024

- 2034 Hours: First smart meter activity detected.
- 2113 Hours: First call, two customers without power.
- 2155 Hours: Fuse 8595 open, troubleshooter found 2 of 2 fuses blown.

May 30, 2024

- 0315 Hours: Fuse 8595 Close. Both customers restored.

## Corrective Notification Associated with Ignition

A priority "A" EC tag (#128910568) was created to replace the 400-foot, 6 AWG conductor. The crew completed the replacement on May 30, 2024.

## Pending Work

Type	Number	Description	Priority	Date Identified	Due Date
EC Notification	N/A				
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:	1997	
Inspection:	July 3,2022	No structure damage or compelling abnormal conditions to report
Patrol:	N/A	
Corrective History:	January 15, 2023	Tree fell onto one span, causing next span to break. Repair damaged conductors on January 16, 2023
Aerial Inspection Records:	N/A	
VM Inspection:	May 16, 2024	UCNC1003042 Tree #7 Side Trim

This report is preliminary and based on available information as of 7/16/2024; event data is subject to change based upon subsequently discovered information.

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EVM Inspection:	N/A	(Note: document if “not previously in EVM Scope”)
Equipment Test:	N/A	
Pole Intrusive Test:	May 17, 2021	Pass 100% Strength.
WSIP Inspection:	Jan 5, 2019	There were no Compelling abnormal conditions for the Pole, equipment, and its associated spans.

\*Incident Location: SAP Pole ID: 102308474

### Hazard Barrier Analysis:

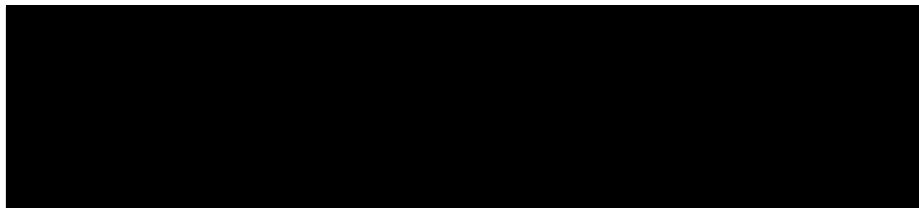
Hazard	Vegetation Contact	Sub-Hazard	Fallen Tree Branch
Target	Tree branch caused a failure in the distribution conductor		
Barrier	Expected vs. Observed Performance	Why did the barrier not prevent the ignition event? (See <a href="#">ICE Codes</a> )	Opportunity
Barriers Assessed as Opportunities			
Distribution Annual Vegetation Patrol	Expected Performance: The intention was to identify problem trees near the incident location; Observed Performance: Barrier performed as expected	A1B1C1D3 - Limitation: Visibility Limitation; Vegetation Condition Visibility; Trees can fail with no defects (visible or non-visible)	This area has had four tree related issue since 2017, we might consider tree trimming outside of clearance area.
Distribution Second Vegetation Patrol	Expected Performance: The intention was to identify problem trees near the incident location; Observed Performance: Barrier performed as expected	A1B1C1D3 - Limitation: Visibility Limitation; Vegetation Condition Visibility; Trees can fail with no defects (visible or non-visible)	A review of our record reveals a trend of tree - related failure on this section of the line, we might consider tree trimming outside of clearance area.
Enhanced Powerline Safety Settings - Downed Conductor Detection	Expected Performance: Trip in response to downed conductor. Observed Performance: Barrier did not exist	A4B1C1D2 - Strategy: EPSS Strategies; HFTD-Related; EPSS only implemented on selected circuits	EPSS setting may have faster de-energization.

Enhanced Powerline Safety Settings - Instantaneous Trip Settings	Expected Performance: Trip in response to downed conductor. Observed Performance: Barrier did not exist	A4B1C1D2 - Strategy: EPSS Strategies; HFTD-Related; EPSS only implemented on selected circuits	EPSS setting may have faster de-energization.
Enhanced Powerline Safety Settings - Sensitive Ground Fault Settings	Expected Performance: Trip in response to downed conductor.; Observed Performance: Barrier did not exist	A4B1C1D2 - Strategy: EPSS Strategies; HFTD-Related; EPSS only implemented on selected circuits	EPSS setting could potentially lead to faster detection and de-energization.
Focused Tree Inspection	Expected Performance: A tree risk assessment that includes a 360-degree, ground based visual inspection of the tree crown, trunk, trunk flare, aboveground roots, tree related site conditions, and significant targets. The assessment may include the use of common hand tools.; Observed Performance: Barrier did not exist	A4B2C2D1 - Strategy: Program Strategies; Vegetation-Related; Location not prioritized for program	This area has had four tree related issue since 2017, we might consider including in Focused Tree Inspection Program.
Vegetation Management Operational Mitigation	Expected Performance: Patrol 5 spans on either side of incident tree that caused EPSS outage in HFTD. Identify trees with overhang, outage species, or other conditions that may impact PG&E facilities. Observed Performance: Evaluated as Opportunity		implementing a VMOM program to prevent tree failure in the HFTD region, regardless of EPSS enablement.

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

- None.

#### Single Line Diagram



LEGEND



Substation



Fuse

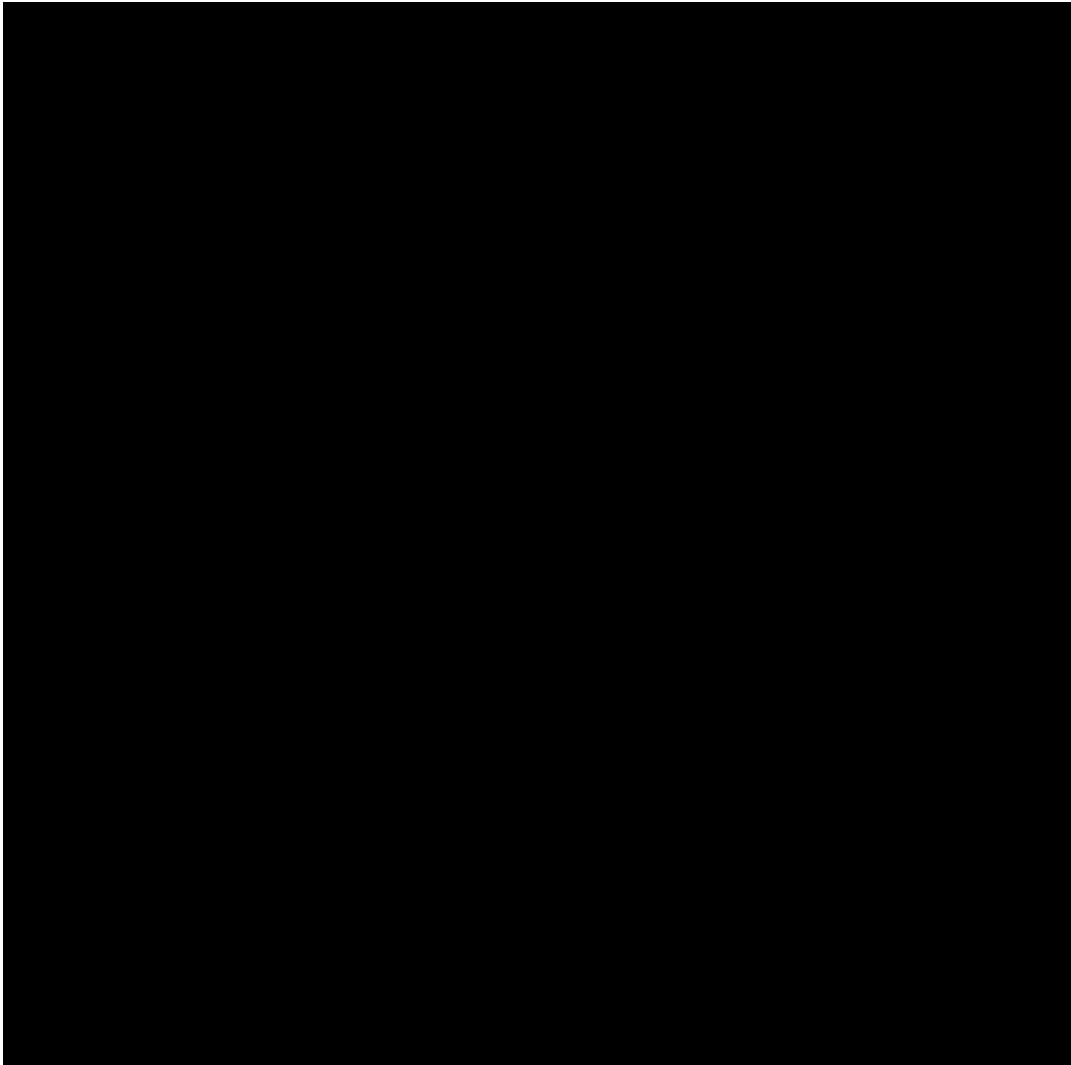


Line  
Recloser



Area of  
Interest

Photos and Diagrams of Events



*Photo 1: Google Photo of Incident Location.*





*Photo 2: Photo taken by troubleshooter from SAP 102308474 on ignition date.*

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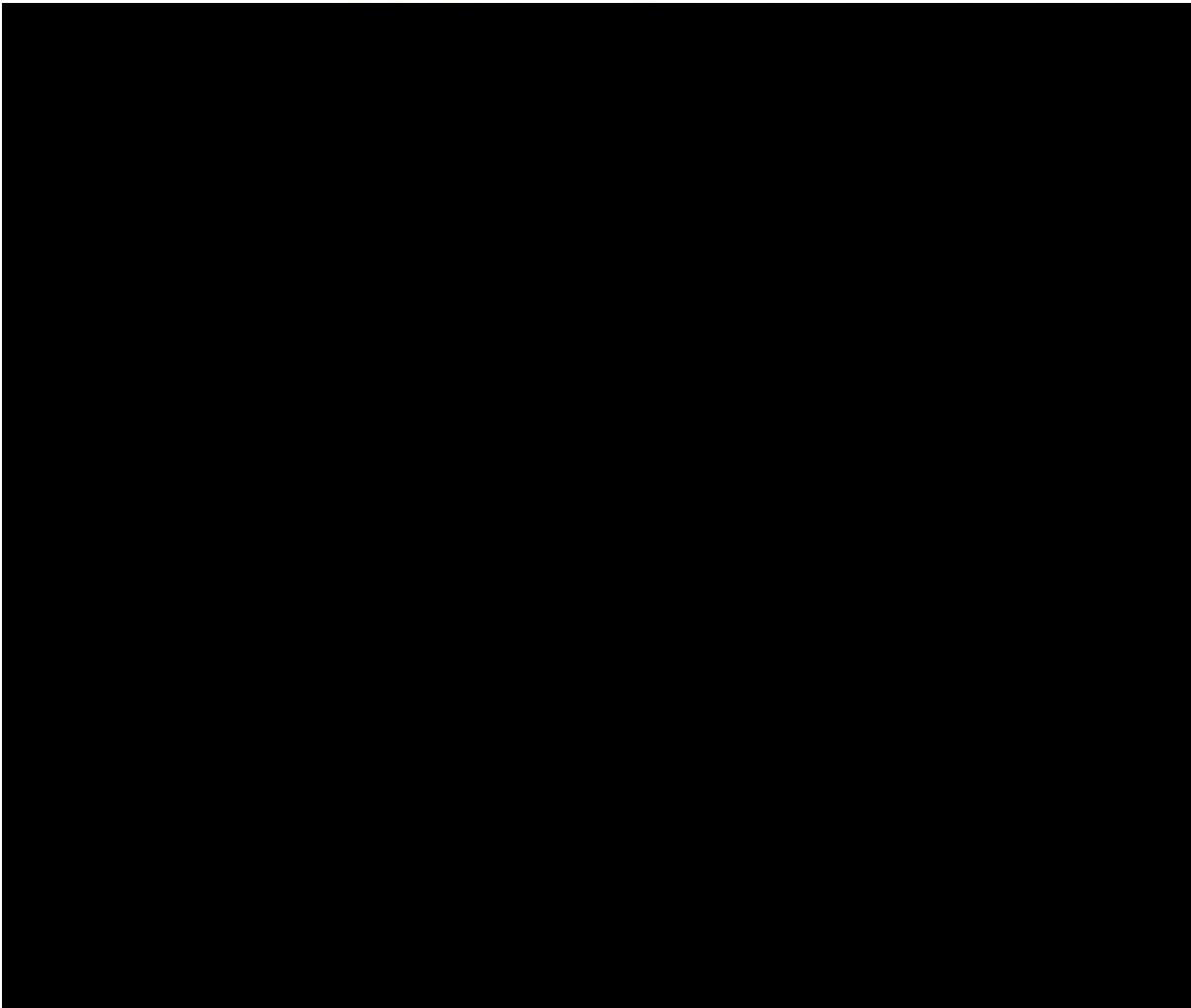


*Photo 3: Photo taken by troubleshooter on ignition date.*





*Photo 4: Photo taken by troubleshooter of the pine branch.*



*Photo 5: Google earth of the Incident Pole and the two other poles to the south of it.*

## Attachments

